

Independent Monitoring Group



Eleventh HSEC Monitoring Review

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Mark Irvine Technical Director	Nigel Seed Partner

ERM's Nairobi Office

Senteu Plaza, 1st Floor
Lenana/Galana Road
Kilimani
PO Box 29170-00100
Nairobi
Kenya

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CONTENTS

1.	INTRODUCTION	1
1.1	Background	1
1.2	Scope of the Review	1
1.3	Objectives	2
1.4	Approach	2
1.5	Review Period	3
1.6	IMG Review Team	3
1.7	Limitations	3
1.8	Report Structure	3
2.	AOC AND JV ASSETS AND CURRENT ACTIVITIES	4
2.1	Overview of Non-Operated Interests	4
2.2	Africa Oil Kenya	6
2.2.1	South Lokichar Field Development Project	6
2.2.2	Lokichar to Lamu Crude Oil Pipeline	7
2.2.3	Supplementary Lender Information Package and ESPP	9
2.2.4	Summary of Activities in South Lokichar	9
2.3	Africa Oil SA Corp (South Africa)	10
2.4	Africa Energy Corp (South Africa & Namibia)	10
2.5	Impact Oil and Gas (Namibia, South Africa and Senegal/Guinea Bissau)	10
2.6	Eco (Atlantic) Oil and Gas Ltd (Guyana and Namibia)	11
2.7	Prime Oil and Gas BV (Nigeria)	11
3.	ASSESSMENT FRAMEWORK AND METHODOLOGY	13
3.1	Assessment Framework	13
3.2	Methodology	13
3.2.1	Overview	13
3.2.2	Document Review and Presentations	14
4.	ENVIRONMENTAL AND SOCIAL ACTION PLAN	16
4.1	Conformance with Current ESAP Requirements	16
5.	PROJECT OIL KENYA ASSESSMENT AGAINST IFC PERFORMANCE STANDARDS	20
5.1	Introduction	20
5.2	Project Oil Kenya Management Systems and Plans	20
5.2.1	Environmental and Social Performance	20
5.2.2	Supplementary Lenders Information Package	20
5.2.3	PS1: Environmental and Social Management System and Performance Plans	22
5.3	PS1 and PS7: Stakeholder Engagement	25
5.4	PS2: Occupational Health and Safety	26
5.5	PS2: Local Content	26
5.6	PS2, PS4, PS5 and PS7: Community Development Plan	27
5.7	PS3: Emissions Management	27
5.8	PS3 and PS6: Water Resources and Water Supply Strategy	27
5.9	PS3: Drilling Cuttings and Waste Storage Disposal Plan	29
5.10	PS3 and PS4: Community Water Supply	30
5.11	PS5: Resettlement and Livelihood Restoration	31
5.12	PS5: Influx Management	32
5.13	PS6: Biodiversity	32
6.	ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM REVIEW	40
6.1	AOC ESMS Framework	40
6.2	ESG Management and Reporting	40

6.3	Energy Transition Strategy.....	40
6.3.1	Overview	40
6.3.2	AOC's Carbon Offset Projects.....	41
6.3.3	Future Considerations	43
7.	CONCLUSIONS.....	44
7.1	ESAP Requirements	44
7.2	Project Oil Kenya	44
7.3	AOC ESMS, ESG Management, Reporting and Energy Transition	44
7.4	Recommendations for Next Review	44

APPENDIX A ADDITIONAL DOCUMENTS PROVIDED BY AOC FOR CURRENT REVIEW

APPENDIX B ACCIDENT INVESTIGATION REVIEW

List of Tables

Table 2.1	AOC Non-Operated Interests	4
Table 2.2	Status and Current Activity in South Lokichar Basin.....	9
Table 3.1	Performance Status Ratings	14
Table 3.2	Performance Status Ratings	15
Table 4.1	Evaluation of ESAP Requirements.....	17
Table 5.1	Topics to be addressed in Volume 2 of the SLIP	21
Table 5.2	ESPPs for Construction and Operations Phases.....	24
Table 5.3	Project Oil Kenya Management Systems and Plans: Compliance Requirements	34

List of Figures

Figure 2.1	Current AOC JV Assets.....	5
Figure 2.2	South Lokichar FFD Project and Pipeline Route Schematic.....	6
Figure 2.3	South Lokichar FFD Project Pipeline Route.....	8
Figure 2.4	Offshore South Africa and Namibia Assets	10
Figure 2.5	Offshore Western South Africa and Namibia Assets	11
Figure 2.6	Offshore Nigeria Assets	12
Figure 5.1	Original and Revised Water Supply Pipeline Routes	29
Figure 5.2	Original and Revised Oil Export Pipeline Routes.....	33
Figure 6.1	GHG Management Plan & Performance (Scope 1 and 2)	41

Table of Acronyms

Name	Description
AOC	Africa Oil Corporation
AoI	Area of Influence
ARR	Afforestation, Reforestation and Revegetation
BAP	Biodiversity Action Plan
CCP	Core Carbon Principles
CDP	Community Development Plan
CPF	Central Processing Facility
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPC	Engineering, Procurement and Construction
EP IV	Equator Principles (Version IV)
EOPS	Early Oil Pilot Scheme
ESAP	Environmental and Social Action Plan
ESRS	Environmental and Social Review Summary
ESDD	Environmental and Social Due Diligence
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
ESPP	Environmental and Social Performance Plan
ESG	Environmental and Social Governance
FEED	Front End Engineering Design
FDP	Field Development Plan
FID	Final Investment Decision
FPIC	Free Prior Informed Consent
GHG	Green House Gases
GIIP	Good International Industry Practice
GoK	Government of Kenya
HR	Human Resources
HSEC	Health, Safety, Environment and Community
IFC	International Finance Corporation
IMG	Independent Monitoring Group
ISMP	Invasive Species Management Plan
IOB	Integrated Operations Base
KJV	Kenya Joint Venture
LRP	Livelihoods Restoration Plan LRP
LALR	Land Acquisition and Livelihood Restoration
LARF	Land Acquisition and Resettlement Framework
LLCOP	Lokichar to Lamu Crude Oil Pipeline
MoPM	Ministry of Petroleum and Mining
NEMA	National Environmental Management Authority
NLC	National Lands Commission
PAP	Project Affected People
PMC	Project Management Company

PS	Performance Standard
RAP	Resettlement Action Plan
REDD	Reduce Emissions from Deforestation and Forest Degradation
RoW	Right of Way
SASB	Sustainability Standards Accounting Board
SEP	Stakeholder Engagement Plan
SLIP	Supplementary Lenders Information Package
TCFD	Task Force on Climate Related Financial Disclosures
SoCC	Species of Conservation Concern
TNFD	Taskforce on Nature-related Financial Disclosures
TCG	Turkana County Government
UN SDG	United Nations Sustainable Development Goals
VCS	Verified Carbon Standard
WRUA	Water Resource Users Association

EXECUTIVE SUMMARY

Africa Oil Corporation (AOC) is a UK headquartered and Canada listed oil and gas exploration and development company with exploration and development assets in Kenya, exploration, development and producing assets offshore Nigeria, as well as a portfolio of exploration assets in Guyana, Namibia, South Africa and in the Senegal/Guinea Bissau Joint Development Zone. AOC holds its interests through direct ownership of concessions and through its shareholdings in investee companies (Prime Oil & Gas BV, Africa Energy Corp, Eco (Atlantic) Oil & Gas Ltd and Impact Oil and Gas Ltd).

The Equity Subscription Agreement between AOC and the International Finance Corporation (IFC) for oil and gas exploration, appraisal and development activities requires AOC, and its Joint Venture partners, to conform to the IFC Performance Standards on Environmental and Social Sustainability (2012), the associated World Bank guidance and the Equator Principles (version IV) requirements and fulfil the requirements of an agreed Environmental and Social Action Plan (ESAP). The investment requires the establishment of an Independent Monitoring Group (IMG) to undertake periodic reviews of progress with the ESAP requirements and conformance with the IFC PSs. The initial IMG review was conducted in December 2015 and this report is the eleventh IMG review.

Most of the current ESAP actions are closed with a small number pending determination of the submitted Environmental and Social Impact Assessments (ESIAs) and the development of associated environmental and social management documentation, as described below.

Project Oil Kenya (POK) is the name given to the upstream South Lokichar field development project in north-west Kenya, operated by AOC's Joint Venture (JV) partner, Tullow Kenya BV, and the midstream pipeline to the Port of Lamu in north-east Kenya, being led by the Government of Kenya. The revised upstream POK Field Development Plan is currently being reviewed by the Government of Kenya and activities on site are at a very low level (maintenance of security at existing facilities and ongoing stakeholder engagement activities) and no current exploration, appraisal or site restoration work being undertaken. A number of upstream legacy issues are also being addressed by the POK JV team, related to the storage of exploration drilling cuttings and wastes at a single site (Twiga 1 well site) and working with the Turkana County Government to develop a sustainable strategy for the provision of community water supplies within Turkana County.

The POK midstream component (pipeline) has been approved by the Kenyan National Environmental Management Authority (NEMA). An ESIA addendum will be required to address the Load Out Facility at the Port of Lamu, once a location is agreed. The ESIA for the upstream component is currently undergoing review by NEMA. A separate ESIA for the water supply pipeline from the Turkwel reservoir to the upstream facilities was submitted to NEMA for review. Responses from NEMA on both these parts of the upstream project are expected in Q1 2023.

A Supplementary Lender Information Package, to address specific IFC PSs and related lender requirements for POK is planned for the second half of 2023 with a Final Investment Decision (FID) targeted for the end of 2023. An overall POK Environmental and Social Performance Plan (ESPP) and associated subsidiary plans will also be produced by mid-2023, covering the ESIA commitments, NEMA licence conditions, IFC PS requirements and other lender requirements.

AOC's Corporate Environmental and Social Management System Framework and associated corporate policies, procedures and standards of operation were reviewed by AOC in May 2022 with no material changes made. AOC's top Environmental and Social Governance (ESG) risk is identified as climate-related market risk, resulting in reduced demand for oil and gas with the transition to a lower carbon future. AOC's ESG priorities include the Energy Transition Strategy and carbon offsets, which include a commitment to be carbon neutral from 2025. As part of this strategy, AOC has commenced the planning of offset projects. AOC continues to work through Prime to influence the ESG performance for its non-operated offshore Nigeria assets, in particular to reduce GHG emissions from routine and non-routine flaring.

AOC's third Sustainability report, covering 2022, is expected to be issued in Q1 2023. AOC has aligned its Sustainability Reports with the Sustainability Standards Accounting Board reporting standards and the Task Force on Climate Related Financial Disclosures reporting requirements.

The focus of the next IMG review will be dependent on activities at existing assets and future investment decisions. The further development of the POK environmental and social assessments, systems and plans as the POK moves towards FID at the end of 2023, AOC's ongoing oversight of its non-operated assets, and further development of AOC's ESG Strategy and Energy Transition Strategy will be key areas. The next review is currently scheduled for the end of the first quarter of 2023.

1. INTRODUCTION

1.1 Background

In August 2015, *Africa Oil Corporation (AOC)* entered into an Equity Subscription Agreement with the International Finance Corporation (IFC) for financing to support its oil and gas exploration, appraisal and development activities. The agreement included a requirement for AOC to conform to the IFC Performance Standards (PSs) on Environmental and Social Sustainability and to undertake specific actions detailed in an agreed Environmental and Social Action Plan (ESAP). An ESAP was developed by the IFC based on its Environmental and Social Review Summary (ESRS) of AOC's activities produced in June 2015.

Environmental Resources Management Consulting East Africa Limited (ERM) was commissioned by AOC and the IFC to act as the Independent Monitoring Group (IMG) ⁽¹⁾. The role of the IMG is to conduct a review of Health, Safety, Environment and Community (HSEC) aspects associated with AOC's activities related to oil and gas exploration, appraisal and development with respect to IFC's environmental and social requirements.

Reviews are scheduled to be undertaken every six months during exploration and development phases, and annually during production phases. Some of the scheduled reviews have been affected by delays due to site security issues, Covid-19 restrictions and project design delays. The previous IMG reviews were undertaken in:

- December 2015, including site visit to South Lokichar and Block 12A in Kenya;
- July 2016, including site visit to South Lokichar and Block 12A;
- January 2017, including site visit to South Lokichar;
- July 2017, desk based due to travel restrictions associated with elections in Kenya;
- May 2018, including site visit to South Lokichar;
- December 2019, delayed due to reduced levels of activity on site and included site visit to Early Oil Pilot Scheme and oil transport;
- February/March 2020, including site visit to South Lokichar and desk-based reviews of upstream Phase 1 development and midstream pipeline project Environmental and Social Impact Assessments (ESIA) ⁽²⁾;
- November/December 2020, desk based due to travel restrictions and a low level of site activity at South Lokichar due to the Covid-19 pandemic;
- July/August 2021, primarily desk-based and included a review of the revised draft upstream ESIA and a site visit to South Lokichar was undertaken to observe community consultations on the ESIA; and
- February/March 2022, desk-based review providing an update on POK, in particular progress with the new water supply pipeline, community water supply arrangements and consolidation and management of historic drilling wastes.

This report covers the findings of the eleventh review undertaken in September/October 2022.

1.2 Scope of the Review

The focus of previous reviews has been on AOC's interests in Kenya where AOC has non-operated assets (blocks 13T, 10BA and 10BB in the South Lokichar Basin, north-west Kenya) operated by a JV partner, Tullow Oil Kenya BV. AOC currently have no other non-operated or operated interests in Kenya having relinquished its interests in Block 12A (in 2017) and Block 9 (in 2018). AOC's interests in Ethiopia were also relinquished (in 2019), as reported in previous reviews.

(1) As required for projects classified by the IFC as Category A (projects expected to have significant adverse social and/or environmental impacts that are diverse, irreversible, or unprecedented).

(2) The Term ESIA is used here, however, it is noted that under Kenyan legislation the term EIA is used.

From late 2018, AOC broadened its investment portfolio and now has interests across the oil and gas exploration, development and production cycle, including non-operated assets in Nigeria, Namibia, South Africa, Senegal/Guinea Bissau Joint Development Zone and Guyana as well as operated exploration interests in South Africa (as described in Chapter 2). Previous reviews have included an assessment of AOC's updated Environmental and Social Governance (ESG) systems, policies, standards of operation and performance reporting requirements that apply to these and potential future non-operated assets, as well as to assets where AOC may have an operator role.

Project Oil Kenya (POK) comprises the upstream South Lokichar oil producing field development in north-west Kenya, operated by Tullow Kenya BV, and the midstream pipeline to the Port of Lamu in north-east Kenya, being led by the Government of Kenya (GoK). For the current review, a site visit was planned to the upstream and midstream components of POK as well as the water supply pipeline. The site visit and review were delayed due to the elections and potential re-run of the elections in Kenya and then the site visit was cancelled due to ongoing security concerns in the upstream area. The current review is therefore desk-based and the objectives are presented below.

1.3 Objectives

The overall objective of the IMG reviews is to identify areas of non-conformance ⁽¹⁾ within the review framework and to make recommendations for corrective actions, or improvements in line with Good International Industry Practice (GIIP).

The current review covers the following areas.

- Overview of status of AOC's non-operated interests.
- Progress against the current AOC ESAP requirements.
- Update on status of POK, including: a review of current organisation, management and related activities; status with the updated Field Development Plan (FDP); status of permit applications, including the upstream permit and the revised water supply pipeline permit; and review of ongoing POK site issues regarding waste management and community water supplies.
- Review the incident investigation report of the fatal incident at the South Lokichar Kapese Integrated Operations Base (IOB).
- Review of POK's developing Environmental and Social Management System (ESMS) and Environmental and Social Performance Plan (ESPP) and the scheduled activities pre-FID (i.e. to end of 2023).
- Update on Corporate ESG status and current activities, including carbon offset strategy.

1.4 Approach

The approach taken for the current review was as follows.

- Attend an inception meeting to receive a briefing on AOC current and planned activities.
- Conduct a desktop review of provided documents (documents submitted for this review are listed in Appendix A).
- Request clarifications or further information from AOC and report the review findings.

Each IMG report provides updated information on assets and project progress and, where relevant, an update on previous observations/findings and any new observations/findings. For this review, given the low level of activity at the POK site over the last few years, a description and review of planned activities has been provided. Where appropriate, information in the previous IMG reviews is referenced or summarised to avoid unnecessary repetition. The review methodology and action tracking procedure are presented in Chapter 3.

(1) The term 'compliance' relates to specific legal and regulatory measures or contract requirements, whereas the term 'conformance' relates to a standard that is outcome-based.

1.5 Review Period

This review covers the activities in progress between the tenth review in February/March 2022 and the current review in September/October 2022. Where reference is made in this report to the 'next review period', this would cover the approximately six-month period from October 2022 to the next review currently scheduled for the end of the first quarter (Q1) of 2023. For the next review, the postponed site visit is planned to be included, subject to an assessment of security and related issues.

1.6 IMG Review Team

The ERM IMG team for the current review comprised consultants covering the following skills specified in the IMG Scope of Work.

- Mark Irvine: Team Leader and Environmental Specialist.
- Kelly Horton: Social Specialist.
- Gideon Owaga: Social Specialist.
- Peter Wright: Biodiversity Specialist.
- Charles Henderson: Carbon Offsetting Strategy Specialist.
- Charlotte De Fraye: Carbon Offsetting Strategy Specialist.
- Jackie Little: Health and Safety Specialist.

1.7 Limitations

The findings in this report are based on the Scope of the Review described above. ERM performed these services in a manner consistent with the normal level of care and expertise exercised by members of the environmental and social consulting profession. The work is based primarily upon documents produced and studies performed by third parties, and follow-up discussions.

ERM has used information provided by AOC, JV Partners and their representatives in good faith and with verification limited to requests for clarifications and additional documentary evidence. The assessment and recommendations made are based on professional judgement drawing on the available information and within the limits of the budget and schedule. The information provided in this report should be considered as technical input and not as legal advice.

1.8 Report Structure

The remainder of this review report is structured as follows.

- Chapter 2 summarises the key AOC and JV assets and status of activities.
- Chapter 3 outlines the assessment framework and applicable standards.
- Chapter 4 presents an assessment of the progress against the AOC ESAP requirements.
- Chapter 5 presents an update of the findings of the review of POK with respect to the IFC PSs, along with the actions required for conformance and recommendations to meet GIIP.
- Chapter 6 presents an update on AOC's Corporate ESG strategy, Carbon Offset Strategy and related activities.
- Chapter 7 presents the conclusions and recommendations for the next review.

The review is supported by the following appendix.

- *Appendix A: Additional Documents Provided by AOC for the Current Review.*
- *Appendix B: Accident Investigation Review*

2. AOC AND JV ASSETS AND CURRENT ACTIVITIES

2.1 Overview of Non-Operated Interests

A summary of AOC's and its JV Partners interests is provided in Table 2.1 and illustrated in Figure 2.1. Further details are provided in the following sections with more detailed maps, where available. Note that Africa Oil SA has operator interests in two blocks in South Africa, based on exploration rights.

Table 2.1 AOC Non-Operated Interests

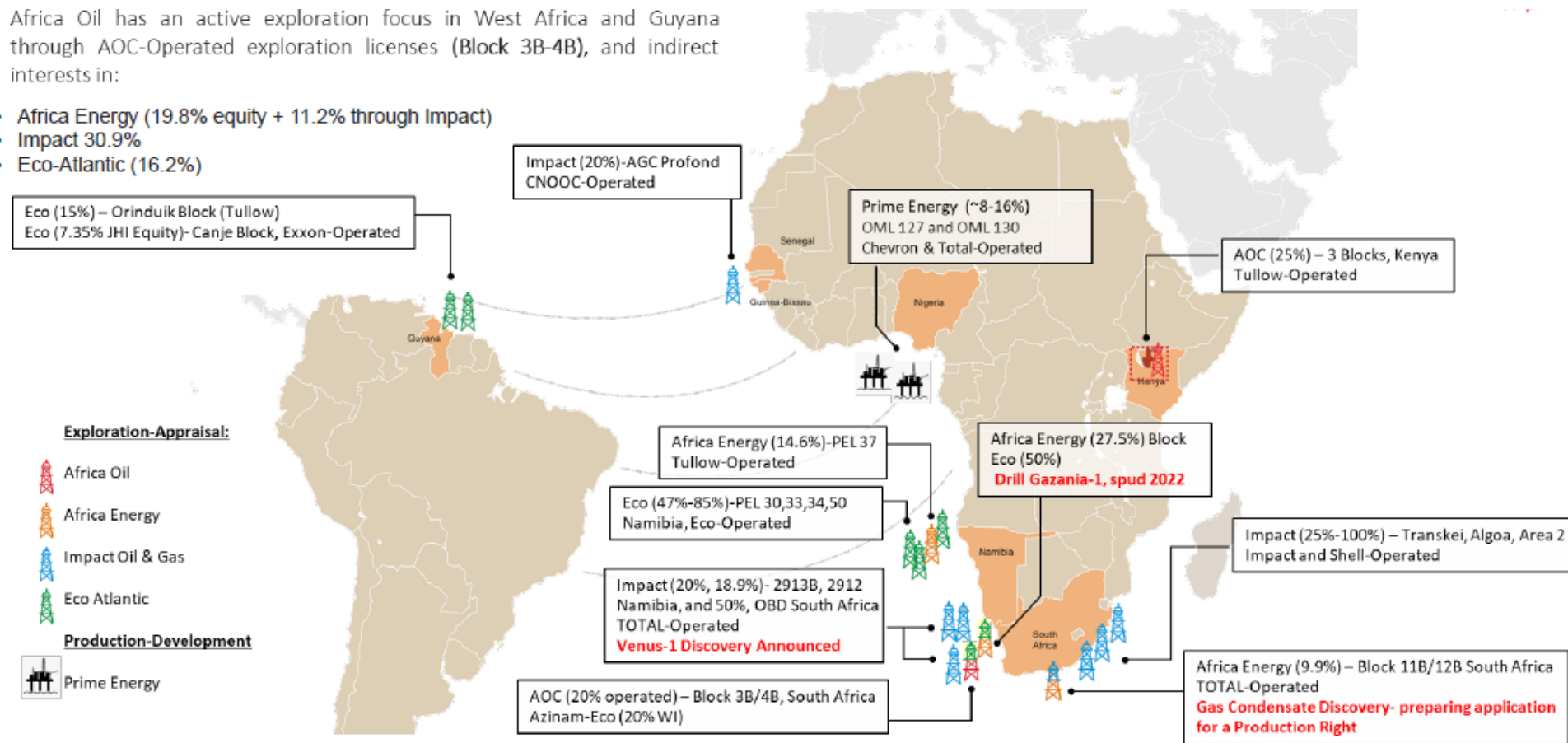
Company and AOC Relationship	AOC Shareholding	AOC Influence	Country	Block/Fields	Company Shareholding	Operator
Direct Holdings						
Africa Oil Kenya	100%	Wholly owned	Kenya	10BA, 10BB, 13T	25%	Tullow Kenya
Africa Oil SA Corp	100%	Wholly owned	South Africa	3B/4B (Exploration Rights)	20%	AOC
Indirect Holdings						
Africa Energy Corp	19.78%	Independent Director	South Africa	11B/12B (Exploration Rights)	4.9%*	Total
				2B (Exploration Rights)	27.5%	Eco (Atlantic) Oil and Gas Ltd
			Namibia	PEL 37	14.62%	Tullow
Impact Oil and Gas	30.8%	AOC has Non-Executive Director on Board	Namibia	2913B 2912	20% 18.9%	Total
			South Africa	Algoa & Transkei, Area 2 Orange Basin Deep	50% 90% 22.22%	Shell Impact O&G Total
			Senegal/ Guinea Bissau	AGC Profond	20%	CNOOC
Eco (Atlantic) Oil and Gas Ltd	15.97%	Independent Director	Guyana	Orinduik Block	15%	Tullow
				Canje Block	1.28%	ExxonMobil
			Namibia	Cooper Sharon Guy Tamar	54.3% 56.7% 47.2% 85%	Eco (Atlantic) Oil and Gas
Prime Oil and Gas	50%	AOC has Director on Board	Nigeria	OML 127 (Agbami producing field)	8%	Chevron
				OML 130 (Akpo and Egina producing fields)	16%	Total

Sources: AOC website (accessed October 2022), AOC Corporate Update (September 2022) and Operator websites (accessed October 2022) and correct to 30 September 2022. * Africa Energy has signed definitive agreements that, subject to approvals and completion, will increase the effective interest in Block 11B/12B to 10%.

Figure 2.1 Current AOC JV Assets

Africa Oil has an active exploration focus in West Africa and Guyana through AOC-Operated exploration licenses (Block 3B-4B), and indirect interests in:

- Africa Energy (19.8% equity + 11.2% through Impact)
- Impact 30.9%
- Eco-Atlantic (16.2%)



Source: AOC website accessed October 2022.

2.2 Africa Oil Kenya

Africa Oil Kenya is wholly owned by AOC. Non-operated assets in Kenya include blocks 10BA, 13T and 10BB in Turkana County, in north-west Kenya. The assets are operated by Tullow Kenya (50%) in a JV with AOC (25%) and Total (25%), named the KJV later in this report. Activities in blocks 13T and 10 BB described in Section 2.2.1 below.

The extended exploration licence for Block 10BA expired on 26 April 2022. An exploration and appraisal licence extension has been included in the application to extend the licences for blocks 13T and 10BB (see below). As stated in Section 1.2 above and reported in previous reviews, AOC no longer have an interest in blocks 9 and 12A in Kenya.

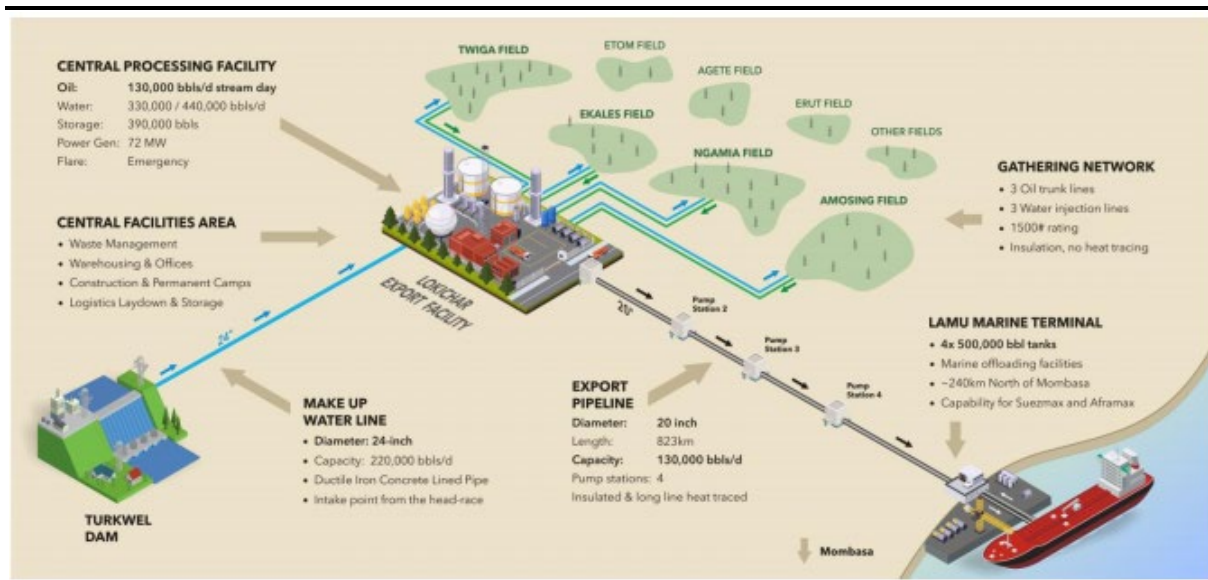
2.2.1 South Lokichar Field Development Project

POK is a GoK led project to deliver hydrocarbons from the South Lokichar Basin to the Port of Lamu. For the purposes of this report, the South Lokichar Basin comprises blocks 13T and 10BB. The KJV are responsible, under its Production Sharing Contract, for implementing the upstream component of POK.

The permitted phase of exploration and appraisal activities within blocks 10BB and 13T commenced on 19th of September 2015 and expired on 18th September 2020. The license was extended to December 31, 2021, pending review of the revised POK FDP which was submitted to the GoK in December 2021. During this time it is reported by AOC that the license is retained in full. The KJV expects the license to be renewed once the FDP review is complete, expected in Q1 2023.

The POK FDP includes the discoveries at Twiga, Amosing and Ngamia in block 10BB and 13T, as well as additional wells from Ekales/Agete and Etom. This will comprise a series of well pads, interconnecting flowlines, a Central Processing Facility (CPF), and support facilities and infrastructure (e.g. roads, logistics base/storage areas, waste storage sites, and power and water supply). Figure 2.1 illustrates the redefined upstream and mid-stream components of POK schematically.

Figure 2.2 South Lokichar FFD Project and Pipeline Route Schematic



Source: AOC Corporate Presentation August 2022.

The integrated development of these six fields in the South Lokichar Basin is planned over two main phases over a 25-year period (22 years after first oil), with first oil from each expected from between 3 and 10 years following FID. These phases include:

- Phase 1: Amosing and Ngamia and Twiga at year 3.
- Phase 2: Ekales at year 5, Agete at year 7 and Etom at year 10.

The peak oil production forecast is 120,000 barrels per day.

A summary of the activities associated with the development of the South Lokichar Basin is provided below along with the associated midstream Lokichar to Lamu Crude Oil Pipeline (LLCOP) project. The environmental and social context in South Lokichar, the relevant Kenyan legislation applicable to the planned activities in this area and details of the progression with the development have been reported in previous IMG reviews.

It has been agreed that the KJV and the GoK will adopt a common approach to environmental, health, safety and social performance management for POK. These will be based on Tullow Oil Kenya's systems and processes. AOC entered into a Collaboration Agreement with Tullow Oil Kenya in 2021 for the 2021 work programme which was extended for the 2022 work programme to share resources and operate under a single management team.

The project Final Investment Decision (FID) is targeted for the end of 2023. The KJV is evaluating options to progress the project, including bringing additional shareholders into the JV. Subject to FID, the issuing of tender packages to potential contractors, bid evaluation and contractor selection for the Project Management Company (PMC), Drilling, and Operations and Maintenance Services contractors would be undertaken in early 2024.

The upstream ESIA, to meet Kenyan regulatory requirements, for POK was submitted to the Kenyan National Environmental Management Authority (NEMA) in September 2021 and determination is pending (expected in Q1 2023).

Due to restriction to activities due to Covid-19 and pending the review of the FDP, the upstream development team has been demobilised, with a small care and maintenance team, including security, field Environmental Health and Safety (EHS) and Social Performance (SP) staff being in place over the last 2.5 years. AOC have reported that activities at South Lokichar are currently restricted to the following activities.

- Routine integrity inspections of wells, sites and facilities and maintenance of on-site facilities and equipment.
- Operation/maintenance of community water boreholes and the associated distribution network.
- Site security and logistical support to dedicated GoK security teams.
- Regulatory inspections and audits and other activities to maintain compliance with permit and license requirements.
- Management of the Twiga 1 waste transfer site.
- Ongoing but low level county and community level consultations.

2.2.1.1 Water Supply

The Turkwel reservoir was selected as the project water source for well pressure control (water injection) at the wellpads to be located in the six production fields. Following an evaluation of options (reported in previous IMG reviews), the originally proposed pipeline route was revised prior to the finalising of the FFD ESIA, therefore a separate ESIA for the revised, 90 km pipeline route from the reservoir to the project site was produced and submitted to NEMA in February in 2022 and is pending determination (expected by the end of 2022). The revised pipeline system includes the provision of a series of six offtake points to provide half of the water from the pipeline to local communities.

2.2.2 Lokichar to Lamu Crude Oil Pipeline

The LLCOP is planned from the CPF at South Lokichar to a marine export terminal to be built at the Port of Lamu. Under the 2017 Joint Development Agreement, oversight and governance is provided by a Pipeline Steering Board comprising representatives of the KJV and the Government of Kenya that provide personnel and other resources to the Pipeline Project Management Team. AOC, as part of the steering board and project management team is therefore able to provide advice and has some influence over how activities are planned and undertaken.

The 20" (c. 0.5 m) diameter steel pipeline, running from the CPF to the Port of Lamu, will be 824 km long. It will be buried to a depth of 0.9 m and will be heated and insulated giving it an external

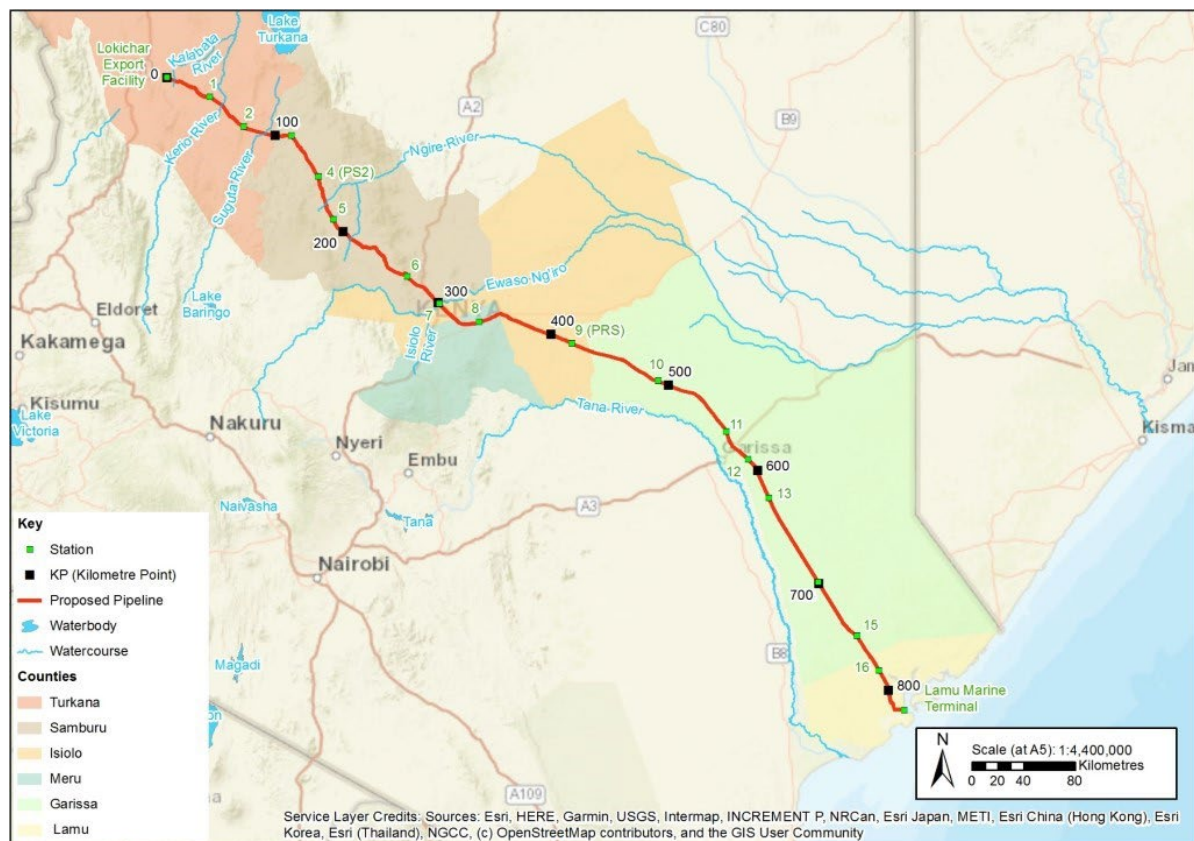
diameter of 26" (c. 0.66 m) diameter). It will be located within the 500 m wide LAPSETT corridor (a GoK selected strategic corridor for infrastructure development). During construction there will be a 26 m wide construction Right of Way (RoW) and this will be reduced to a 6 m wide easement for the operations phase. There will be a series of four above ground heating and pumping stations along the pipeline route within the LAPSETT corridor. Temporary construction laydown areas, worker camps and associated facilities will also be located within the 500 m LAPSETT corridor, where feasible. Construction will take approximately 36 months after FID, with an average installation rate of approximately 1 km a day.

An ESIA for LLCOP was submitted to NEMA in November 2019 and an addendum issued in March 2020 to address design and pipeline route changes. Following a series of public hearings and NEMA review, an ESIA licence was granted to the KJV on 1 November 2021. The licence has a series of 101 conditions attached to it covering general, construction, operations, notifications and decommissioning requirements.

The ESIA included two options for the storage facility at the Port of Lamu (one onshore and one floating option). An ESIA addendum to address the preferred onshore option for four 500,000 barrel storage tanks was submitted to NEMA in March 2022. For the Load Out Facility, the original selected location (Berth 3) is now not available therefore alternative options are being evaluated. A second ESIA addendum will be prepared and submitted to NEMA once the selection process has been completed. The ESIA addendum is expected to be completed in Q2 2023. Once operational, export of oil to tankers of up to one million barrel capacities would take place approximately once every 7 to 10 days, at peak production.

The GoK LAPSETT Corridor Development Authority, via the National Lands Commission (NLC), is leading the land access and stakeholder engagement for the pipeline, as well as the upstream land requirements. Work by the NLC to survey and gazette the required land along the pipeline route up to the Turkana County border has been completed. Completion of the work in Turkana was delayed due to Covid-19 access restrictions in 2020 and 2021. AOC has reported that the gazetting process for the upstream areas has now been completed.

Figure 2.3 South Lokichar FFD Project Pipeline Route



Source: AOC

2.2.3 Supplementary Lender Information Package and ESPP

POK comprises the upstream, including the water supply, and mid-stream elements of the project. To address gaps with respect to lender requirements for the whole project, KJV is planning to undertake a Supplementary Lender Information Package (SLIP) report focussing on conformance with the IFC PSs and associated World Bank guidance, and the relevant Equator Principles (EP IV) requirements. This is planned to report in mid-2023. In parallel to this, an overall POK Environmental and Social Performance Plan (ESPP) will be produced by the KJV incorporating all the project commitments and requirements from the ESIA, NEMA licence conditions and lender standards requirements. Further details of the SLIP and ESPP are provided in Chapter 5.

2.2.4 Summary of Activities in South Lokichar

A summary of the status and main activities underway or planned in south Lokichar described above are presented in *Table 2.2*.

Table 2.2 Status and Current Activity in South Lokichar Basin

Licence Block	Status	Current Activity
Blocks 13T and 10BB (South Lokichar Basin)	Exploration and appraisal licence ended at the end of 2021 for blocks 13T and 10BB.	No current exploration and appraisal activities other than care and maintenance of existing well pads.
	The revised POK FDP was submitted to GoK in December 2021 for review. Comment on the revised plan is expected from the GoK in Q1 2023.	No current development activities.
	Upstream ESIA was submitted in September 2021 for NEMA review. The decision is pending, expected Q1 2023.	Drilling wastes have been consolidated at the Twiga 1 well site, pending FID and construction of an integrated waste management centre at the proposed CPF.
	An ESIA for water pipeline submitted in February 2022 for NEMA review. The decision is pending, expected Q1 2023.	Community water supply strategy being developed with the Turkana County Government (TCG).
	FID is targeted for the end of 2023 and construction is scheduled to take place over a 36-month period from FID to first oil.	Ongoing Stakeholder engagement to maintain relationships, support the ongoing activities and register grievances.
	Joint Development Agreement with GoK to progress export pipeline from South Lokichar to Port of Lamu.	KJV reviewing ESIA licence conditions in preparation for the development of the ESPP. Discussions are ongoing with GoK on the location of Load Out Facility and the ESIA addendum will commence once these discussions have concluded.
	Midstream ESIA was submitted to NEMA in November 2019 and a licence was issued in November 2021, along with licence conditions. An ESIA addendum for the Load Out Facility at the Port of Lamu will be produced once an agreement on the location is obtained from the GoK.	
A POK Supplementary Lender Information Package to meet IFC PSs, EPIV requirements and an Environmental and Social Performance Plan are planned.	Contracting a consultant to undertake the SLIP is planned for Q4 2022 and work to be completed on SLIP by mid-2023. KJV to develop ESPP by mid-2023.	

2.3 Africa Oil SA Corp (South Africa)

Africa Oil SA Corp, owned by AOC, has a 20% operated interest and a 3.5% indirect interest through Eco (Atlantic) Oil and Gas Ltd in the Exploration Rights for Block 3B/4B, offshore South Africa. Africa Oil SA Corp became the Operator for the block in February 2020; however, this role is currently limited to the desk-based review and evaluation of previously acquired seismic survey data (see Figure 2.1 and Figure 2.4).

2.4 Africa Energy Corp (South Africa & Namibia)

AOC has an approximate 19.9% interest in Africa Energy Corp. Africa Energy has a 10% interest in the Exploration Rights for Block 11B/12B, offshore South Africa, where Total is the operator (see Figure 2.1 and Figure 2.3). Following discoveries in 2019 (Brulpadda) and 2020 (Luiperd) the exploration licence had been extended into 2022.

Africa Energy currently has a 27.5% participating interest in the offshore Exploration Right for Block 2B, offshore South Africa where Eco (Atlantic) Oil and Gas Ltd is the operator (see Figure 2.1 and Figure 2.4). Spudding of an exploration well in the Gazania prospect is scheduled for Q4 2022.

Africa Energy also has a 14.6% interest in PEL 37 offshore Namibia where Tullow is the operator.

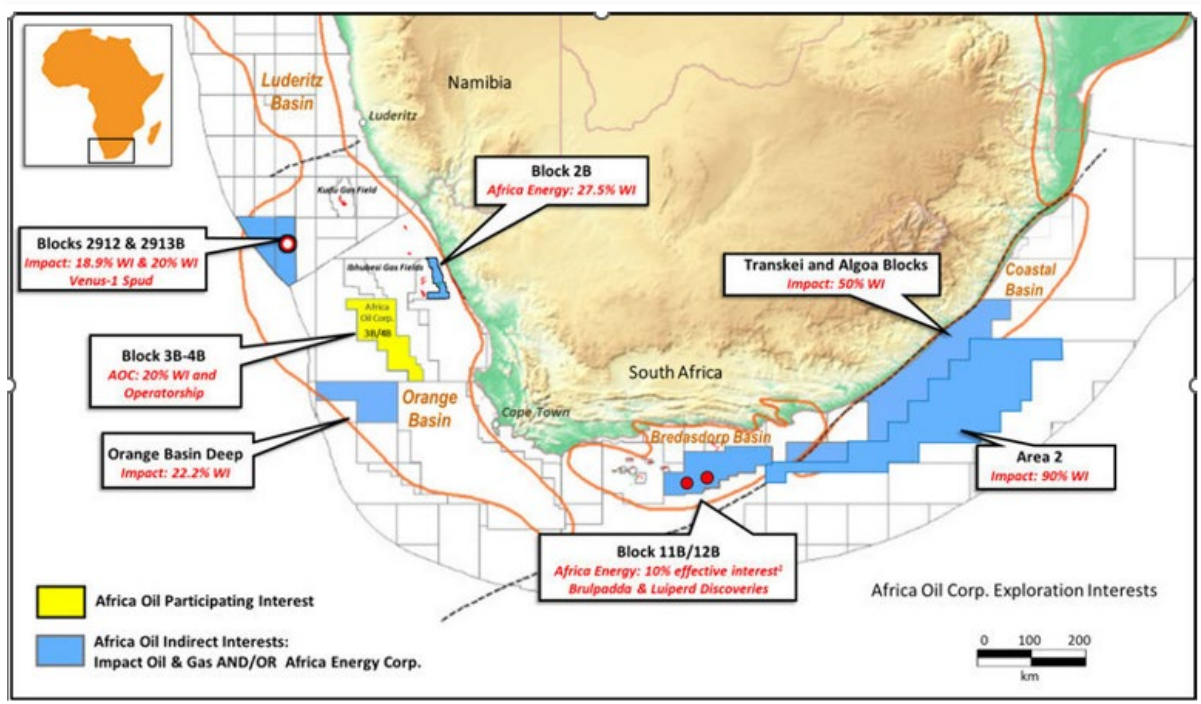
2.5 Impact Oil and Gas (Namibia, South Africa and Senegal/Guinea Bissau)

AOC has a 30.9% interest in Impact Oil and Gas that has a 20% interest in block 2913B and an 18.9% interest in block 2912 offshore Namibia, where Total is the operator. The Venus well spudded in November 2021 and a discovery of light crude was declared on 20th February 2022. Appraisal work is now planned.

Impact Oil and Gas has interests in three blocks offshore South Africa: 90% in Area 2 (Impact Oil and Gas is the Operator), 50% in Algoa & Transkei (Shell is the Operator) and 22.22% in Orange Basin deep (Total is the Operator) (see Figure 2.1 and Figure 2.4).

Impact Oil and Gas also has interests in the CNOOC Operated AGC Profond Block in the Senegal/Guinea Bissau Joint Development Zone (see Figure 2.1 above).

Figure 2.4 Offshore South Africa and Namibia Assets



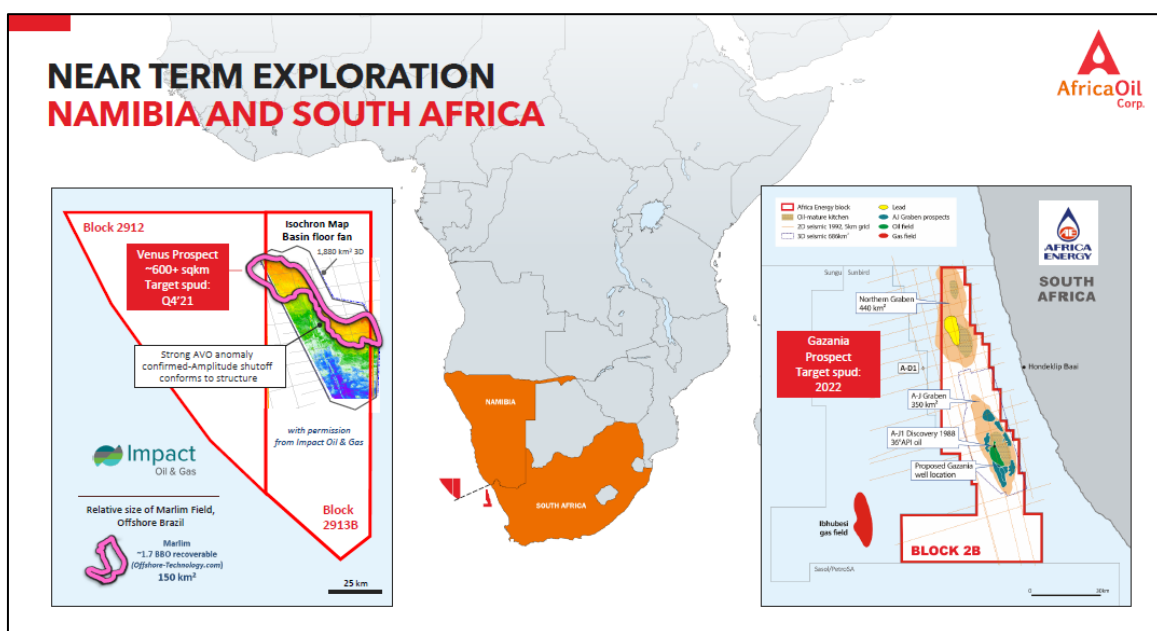
Source: AOC Corporate Presentation November 2021.

2.6 Eco (Atlantic) Oil and Gas Ltd (Guyana and Namibia)

AOC has an approximate 18.4% interest in Eco (Atlantic) Oil and Gas Ltd, which has a 15% working interest in the Orinduik block, offshore Guyana. The Operator is Tullow. Two discoveries were made in 2019 (Jethro-1 and Joe-1 wells), and there is potential for further exploration and appraisal wells under current permits. Eco-Atlantic also has exploration interests in the Canje Block through a 10% holding in JHI Associates, which has a 17.5% interest in the block (see Figure 2.1). ExxonMobil is the Operator. The Sapote-1 exploration well was drilled in 2021 but was unsuccessful. The partners signed a licence renewal to Q1 2023 and has an option to extend that through another renewal to 2026.

Eco-Atlantic also has four blocks offshore Namibia (see Figure 2.1 and Figure 2.5). Work is being undertaken to process seismic data from these blocks with licences extended to 2031. Following the acquisition of Azinam in March 2022, Eco-Atlantic also holds a 50% operated interest in Block 2B offshore South Africa, and a 20% working interest in Africa Oil operated Blocks 3B/4B.

Figure 2.5 Offshore Western South Africa and Namibia Assets



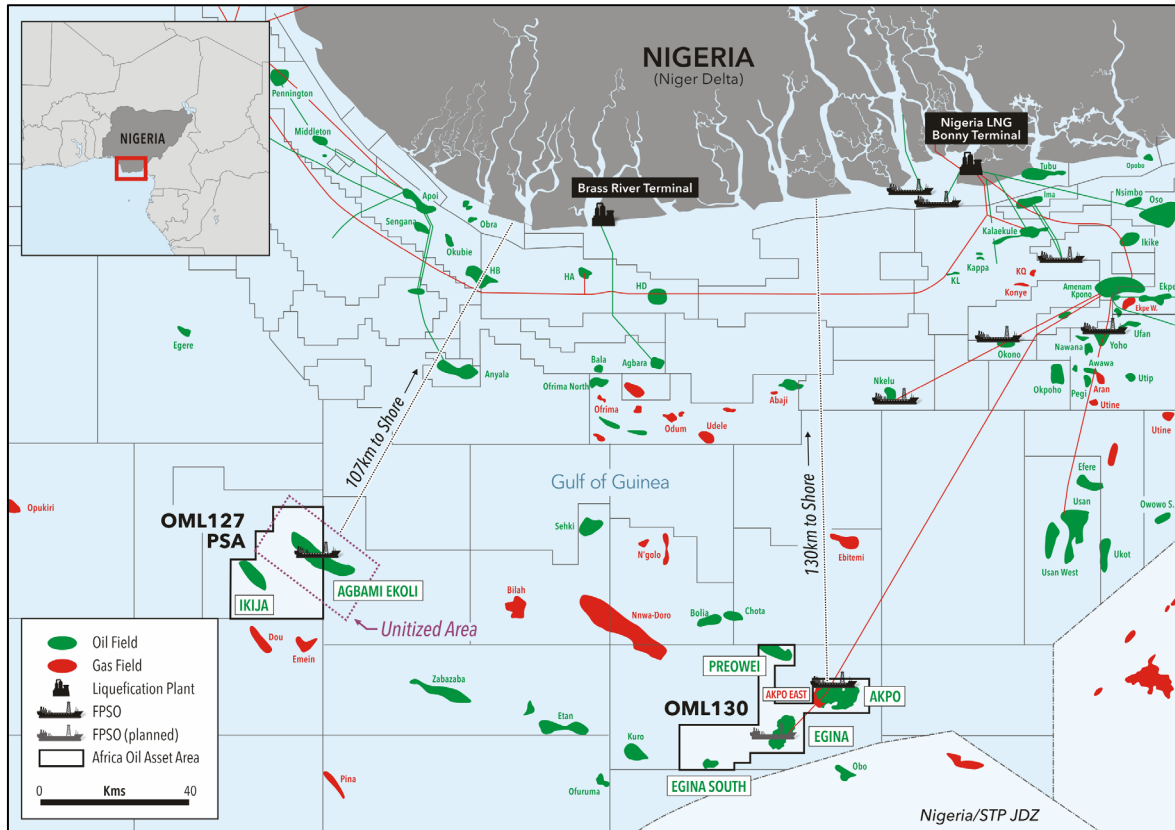
Source: AOC Corporate Presentation November 2021.

2.7 Prime Oil and Gas BV (Nigeria)

AOC holds a 50% equity interest in Prime Oil and Gas in a Joint Venture with BTG Pactual. Prime owns non-operator working interests in three FPSO based deep-water producing assets offshore Nigeria. These are listed below and shown in Figure 2.6.

- Block OML 127: Agbami field operated by Chevron (AOC has approximately a 4% interest as part of Prime's approximately 8% interest).
- Block OML 130: Egina and Akpo fields operated by Total (AOC has approximately an 8% interest as part of Prime's approximately 16% interest).

Figure 2.6 Offshore Nigeria Assets



Source: AOC website August 2022

3. ASSESSMENT FRAMEWORK AND METHODOLOGY

3.1 Assessment Framework

The IMG review of AOC's and its JV partners' plans and activities was undertaken through a combination of document review, corporate presentations on a video-call, and follow-up email exchanges.

The assessment was undertaken against the following environmental and social standards.

- Relevant environmental and social laws and regulations of the host country in force at the time of the assessment.
- AOC's agreed ESAP requirements (disclosed by the IFC on 31 August 2015).
- IFC PSs on Environmental and Social Sustainability (2012) and related policies and guidance, including:
 - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts;
 - Performance Standard 2: Labour and Working Conditions;
 - Performance Standard 3: Resource Efficiency and Pollution Prevention;
 - Performance Standard 4: Community Health, Safety and Security;
 - Performance Standard 5: Land Acquisition and Involuntary Resettlement;
 - Performance Standard 6: Biodiversity Conservation and Sustainable; Management of Living Natural Resources;
 - Performance Standard 7: Indigenous Peoples; and
 - Performance Standard 8: Cultural Heritage.

The review considered the sector-specific guidelines of the World Bank Group as referenced in the IFC PSs, including the following.

- General Environmental, Health and Safety General Guidelines (April 2007).
- Environmental, Health, and Safety Guidelines for Onshore Oil and Gas Development (April 2007).
- Environmental, Health, and Safety Guidelines for Offshore Oil and Gas Development (June 2015).

In addition the EP IV requirements on Human Rights Assessment and Climate Change Risk Assessment also apply.

The draft ESIA's that were provided to the IMG for previous reviews were reviewed against the Kenya Environmental Management and Coordination (Impact Assessment and Audit) Regulations (EIAAR) (2003) (as amended in 2016 and 2019) and associated guidance. AOC has provided a scope of work for a SLIP to address gaps with respect to lender standards. This work is due to commence in Q4 2022 and report in mid-2023

The proposed pipeline along the LAPSSET corridor from South Lokichar to Lamu is being financed separately therefore it is considered as a separate Project component within the overall common management approach to POK.

Regarding AOC's non-operated interests in a broader portfolio of projects, it is recognised that the application of its ESG systems, policies and standards of operations to these assets and projects is limited by what the Operator is willing and able to implement.

3.2 Methodology

3.2.1 Overview

The IMG review comprised the following main activities.

- A review of relevant environmental and social documentation and information. Presentations were made by AOC on 8 September 2022 with a video-conference link to AOC's offices in London and Nairobi. Copies of presentations and related documents were provided prior to and after the presentations (see below).

- Activities were evaluated against the assessment framework to determine compliance with national laws and regulations, corporate requirements, and conformance with lender requirements.

3.2.2 Document Review and Presentations

HSEC documents covering AOC’s corporate management plans and the KJV operational policies, procedures and plans were provided during the previous IMG reviews with updated and additional documents provided for the current IMG review. Details of the documents provided for the current review are presented in Appendix A. The documents submitted for the previous IMG reviews are listed in the previous reports.

An operational update was presented to the IMG by AOC outlining HSEC issues and progress with the development of management plans.

These covered the following main areas.

- An overview of POK’s current status and future plans, including: the status of the upstream, water supply and midstream ESIA reviews and licences; progress with addressing legacy issues (drilling waste consolidation and community water supply); stakeholder engagement, land access and progress with the Community Development Plan; and progress with the planned SLIP and the overarching POK ESPP and associated subsidiary plans.
- A summary of the process and outcome of the investigation into the fatal accident at the South Lokichar Kapese base.
- An update on AOC Corporate ESG, Risk Management Strategy and Energy Transition Strategy.

The status of the findings from the ESAP review and the HSEC performance are rated and evaluated according to the categories presented in *Table 3.1* and *Table 3.2*.

For the review of AOC’s ongoing development and implementation of its AOC ESG strategy related to its other non-operated interests, these have not been assigned a rating; however, where relevant, recommendations are made with respect to conformance with the IFC PSs, related guidance and GIIP (see Chapter 6).

Table 3.1 Performance Status Ratings

Performance Status Rating	Criteria	Action
When Required	Work to meet the requirements has not commenced, as the relevant phase of the project has not started.	Workplan to be agreed prior to relevant phase commencing.
Open	Work to meet the requirements has not commenced. This may be because a new action has been identified.	Workplan to be agreed with an agreed period.
In Progress	Work to meet requirements is in progress. Some parts of the requirements may be closed and others are planned within a defined period.	Workplan to be completed with an agreed period. Some items stated to have been completed may require verification before being closed.
Closed	Requirements have been fully met.	No further action is required, but will require ongoing monitoring to ensure future conformance. Closed items are shown on the ESAP items to demonstrate progress. Closed items are removed from the PS Conformance Actions

Table 3.2 Performance Status Ratings

Assessment Rating	Criteria	Action
Requirement not met – Level I	Issue or situation not consistent with Applicable Standards or commitments but without an immediate risk or impact to resource or receptors.	Level I Non Conformances will be recorded, along with a recommendation for corrective action to the Company
Requirement not met – Level II	Issue or situation not consistent with Applicable Standards or Company commitments that has not yet resulted in clearly identified damage or irreversible HSEC impacts, but which requires immediate corrective action to prevent risk of impact to resources or receptors. Recurring issue or situation not consistent with Applicable Standards or Company commitments but without an immediate risk of impact to resource or receptors generally requiring systems-level corrective action.	Level II Non Conformances will generate a corrective action request, and will be recorded. Level II Non Conformances may result in a recommendation to ‘Stop Work’, in those situations where work activity presents on-going HSEC risks.
Requirement not met – Level III	Issue or situation not consistent with Applicable Standards or Company commitments that has resulted in significant observed impact to resources or receptors, or which has a reasonable expectation of imminent damage or irreversible HSEC impacts, and which requires immediate corrective action. Action that indicates intentional disregard for Applicable Standards or Company commitments that has not necessarily resulted in a significant impact, generally requiring systems-level corrective action.	Level III Non Conformances will result in a recommendation to the Company to ‘Stop Work’, which will be reported to IFC. The Company will agree a time-bound Action Plan to address the non-conformance to the satisfaction of the Independent Monitoring Group.

4. ENVIRONMENTAL AND SOCIAL ACTION PLAN

4.1 Conformance with Current ESAP Requirements

The current ESAP was developed in 2015 and focused on planned and potential operations in Ethiopia and Kenya. As discussed in Chapter 2, AOC has relinquished its Ethiopian interests, has no current operated assets in Kenya and has recently invested as minority shareholder and non-operator in other geographies. The current review assesses progress with the remaining open ESAP requirements, including providing updated planned completion dates.

Table 4.1 presents the IFC ESAP requirements, the tasks identified to be completed and status of actions. For the purposes of the current ESAP, the requirements relating to Ethiopia have been assigned as 'closed'. The ESAP requirements relevant to the current and planned POK operations in South Lokichar are mainly closed, with some assigned as 'in progress', pending finalisation of documents or approval of ESAs. It is noted that there have been only minor updates on document delivery dates from the progress reported in the previous review

The 2015 ESAP was developed following the ESRS undertaken by the IFC. The ESRS also had additional actions for AOC to undertake that were outside the scope of the ESAP. Progress against these were addressed in previous IMG reviews. The existing ESAP may be updated by the IFC in the future to reflect the changes in AOC's asset portfolio.

Table 4.1 Evaluation of ESAP Requirements

Index	Task Title & Description	Anticipated Completion Date	Status	Discussion
ESAP 1.1	The Company will enhance HSE capacity through: i) an IFC Performance Standard focused training for senior management and operational teams		Closed	Training process established and training undertaken
ESAP 1.2	(ii) hiring an Environmental, Social and Governance Manager.		Closed	ESG Manager appointed 9 November 2015.
ESAP 2.1	The Company will develop Stakeholder Engagement Plans (SEP), for its Kenya and Ethiopia activities per the requirements of Performance Standard 1.		Closed	A SEP Framework document was produced by AOC and approved by IFC. The Ethiopia block have now been relinquished.
			Pre-FID phase SEP	For the South Lokichar Basin FFD Project, Tullow Kenya prepared a Stakeholder Engagement Framework and Pre-Development Stakeholder Engagement Plan. These were finalised following review by the IFC. POK updated this to an Upstream Stakeholder Engagement Plan in June 2021.
		Q2 2023	In Progress	A draft POK SEP was produced in January 2022 and is currently undergoing review by POK. It covers the up-stream and mid-stream project elements and included an Action Plan for the pre-FID phase in 2023. A SEP for the post FID phase will be developed by mid-2023 as part of the POK ESPP.
ESAP 2.2	Company to prepare and submit ESAs to IFC for review and approval – undertaken per project.		Closed	An ESIA for potential drilling on the west coast of Lake Abaya in Ethiopia was completed in Q2 2018. The Ethiopian Blocks were relinquished
				For the South Lokichar Basin development, Tullow Kenya undertook an ESIA for the Early Oil Production System (EOPS) in Q4 2018
			Closed	The POK ESIA and Supplementary Assessment is addressed under ESAP 7
ESAP 3	The Company will complete the additional requirements for Free Prior Informed Consent (FPIC), per the circumstances listed in Performance Standard 7, and complete a mutually acceptable process between Company and affected community and provide evidence of an agreement between the two parties on the outcome of the negotiation		Closed	For the exploration phase of the South Lokichar Basin development, Tullow Kenya has prepared a <i>Stakeholder Engagement Framework, Pre-Development Stakeholder Engagement Plan and Land Acquisition and Resettlement Framework</i> that outlined the approach required to achieve and document FPIC based on the definition of the project footprint and specific impacts. These were finalised following approved by the IFC. For future phases of the project, the FPIC process will be further developed and agreed with the IFC.

Index	Task Title & Description	Anticipated Completion Date	Status	Discussion
ESAP 4a	The Company will develop an overarching human resource policy (HR) for Kenya and Ethiopia, which will make reference to Performance Standard 2 and ILO conventions, and will include associated country specific implementation procedures		Closed	Tullow Kenya has an Employee's Handbook that includes a Human Resources Policy. This has been reviewed by the IFC and confirmed as acceptable.
	(ii) The Company will develop a Retrenchment Framework Plan that aligns with the requirements of Performance Standard 2 and that should be utilised in cases of collective dismissal by the Company and/or contractor/subcontractor		Closed	Tullow Kenya follows national law and conformance with IFC requirements regarding retrenchment as evidenced in relevant HR procedures that provided during previous IMG reviews.
	(iii)The Company will develop and implement a formal internal grievance mechanism applicable to all employees and workers employed at Company's sites by contractors and sub-contractors.		Closed	Framework document has been produced and approved by IFC.
		Closed.	Tullow Kenya has an Employee's Handbook that includes a Human Resources Policy. This has been reviewed by the IFC and confirmed as acceptable.	
ESAP 4b	The Company will prepare a security risk assessment and develop Security Management Plans that are aligned with Performance Standard 4. These will be reviewed and updated as the project evolves.		Closed	Framework document has been produced and approved by IFC.
			Closed	Tullow Kenya has prepared Security Management Plans for ongoing activities and submitted these and supporting studies to IFC for review and they have been confirmed as acceptable.
ESAP 5.1	The Company will develop Land Acquisition and Livelihood Restoration (LALR) Plans for each of the two countries (Kenya, Ethiopia).		Closed	Framework document has been produced and approved by IFC.
		Q2 2023	In Progress	A POK Upstream Land Access Strategy was drafted in March 2020 and the IFC provided comments on the draft in September 2020. This document refers to requirements to develop an Upstream Resettlement and Livelihood Restoration Framework (draft produced in February 2021) and Resettlement and Livelihood Restoration Plan, prior to FID (planned for the end of 2023). As part of this process, detailed project specific plans, including procedures for any supplementary benefits and entitlements, will be developed as part of the POK ESPP, planned for mid-2023.
ESAP 5.2	The Company will redesign its compensation plan in Ethiopia to incorporate procedures to		Closed	Compensation Plan redesigned and the Management of Change provided to IFC as evidence. Ethiopian blocks have been relinquished.

Index	Task Title & Description	Anticipated Completion Date	Status	Discussion
	compensate prior to commencing work, vacating land and any potential damage that could occurred after seismic survey.			
ESAP 6.1	i. The Company will develop a biodiversity strategy for Kenya as described in the ESRS.		Closed	AOC have issued a Biodiversity Management Strategy (KE/ESG/FRM/BD/2017/8) that has been aligned with the Operator's Biodiversity Management Framework that has been accepted by the IFC.
			Closed	For blocks where Tullow Kenya is the Operator, a Kenya Biodiversity Management Framework has been produced and accepted by the IFC. In the event that critical habit is identified in later stages of the project or in new areas, then the strategy will require to be updated to address the relevant PS requirements.
			Closed	A biodiversity panel has been set up and a Terms of Reference agreed by the IFC. There have been three panel meetings and the panel continues to offer advice as required
	ii. The Company will develop a similar plan prior to any substantive work related to development of successful wells in Ethiopia		Closed	Ethiopia blocks have been relinquished.
ESAP 7	The Company will prepare and submit ESIA's to IFC addressing local regulatory requirements and IFC PSs in any case where wells progress to production. These will be presented to IFC for review and approval at least four months prior to start of any substantive construction.		Closed	AOC commissioned an ESIA for the potential exploratory drilling well at Lake Abaya. The ESIA was completed in Q2 2018. Ethiopia blocks have been relinquished.
		Q2 2023	In progress	The ESIA for the FFD Project was submitted to NEMA in September 2021 for determination. The LLCOP ESIA Licence was issued in November 2021. The revised water pipeline ESIA was issued to NEMA in February 2022. A response from NEMA is expected in Q1 2023. A Supplementary Lenders Information Package addressing gaps in meeting lender requirements is planned for completion in mid-2023. An addendum to the midstream ESIA to address the location of the Port of Lamu Load Out Facility will be scheduled once an agreement is made on the available options.

Notes: Grey shaded items are closed.

5. PROJECT OIL KENYA ASSESSMENT AGAINST IFC PERFORMANCE STANDARDS

5.1 Introduction

This chapter provides an update on previous assessments made with respect to activities in South Lokichar. A review of the developing POK management system and plans, the planned SLIP, and progress with stakeholder engagement, the GOK-led land acquisition process, and the Community Development Plan (CDP) are provided below. This is followed by an update on progress with a number of specific issues (i.e. the revised water supply pipeline, drill cuttings consolidation and community water supplies).

5.2 Project Oil Kenya Management Systems and Plans

5.2.1 Environmental and Social Performance

As discussed in the previous IMG review, a number of the previous findings related to POK were associated with the need to finalise and operationalise various environment and social management plans and procedures to conform to the IFC PSs requirements. Project delays due to the revision to the POK FDP and Covid-19 has meant that the finalisation and operationalisation of these previous draft plans and procedures have been superseded by events.

The requirements identified during previous reviews, along with the broader environmental and social management of POK, will now be addressed through a new set of plans and procedures under the POK Environmental and Social Management System (ESMS) and POK ESPP to be developed during 2023 for construction and operations activities (see Section 5.2.2). Drilling activities will continue over a ten year period and will therefore span the Construction phase and parts of the Operations phase. Although drilling has not been defined within POK as a separate phase, it is assumed that the construction requirements of the ESPP will apply to these activities (for example the construction of well pads) once the main Construction phase has been completed. It is expected that this requirement will be stated in the ESPP.

Some of the plans and procedures that will sit under the overall POK ESPPs will be developed by the main EPC contractor(s) post-FID but prior to commencement of construction. As well as meeting NEMA regulatory and licence condition requirements, these POK systems, plans and procedures will all need to conform to the requirements of the IFC PSs and associated IFC Environmental, Health and Safety (EHS) guidelines and relevant parts of EP IV, and will therefore require IMG and IFC review during development and implementation.

An overview of the developing ESMS and ESPP, along with commentary on the key areas of focus are presented in Section 5.2.2 to Section 5.2.13 below. The relationship between the developing plans and the requirements of the IFC PSs are presented in Table 5.1. As the required ESPP and associated subsidiary plans are still under development and given the low level of site activity pre-FID, the compliance ratings have been assigned as at Level 1 (i.e. there are no immediate environmental and social risks). A number of priority procedures have been developed and implemented to manage current and planned on-site activities prior to the ESPP being finalised (see Section 5.2.3). Progress with the development of plans and procedures will be reviewed in future IMG reviews once the SLIP has been produced and the ESPP finalised and depending on the on the site activities being undertaken or planned at that time.

5.2.2 Supplementary Lenders Information Package

The KJV is in the process of contracting consultants to undertake support in the development of a SLIP for all the elements of POK (upstream and midstream) to address gaps with respect to the issued ESIA's and the requirements of the IFC PSs and associated World Bank guidance, and relevant parts of the EP IV. This is scheduled to commence in Q4 2022 and be completed by mid-2023. The SLIP will comprise three volumes as outlined below.

- Volume 1 will be a summary of the ESIA activities undertaken for POK to date.

- Volume 2 will consist of a series of issue-specific reports addressing gaps between the NEMA ESIA's and the lender requirements.
- Volume 3 is to be developed by the KJV, informed by the work undertaken for Volume 2, and will comprise the POK ESMS Framework, ESPP and associated subsidiary plans for the construction and operations phases.

POK has adopted the Good International Industry Practice provided by the OGP/IIPECA Operating Management Systems Framework ⁽¹⁾ in the development of the POK ESMS. The ESMS will present the management systems and structures to be implemented to manage the overall environmental and social risks, KJV standards, ESIA commitments, ESIA licence requirements and lender requirements.

As responsibility to deliver the POK requirements will apply to the KJV and its contractors during the construction phase (and drilling operations), a Contractor Management Framework will also be developed to incorporate the ESPP and subsidiary plan requirements into the contract agreements with the selected EPC contractor(s). For the operations phase, the KJV will adopt the ESPP. The ESPP will incorporate all the project commitments and requirements from the ESIA's, NEMA licence conditions and lender standards requirements.

Table 5.1 presents the key topics to be addressed in the SLIP, referencing the IFC PSs the topics sit under, along with further details of issues to be addressed in the Volume 2 report, where relevant.

As stated in the previous review, the scope of the SLIP and ESPP appears comprehensive, addressing the key requirements of the IFC PS, EP IV and related guidance. The detailed contents will be further developed by the contractor undertaking the SLIP and it is expected that these will be referenced to the specific IFC PSs and other lender requirements such as the EP IV requirements on climate change and human rights risk assessments. It is noted that the requirement for a Construction Heritage Management Plan as part of the ESPP was identified as part of the gap analysis for the water supply pipeline ESIA by Wood plc. This is not referred to in the topics to be addressed in the SLIP. It is assumed that this is an oversight, and this should be included in the SLIP under the PS8 requirements.

It is assumed here that the Operations Phase Decommissioning & Closure Framework will include the requirements of the Construction Phase Land Disturbance and Rehabilitation Management Plan and that the SEP includes the grievance mechanism.

Table 5.1 Topics to be addressed in Volume 2 of the SLIP

Topic to be Addressed	Further Details
Assessment of Environmental and Social Risks	<ul style="list-style-type: none"> ■ Climate Change & Resilience Assessment <ul style="list-style-type: none"> - Climate Change Scenarios - Climate Change Implications for Project - Design and Mitigations ■ Cumulative Impacts Assessment ■ Human Rights Assessment ■ Supply Chain Assessment
Labour & Working Conditions	<ul style="list-style-type: none"> ■ Labour Assessment ■ Human Resources Policies & Procedures ■ Working Conditions & Terms of Employment ■ Management of Migrant Workforce ■ Worker Accommodation ■ Workers Organisations ■ Non-Discrimination & Equal Opportunity ■ Retrenchment & Demobilisation Planning

(1) <https://www.iogp.org/bookstore/product/operating-management-system-framework-for-controlling-risk-and-delivering-high-performance-in-the-oil-and-gas-industry/>

	<ul style="list-style-type: none"> ■ Worker Grievance System (including sub-contractors) ■ Child Labour/Forced Labour ■ Occupational Health & Safety ■ Management of Sub-contractor Workers ■ Supply Chain Assessment & Management
Resource Efficiency & Pollution Prevention	<ul style="list-style-type: none"> ■ Resource Efficiency ■ Greenhouse Gas Management ■ Water Consumption ■ Pollution Prevention ■ Waste Management ■ Hazardous Materials Management ■ Pesticide Use & Management
Community Health, Safety & Security	<ul style="list-style-type: none"> ■ Community Health Safety & Security Management ■ Infrastructure & Equipment Design & Safety ■ Hazardous Materials Management & Safety ■ Community Exposure to Disease ■ Influx Management ■ Emergency Preparedness & Response ■ Use of Security Personnel (including Voluntary Principles etc)
Land Acquisition, Resettlement & Livelihood Restoration	<ul style="list-style-type: none"> ■ Supplemental Resettlement & Livelihoods Restoration Framework/Plan
Biodiversity Conservation and sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> ■ Critical Habitat Assessment ■ Alternatives Assessment related to Critical & Natural Habitat ■ Biodiversity Monitoring & Evaluation for Critical & Natural Habitats ■ Biodiversity Action Plan (for areas of Critical Habitat) ■ Biodiversity Management Plan ■ Legally Protected and Internationally Recognised Areas ■ Invasive Alien Species ■ Ecosystem Services & Management of Ecosystem Services ■ Sustainable Management of Living Natural Resources
Vulnerable, Marginalised & Indigenous Groups Assessment	<ul style="list-style-type: none"> ■ Indigenous Peoples Assessment ■ Approach to and Application of FPIC ■ Critical Cultural Heritage ■ Summary of Mitigation & Development Benefits

5.2.3 PS1: Environmental and Social Management System and Performance Plans

Within the POK ESMS, the Social Performance Plan sets out how POK and its Contractors will undertake activities in line with the mitigations, management controls and commitments set out in the various component ESAs. POK has adopted the Good International Industry Practice provided by the OGP/IIPECA Operating Management Systems Framework ⁽¹⁾. The overall ESPPs for the construction and operations phases will be divided into two main parts: Environmental Performance Plan and the Social Performance Plan. Each part has been structured with subsidiary plans to address the key Kenyan regulatory and lender performance requirements.

The subsidiary plans within the Environmental Performance Plan and Social Performance Plan that POK has identified are listed in Table 5.2, along with the phase that they apply to. The

(1) <https://www.iogp.org/bookstore/product/operating-management-system-framework-for-controlling-risk-and-delivering-high-performance-in-the-oil-and-gas-industry/>

Decommissioning and Closure activities have been included in the operations phase. It is assumed that the relevant parts of the Social Performance subsidiary plans will also apply to these activities.

A series of procedures will be developed under the overall POK ESMS. The aim is to align these POK documents with Tullow Oil Kenya's policies, plans, procedures and standards (as the Operator) to ensure a consistent approach to managing environmental, health, safety and social performance. POK is currently reviewing the Operator's high-level system to inform the development of the POK specific ESMS requirements to ensure compliance with the Operator's system, Kenya's regulatory requirements and lender requirements.

Three core POK safety management procedures have been developed or are under development for application to site activities prior to the finalising the ESMS, ESPP and associated procedures. These are being implemented at this stage of operations to control ongoing site activities, which will remain at a low level pre-FID. These are described below.

- **POK Permit to Work Procedure** (draft dated 18/07/2022). This procedure will apply to all activities, other than those routine activities that are specified as not requiring a permit to work, within the POK controlled areas within the upstream project area (i.e. it does not apply to GoK activities outside these areas). The procedure aims to control risks from potentially hazardous activities and to maintain a safe worksite through the issuing of permits for certain types of work. General Work Permits and Hot Work Permits (where the activity can result in fire or explosion) will be issued, supported by permits for specific activities, such as confined space entry. The procedure will apply to POK staff and all contractors and will require training to be undertaken to ensure competence of all those responsible for managing the procedure and in undertaking tasks subject to the procedure.
- **POK Incident Management Procedure** (issued 27/07/2022). The purpose of this procedure is to set out the arrangements in place to respond to emergency situations and incidents that could affect POK activities. These include medical emergencies, multiple casualty, fatality, road traffic accidents, loss of well control and loss of containment, fire, flood, civil unrest and security incidents. It applies to all POK staff and contractors undertaking POK related duties in POK offices, field sites or other locations. For contractors with their own incident management procedures there will be a requirement for bridging documents between the contractor procedures and with the POK procedure. The procedure describes the POK Crisis and Emergency Management procedures, performance review and incident investigation processes, and roles and responsibilities, including those of the Incident Management Team responsible for coordinating POK responses to emergencies and significant incidents. The requirements of the procedure and the response arrangements in place for different types of incidents will be communicated to the relevant GoK agencies, country government and Affected Communities.
- **POK Land Transport Procedure** (issued 18/17/2022). The purpose of this procedure is to manage land transport safety through setting out standards for vehicles, drivers, equipment, and maintenance as well as driver and passenger behaviour, journey management planning and vehicle tracking. The procedure applies to all POK and contractor activities using Project related vehicles within Kenya

In addition, a draft EHS assurance plan has been provided to the IMG as part of the current review.

- **A POK Environmental Health and Safety Assurance Plan** (draft dated 22/04/2022). This plan presents the approach to planning and undertaking EHS audits for the upstream and mid-stream components of POK during all phases. Audits and inspections by POK and third parties (including GoK) will be undertaken to meet regulatory requirements and to meet POK ESMS requirements. The scope and frequency of these audits will be based on an assessment of project risks and will be at least annual for statutory audits and monthly for site based audits and inspections. Under this draft plan a number of audits have already been or are currently being undertaken, namely the EOPS site, the Kapase Integrated Operations Base and the Twiga 1 waste transfer station as well as monthly well integrity and asset protection checks.

Once the POK ESMS and ESPP and associated plans and procedures have been developed (planned for mid-2023) the next step will be to develop contractor implementation documents. For

work currently being undertaken by contractors on site and planned pre-FID then POK management of such activities should be through the above procedures with compliance evidenced through the EHS Assurance Plan.

Table 5.2 ESPPs for Construction and Operations Phases

Project Phase and Plan	Details
Construction Environmental Performance Plan	<ul style="list-style-type: none"> ■ Air Emissions Management Plan ■ Biodiversity Management Plan ■ Construction Environmental Management Plan ■ Emergency Preparedness & Response Plan ■ Hazardous Materials Management Plan ■ Invasive Species Management Plan ■ Land Disturbance and Rehabilitation Management Plan ■ Marine Management Plan ■ Noise & Vibration Management Plan ■ Transport Management Plan ■ Waste Management Plan ■ Water Resources Management Plan
Operational Environmental Performance Plan	<ul style="list-style-type: none"> ■ Air Emissions Management Plan ■ Biodiversity Management Plan ■ Decommissioning & Closure Framework ■ Emergency Preparedness & Response Plan ■ Hazardous Materials Management Plan ■ Marine Management Plan ■ Noise & Vibration Management Plan ■ Transport Management Plan ■ Waste Management Plan ■ Water Resources Management Plan
Construction Social Performance Plan	<ul style="list-style-type: none"> ■ Community Health & Safety Management Plan ■ Cultural Heritage Management Plan ■ Influx Management Plan ■ Labour Management Plan ■ Resettlement & Livelihood Restoration Framework ■ Security Plan ■ Stakeholder Engagement Plan ■ Supply Chain & Local Content Management Plan ■ Worker Health & Safety Management Plan
Operational Social Performance Plan	<ul style="list-style-type: none"> ■ Community Health & Safety Management Plan ■ Influx Management Plan ■ Labour Management Plan ■ Security Plan ■ Stakeholder Engagement Plan ■ Supply Chain & Local Content Management Plan ■ Worker Health & Safety Management Plan

5.3 PS1 and PS7: Stakeholder Engagement

The stakeholder engagement process for POK has developed over time from the exploration and appraisal activities through the various ESIA processes. For the disclosure of the upstream ESIA, this was undertaken at National Government and County Government levels, as well as with community members through a series of community meetings. For the midstream ESIA, this was a government led process.

The upstream Stakeholder Engagement Plan (SEP), covering planned pre-FID activities, was published with the upstream ESIA in July 2021 and is currently being revised (a draft dated January 2022 has been provided as part of the current review). For the midstream project a Stakeholder Outreach Framework was produced in July 2020 which generally followed the approach adopted for the upstream project and covers the construction and operations phases of the work.

As part of the updated SEP, a Community Relations Plan is proposed which will set out how Affected communities will be engaged. A POK Communication Plan will also be developed for more broad-based communication about POK activities.

The draft revised upstream SEP outlines a number of stakeholder engagements that have occurred, including the upstream ESIA disclosure and consultation process, and the planned engagements to occur pre-FID. Stakeholder engagements undertaken in 2021 and the first half of 2022 mainly focused on midstream and upstream ESIA project disclosure and consultations meetings held within the LLCOP corridor and in all the villages within the project area for upstream and make-up water pipeline.

The following key activities have been identified in the draft revised upstream SEP as requiring stakeholder engagement support.

- Consolidation and management wastes at the Twiga-1 waste storage facility.
- Development of a sustainable community water supply and hand-over to Turkana County Government.
- Handover of existing social investment projects to Turkana County Government.
- Management of Kapese IOB on a care and maintenance basis and preparation for decommissioning.
- Development of the POK Community Development Plan (see Section 5.6).
- Development of the POK Resettlement and Livelihood Restoration Plan.

As all elements of POK are part of one integrated project, a consistent approach to the construction and operations SEPs for the water supply, upstream and midstream elements is planned. The development of the SEPs will require collaboration with the national and county governments across the project footprint.

It is planned to set up a series of fora at National and County levels to encourage engagement on all aspects of POK and to receive feedback from stakeholders. Meetings would be scheduled quarterly.

The timings of these pre-FID and post FID engagements have not been finalised in the draft SEP.

In the previous review the approach to consultations with vulnerable and marginalised communities, with respect to IFC PS 7 (Indigenous Peoples) was discussed. A key part of the engagement plan for communities such as the Turkana will be through the CDP that will address project commitments such as livelihood restoration, local content, training and social investments. The CDP is discussed in Section 5.7 and will form part of the ESPP to be developed by the mid- 2023.

The POK Grievance Procedure is presented in the upstream SEP. It applies to all issues raised by stakeholders on POK but as land acquisition is being undertaken by GoK as part of the statutory land acquisition process, addressing grievances relating to this process and compensation will be the responsibility of GoK and will include the mechanisms and rights to appeal set out in Kenyan law.

The Grievance Procedure will be updated as part of the SEP update. The current procedure states that the process for registering grievances will be made available by POK directly through community

relations staff, through local leadership, local government and via telephone, texts and email. Grievances will be assigned different levels with Level 1 being resolved at the field level, Level 2 being resolved through a POK Grievance Management Committee and Level 3 being resolved through an independent third party (i.e. through the courts). For all grievances there will be a process of registration, acknowledgment, resolution and close out, including a lessons learnt process.

A copy of the consolidated Grievance Register covering registered grievances from 2015 to 2021 (dated June 2021) was provided as part of the previous review. It was reported at that time that recent grievances are at a low level and related to community requests for more engagement on project plans, issues around contractor payments and related contract conditions, and loss/injury to livestock from damaged compound fencing. It was reported by AOC for the current review that these grievances have been closed out and there have been no new grievance recorded since the last report was provided.

Finalisation of the upstream and mid-stream SEPs and the associated Grievance Procedure are required pre-FID and it is expected that these will form part of the SSPP due for completion mid-2023.

5.4 PS2: Occupational Health and Safety

An incident occurred on the 30 May 2022 at the Kapese IOB during the disposal of surplus explosives from previous drilling operations by burning. An unexpected detonation created an explosion that fragmented the metal box being used to burn the explosives, causing heavy debris to travel up to 500 m away. Two people were injured by the flying metal; one died from his wounds approximately 3 hours after the explosion, the other was med-evacuated to Nairobi for hospital treatment. The IMG was provided with the reports of the investigation undertaken by the Operator and was requested to review these. The findings of the review are presented in Appendix B and summarised here.

The investigation methodology adopted included identification of root causes and allocation of time-bound remedial actions. From the review of documentation, however, the investigation does not appear to fully investigate the root causes of the unsafe conditions at management and EHS implementation levels. Specific points are listed below.

- Causes and remedial actions are focused on operational teams with inadequate reflection on the absence or failings of culture, systems, processes or procedures that allowed the causative conditions to exist. This implies that the causes sit completely at an operational level and not at higher management levels.
- There is an absence of clarity on EHS responsibilities or accountabilities across the KJV to gauge whether all necessary persons were involved in the process.
- Causes and remedial actions are focused on events immediately before the explosion. There are no identified root causes of treatment and evacuation delays that could potentially have impacted the deceased's survival.
- Not all identified root causes are listed within the root causes section of the report, for example the appointment of an EHS professional is a remedial action, but not listed as a root cause.

5.5 PS2: Local Content

A pre-FID Local Content Strategy has been developed and Early Development Opportunities have been identified that include: craft training, transportation and logistical requirements, care maintenance operations, technical services such as hazardous waste monitoring, camp and accommodation services and Personnel Protective Equipment supply.

The key objectives of the POK Local Content Strategy include: developing projects run by nationals through training, knowledge transfer and employment, supporting businesses to enter the project supply chain; and creating a social enterprise funding and partnerships programme for education and enterprise development.

POK will develop a Local Content and Employment Plan in line with Kenyan local content requirements and the Petroleum Act 2019.

5.6 PS2, PS4, PS5 and PS7: Community Development Plan

The aim of the CDP is to integrate the requirements of the associated Resettlement and Livelihoods Restoration Plan, Influx Management Plan and Local Content Plan into one document that will form the basis for the discussion and agreement with Affected Communities on project benefits and then the delivery of these benefits. The development of the CDP through discussion and agreement of development options is key to meeting POK's Informed Consultation and Participation (ICP) approach. This approach is considered consistent with the requirements of IFC PS7.

The CDP will set out how the communities will benefit from the Project. This is separate to the benefits that will arise from the Profit Sharing 5% that the Local Community will receive and the 20% the TCG will receive from GoK as per the Petroleum Act 2019.

The main elements of the CDP will include the following.

- Access to Land. Supplemental resettlement and livelihood restoration measures related to land acquisition and land access beyond the statutory compensation being provided by the NLC.
- Access to Community Water. Outlining the process for the handover of POK community water supply infrastructure to TCG and communities and agreement of how water offtakes on water supply pipeline will be managed.
- Permitting and Approvals. Compliance with permit and regulatory requirements including issues related to community health safety and security.
- Local Content and Employment. Employment and supply chain opportunities both at national level and local level within the Affected Communities.
- Social Investment. Other social investment activities such as training, educational bursaries, and community infrastructure projects.

5.7 PS3: Emissions Management

Following the updated Front End Engineering Design (FEED) work undertaken in 2021, a significant reduction in emissions to air intensities were achieved. These were mainly related to the removal of routine flaring of produced gas with the injection of excess gas into the reservoirs. The injected gas can then be used for future power generation. In addition, the use of more efficient gas turbines for power generation and the use of waste heat recovery units (WHRU) for heating water will further reduce the emissions per barrel of oil produced. The overall Green House Gas (GHG) emission reduction calculated from the FEED study was from approximately 30 to 19 kg CO₂-e per barrel of oil produced.

The use of power from connection to the Kenya electricity grid was considered for the upstream project but engineering studies concluded that this approach would have a higher emissions intensity. For the midstream project, connecting pumping stations to the Kenya electricity grid was assessed as more efficient than using diesel power generation, where connections are possible.

AOC reported that the use of small-scale (5 MW) solar power for the midstream project is being evaluated. This will be subject to further FEED work, however, an initial assessment has estimated that there could be the potential to reduce emissions from approximately 2.2 to 0.5 kg CO₂-e per barrel for this activity. AOC's offsetting strategy is described in Section 6.3 and there is the potential for POK residual emissions to form part of the development of this strategy.

5.8 PS3 and PS6: Water Resources and Water Supply Strategy

The water supply pipeline route from the water storage at the Turkwel dam to the upstream development site was revised from the original alignment in the draft upstream ESIA following a FEED review, completed in Q4 2021. Following the submission of the upstream ESIA a separate water supply pipeline ESIA was submitted to NEMA with the new alignment in February 2022.

The original pipeline route was selected in 2019. This route was based on the water pipeline from Turkwel Gorge Reservoir running to the south of the Turkwel river in an area between the Turkwel and Weiwie rivers, known as the Anglogit triangle, and crossing the Weiwie river upstream of the confluence with the Turkwel river.

The FEED review provided the KJV with opportunities to improve the design and enhance constructability. Outcomes of the review included a recommendation to change the pipeline design and construction material to allow higher pressures and therefore less pumping, and a change in the proposed alignment. The original 2019 alignment passed through the sensitive Anglogit triangle area (identified as critical habitat and which forms a natural habitat extension to the Nasolot National Reserve), and the proposed river crossing location upstream of the confluence of the Weiwie and Turkwel rivers, was in a sensitive riparian corridor and would require extensive mitigation measures including the boring of a 1,200 m tunnel under the Turkwel river.

Based on a route selection review, a revised route was identified to:

- simplify construction;
- reduce construction times; and
- avoid, as far as possible, sensitive habitats.

The revised alignment now follows a route further to the north, avoiding the Anglogit triangle between the Turkwel and Weiwie rivers and increasing the distance between the pipeline and the Nasolot National Reserve. The new route is designed to avoid impacts on natural habitat, reduce impacts on critical habitat as far as possible and avoid sensitive watercourse crossings. In addition, the revised route would result in a shorter construction period for the water crossing and aligns with existing road infrastructure thereby avoiding creating new access routes to currently inaccessible sensitive habitats.

The KJV has set up a Biodiversity Advisory Panel comprising a group of independent experts to advise on biodiversity issues related to POK. A delegation from the panel attended a field visit to assess the revised route on the 9th and 10th December 2021 and discussed their findings with the ESIA consultant on the 10th and 15th December. The panel concurred that the new route, water crossing location, and water crossing method were all appropriate and an improvement on the original proposed route. The revised pipeline route is shown on Figure 5.1.

The revised water supply pipeline will include six community offtake points to provide water intended for animal husbandry and irrigation purposes (i.e. not for direct human consumption as it is obtained from surface water resources). The selection of the number and location of the community water offtakes was based on a number of factors including population densities, the proximities of the main settlements to the proposed water pipeline route, the risk of constructing a water pipeline next to communities that have no access to water, and also legacy issues related to the construction of the Turkwel dam. As discussed in Section 5.10, the management and provision of water and sanitation services are devolved to County Governments who are the owners of the Water Service Providers ⁽¹⁾. Any future plans to treat this water resource for use as potable water would be the responsibility of the County Government through its Water Service Providers. The six planned community offtake points are located in different areas to the borehole sourced community water resources discussed in Section 5.10.

A review of the water supply ESIA against IFC PS requirements was completed by Wood Plc in January 2022 that identified the key issues that the SLIP should address. The review identified the need for a number of additional studies and management plans to be developed including a Biodiversity Action Plan (BAP), Invasive Species Management Plan (ISMP), Cultural Heritage Management Plan, a number of a community, health, safety and security plans, a Land Acquisition and Resettlement Framework (LARF), Resettlement Action Plan (RAP) and Livelihoods Restoration Plan (LRP). As the water supply infrastructure is part of the overall POK, the requirements for these plans will be incorporated into the POK ESPPs to be developed by mid-2023.

(1) <https://wasreb.go.ke/water-service-providers>

The IMG considers that revision of the pipeline route to avoid natural (and potentially critical) habitat demonstrate the correct application of the mitigation hierarchy, i.e. to avoid key receptors and reduce impacts at the project design stage.

Figure 5.1 Original and Revised Water Supply Pipeline Routes



Source: Proposed Make-Up Water Supply Project 2022

5.9 PS3: Drilling Cuttings and Waste Storage Disposal Plan

POK has completed the removal and consolidation of solid and liquid drilling wastes (drill cuttings containing residual hydrocarbons, oily water, silicate water and oil sludge) from ten drill sites used in the exploration and appraisal phases of POK into one site at the Twiga 1 well site, in Block 13T. Work commenced in 2021 and transfers were completed in early 2022, as reported in the previous IMG review.

The Drill Cuttings Waste Storage and Disposal Plan was developed and approved following site inspections by national and county level GoK representatives and NEMA. The waste storage pits at Twiga were upgraded and expanded and licenced by NEMA for the temporary storage of these wastes, pending the construction and commissioning of the proposed integrated waste management centre at the proposed CPF.

In total there are approximately 22,000 tonnes of drill cuttings wastes now stored at Twiga, including the residual material from the approximately 1,120,000 litres of liquid waste that were evaporated in evaporation pits at Twiga. Some liners retrieved from the waste pits have disposed off at a licensed facility and some are being stored safely, pending later disposal.

A site visit was undertaken to the Twiga site and three of the cleared drill sites by members of the TCG Environment Committee, community representatives and KJV on 19th January 2022. The aim was to monitor progress of the waste consolidation process, the waste handling operations and adherence to NEMA improvement requirements. The meetings notes indicate that the site visit attendees were content with the progress made to date.

As part of the Drill Cuttings Waste Storage and Disposal Plan, the KJV will undertake monthly inspections, quarterly sampling, and annual audits of the Twiga site. NEMA and the TCG will also undertake quarterly audits. Inspections and audits include checking the integrity of storage pits and the HDPE liners, checking that wastes are contained, and run-off is managed, and site supervision and security.

Sampling programmes undertaken to date have indicated that eight of the ten sites are free of contamination. Two of the sites, Etiir and Amosing 3, are undergoing further monitoring due to elevated levels of some volatile contaminants associated with hydrocarbons still in the soil (toluene and ethylbenzene). This includes quarterly gas sampling to monitor natural remediation.

The results of monitoring of the wastes at Twiga has indicated that most of the organic fraction (synthetic drill fluids and hydrocarbons) has been broken down over that time. Further work is required to fully characterise the drill cutting wastes to determine the contamination levels and whether, after further natural or enhanced bioremediation, they could be beneficially used, e.g. as construction fill.

5.10 PS3 and PS4: Community Water Supply

The KJV has been supplying water to communities within Turkana County since 2012, using water bowsers supplied from boreholes to fill 23 water tanks located within communities. These are mainly in Turkana South sub-county with some also in Turkana East sub-county. The issue of the sustainability of this process and alternative approaches to community water supply have been under discussion between the TCG, KJV and community representatives since 2014. AOC has reported that the costs of this water supply approach are very high and has led to a number of issues including the creation of community dependency on the KJV, vandalism of water tanks (assumed to be associated with creating employment for local communities to repair these) and influx of people to the areas where water is being supplied.

To develop a more sustainable approach to water supplies, the KJV has been in discussion with the TCG and other stakeholders to hand over community water supply to the TCG, with support from the KJV. The principle being applied here is that the KJV should provide supplementary benefits to communities and not be responsible for core services that should be provided by the County Government, e.g. community water supply. The aim is to develop a phased approach to provide piped potable water systems to the communities, with the boreholes, pumps, piped systems and offtakes to be managed and maintained by the TCG and local communities, including routine water quality testing.

For operations in block 10BB, in the Turkana East sub-county, a water reticulation project has been developed. The development of the project followed a memorandum of understanding (MOU) between the KJV and the TCG dated 5 December 2017. The MOU addressed the provision of sustainable community water supplies to the approximately 5,100 people and 17,500 livestock (2017 data) within the communities in the Nakukulas/Lokicheda area by replacing the bowsers deliveries with a reticulation system from a borehole (Nakukulas borehole 10 installed in 2011 close to the Ngamia-1 drill site). The project was named the Kodekode Water Reticulation Project and required the formation and training of a community based Kochodin Water Resources Users Association (WRUA). The water supply system was installed in 2018 and is operated using a solar powered pump with water from the borehole rising main pumped to a 100 m³ storage tank at Kodekode, feeding a water distribution line. Booster pumps and storage tanks have also been installed to supply 14 community water offtake points installed along the water line, which also supplies 11 livestock water troughs. There is some solar power already installed for the pumping system and it is planned that all the pumps will be solar powered in due course. A formal handover to the Kochodin WRUA, through the TCG, was agreed and a Handover Deed was drafted in June 2020, although it is understood that this is still under review by the TCG Attorney General. In the meantime, POK continues to support community water supply to Turkana East through the Kodekode water system and routinely undertakes maintenance of the water supply line.

It was reported from a meeting between the KJV with the TCG Ministry of Water (25 January 2022) that there have been operational issues with the project due to illegal offtakes from the water supply

system and issues with the management of the users' association, requiring some members to be removed. The minutes from that meeting also report that TCG plan to create urban and rural water service providers to manage the county water supplies (at that time this was planned to be in place in March 2022). Under the Water Act 2016 national water management and the provision of water and sanitation services are devolved to County Governments who are the owners of the Water Service Providers ⁽¹⁾. The Kodekode Water Reticulation Project would fall under the responsibility of the Rural Water Services Provider.

The second phase of the water supply strategy will be the installation of a reticulation system for communities in Turkana South sub-county using an existing borehole at Namanthelem. This would come under the jurisdiction of the new Urban Water Service Provider (as Lokichar is designated as an urban area). An overall approach has been agreed to by the TCG Chief Water Officer and more detailed discussions and agreements are now required to implement the strategy. It is reported that this work is ongoing with the early stage of the design work commenced.

The steps being taken to hand-over the existing project-related community water supplies to the TCG and the relevant water supply companies are important for how POK community support and development is managed to avoid dependencies, and for the management of project-induced in-migration and the associated stresses on water supplies and other community resources, as well as the potential for conflict.

Some in-migration to the POK sites from within the affected counties and farther afield is inevitable, given the requirement for labour and services to support POK. Integrating the POK requirements to manage in-migration with the broader GoK and TCG spatial planning and strategic planning for managing water and other resources will have a greater chance of success than a POK led strategy focussed only on supply water to Affected Communities.

Currently POK is providing field personnel to undertake monitoring and maintenance of the reticulation system, however, POK is working towards community management of the water supply system by the end of 2023 with POK offering limited support only post-FID. Discussions with the WRUAs, Turkana County Government and communities on how the water supply system can be managed at community level are ongoing, including potential community livelihood activities through income generation from the water resources and provision of technical support to maintain the system.

5.11 PS5: Resettlement and Livelihood Restoration

The Kenyan NLC is currently undertaking a comprehensive exercise of Community Land Registration across the Country. This exercise is ongoing and when complete will allow both formal registration of community/individual lands under Community Land Management Boards and the compulsory acquisition of land for government activities on behalf of county governments.

A Resettlement and Livelihood Restoration Framework (RLRF) has been prepared for upstream and midstream components of POK (dated February 2021) and this was reviewed by the IFC and IMG previously. It states that land acquisition will be undertaken in accordance with the Land Act (2012), with compulsory acquisition done by the NLC as the 'acquiring authority'. The RLRF outlines the process as follows.

"Land gazetted by NLC as part of the GoK compulsory acquisition process is based on polygons (outer circumference) that reflect the upstream Project land footprint. Project facilities will be located within these polygons. Areas within the acquired polygons which are not used by the Project facilities or RoW, will still be available for use by the community and the polygons will not be fenced.

The NLC will acquire the land required for the upstream project on behalf of Ministry of Petroleum and Mining (MoPM) - the 'acquiring body'. MoPM will then provide the relevant land rights (via a lease agreement or similar) to the Project in accordance with the terms of the PSC".

(1) <https://wasreb.go.ke/water-service-providers>

Currently the land to be acquired has been gazetted, and the initial community sensitisation has been completed. The assets and inventory surveys have also been completed. POK has stated that it has an agreement to receive a copy of the database (which was designed by POK) of land records from the NLC once the process has been completed. POK intends to undertake supplementary activities to meet the requirements of PS 5. A Resettlement and Livelihood Restoration Plan (RLRP) will be developed to meet the Kenyan regulatory requirements and is expected to be completed by mid-2023, ready for implantation post-FID. NLC is expected to complete land survey and asset inventory activities in the upstream area and along the water pipeline during 2023.

The RLRP will focus on community livelihoods and interventions will be community-based rather than individual focused reflecting the diffuse and indirect nature of impacts. The key elements that will be factored in when developing the RLRP will be: loss of trees (vegetation) and crops (community food security), loss of access to natural resources such as community grazing lands, cultural assets, vulnerable and disadvantaged persons, and impact of cash windfalls among community members compensated by NLC. As discussed under Section 5.6, a Community Development Plan is being developed to address how community benefits will be agreed and delivered, including community engagement and involvement in this process.

5.12 PS5: Influx Management

POK intend to develop influx management plans for the construction and operations phases of POK as part of the ESPPs. These plans will need to be integrated with the related existing and developing plans (i.e. stakeholder engagement; community health and safety; security; local content; community development; and resettlement and livelihood restoration). It is expected that the influx management plans will be prepared by mid-2023 and will follow the guidance provided by the IFC (2019) ⁽¹⁾.

5.13 PS6: Biodiversity

Identification of biodiversity sensitivities within the Project Area of Influence (Aoi) has been undertaken through the various national ESIA's that have been produced (upstream, water supply pipeline, midstream and midstream addendum addressing Lamu Port and the Garissa pipeline section re-Route). Desk based reviews of available biodiversity data and targeted baseline surveys of each of the project areas have been completed.

Within the upstream Aoi, key sensitivities identified include the Nasolot and South Turkana National Reserves, presence of IUCN Endangered large mammals (African elephant (*Loxodonta africana*), leopard (*Panthera pardus*) striped hyena (*Hyaena hyaena*), a number of IUCN Critically Endangered vulture species and the presence of the endemic Turkana toad (*Sclerophrys turkanae*) and ground beetle (*Omophron* sp). The upstream ESIA has mapped the habitats within the Project Aoi and assessed impacts on Species of Conservation Concern (SoCC). Residual impacts are predicted on a number of habitats and SoCCs including moderate significant impacts on Turkana toad (*Sclerophrys turkanae*), the ground beetle (*Omophron* sp) and vulture species and minor significant impacts on leopard and striped hyena. Priority ecosystem services for the upstream project have been identified and impacts on them assessed.

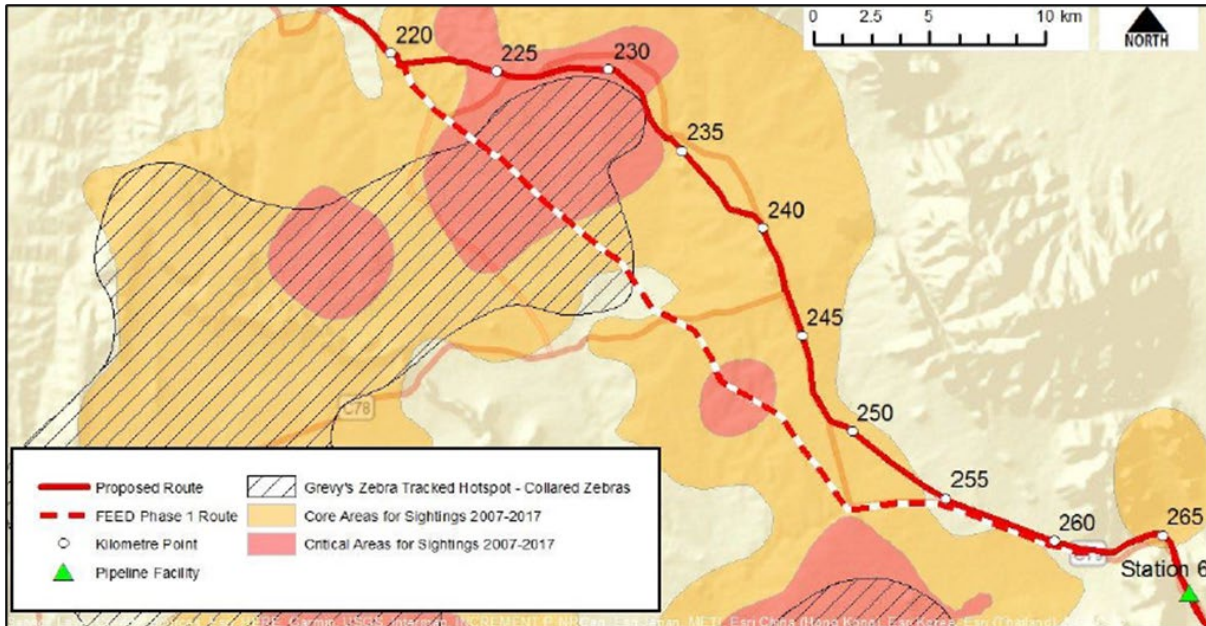
Sensitivities identified through the development of the water supply ESIA process led to the revision of the pipeline route to avoid sensitive habitats (see Section 5.8 above).

During development of the midstream ESIA, a range of biodiversity sensitivities were identified along the pipeline route Aoi. These include 49 different protected areas including internationally recognised and nationally protected areas, to community conservancies and private reserves. The route crosses six ecoregions as defined by the World Wildlife Fund. Baseline surveys of the Aoi recorded eight plant SoCC, eight bird SoCC, sixteen mammal SoCC and two fish SoCC. The mammal SoCCs include Grevy's zebra (*Equus grevyi*), with core and critical habitat for the species recorded within the Aoi. During project development, the pipeline route was revised to reduce impacts on biodiversity sensitivities including the core areas for Grevy's zebra and the Arawale National Reserve. Residual impacts of up to Minor significance are predicted on designated sites, habitats and species during

(1) IFC 2009. Projects and People. A Handbook of Addressing Project-Induced In-Migration.

construction. Priority ecosystem services for the midstream project have been identified and impacts on them assessed. The original and revised pipeline route through this area is illustrated in Figure 5.2

Figure 5.2 Original and Revised Oil Export Pipeline Routes



Source: AOC Project Presentation, 2022

At Lamu Port where the midstream pipeline will terminate, biodiversity sensitivities in the Aol include a community conservancy, coral reefs, seagrass beds and soft bottom sediments, cetaceans and sea turtles. An ESIA addendum for the Load Out Facility will be undertaken once negotiations with the GoK on a location have been concluded. The addendum will need to address the potential impacts on dredging and dredge spoil disposal on marine biodiversity.

Stakeholder engagement has been undertaken and has informed the routing of the midstream pipeline through engagement with the Grevy's Zebra Trust and the Twiga Walinzi Initiative.

POK has identified a number of gaps between the completed and approved ESIA's and the requirements of the IFC PSs and associated World Bank guidance, and the relevant EP IV requirements which the SLIP is aimed to address. Given the presence of areas of natural habitat and critical habitat trigger species within the various Aols, the SLIP is expected to address requirements to deliver no net loss and net gain requirements as part of the SLIP Biodiversity Action Plan.

Table 5.3 Project Oil Kenya Management Systems and Plans: Compliance Requirements

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
Performance Standard 1 Assessment and Management of Environmental and Social Risks and Impacts				
<i>Environmental and Social Assessment Management Systems, Policy, Identification of Risks and Impacts, and Management and Monitoring Programmes</i>	<p>The POK ESIA's assessed the project impacts and set out an E&S Management Framework that presented the key mitigation measures and project commitments that will require to be adopted by the Operator and its contractors.</p> <p>The SLIP will augment these assessments with additional details on climate change and resilience, Cumulative Impacts Assessment, Human Rights Assessment and Supply Chain Assessment</p>	<p>POK will develop an ESMS and associated ESPP and subsidiary plans for construction and operations.</p> <p>The ESPP and associated mitigation measures, commitments and monitoring requirements that are required by the Operator's contractors will need to form part of the tender process and contractual documentation to ensure that commitments are carried forward to detailed project plans and procedures.</p>	<p>Operator EHS Team</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>
<i>Organisational Competency, Capacity and Training</i>	<p>The Operator reported that an annual review of planned activities, resource requirements and training needs is undertaken and that the requirements are to be reviewed when there are significant changes to planned activities.</p>	<p>The ESPP includes a Labour Management Plan for construction and operations.</p> <p>This should identify resource requirements pre-FID and then over the different project phases to further develop, implement and monitor the ESPP and its associated subsidiary plans. The plan should include competency frameworks and training requirements for the required roles.</p>	<p>Operator HR Team</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>
<i>Stakeholder Engagement, Disclosure of Information and Grievance Mechanism</i>	<p>The POK ESIA's report on the stakeholder engagement activities that have been ongoing since drilling activities commenced in 2016. Stakeholder engagement continues pre-FID with the land access work currently being undertaken</p>	<p>The ESPP will include an updated Stakeholder Engagement Plan, including an updated grievance management procedure construction and operations.</p> <p>A Community Relation Plan is to be developed for engagements with Affected Community pre-FID as well as a programme of re-establishing contact</p>	<p>Operator SP Team</p> <p>The ESPP is scheduled for mid-2023 with associated SEP being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
		with National and Country level Government and civil society stakeholders.	A pre-FID Community Relation Plan is also scheduled for mid-2023.	
Performance Standard 2 Labour and Working Conditions				
<i>Working Conditions, Terms of Employment, Worker Organisations, Grievance Mechanisms, Contractor Management and Monitoring and Occupational Health and Safety</i>	The SLIP will address the requirements of labour and working conditions. These will include the required policies and procedures to align with International Labour Organisations requirements on working conditions, terms of employment, workers' rights and organisations, equal opportunities, grievance mechanism, worker health and safety, and child and forced labour. In addition, management of sub-contractors, migrant workers and the supply chain will be addressed.	<p>The ESPP includes a Labour Management Plan, Workers Health and Safety Management Plan and Supply Chain and Local Content Management Plan for construction and operations.</p> <p>The relevant requirements in these plans will be contractual obligations for contractors and sub-contractors. Training for personnel managing and monitoring contractors and sub-contractors should be included in the training and capacity building requirements of contracts.</p>	<p>Operator HR Team</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>
Performance Standard 3 Resource Efficiency and Pollution Prevention				
<i>Resource efficiency, wastes, water use and Pollution Prevention</i>	Environmental impacts associated with resource use, water use, waste generation, and pollution risk have been assessed in the POK ESIA's. Additional work on these issues will be undertaken in the SLIP	<p>The ESPP will include a Construction Environmental Management Plan, Hazardous Materials Management Plan (Construction and Operations) and Marine Management Plan (Construction and Operations).</p> <p>The relevant requirements in these plans will be contractual obligations for contractors and sub-contractors.</p> <p>POK has undertaken a consolidation of historic wastes from previous drilling operations into a single site at Twiga. This is pending the construction of the integrated waste management centre at the CFA, post FID.</p>	<p>Operator HSE Team and SP Team (for community water supply).</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
		Work is ongoing on the community water supply programme with the aim of handing the operation and management over to community/Country Government by the end of 2023		
<i>Greenhouse Gas Management</i>	The updated POK design resulted in no routine flaring with excess gas being injected. Flaring will be restricted to emergency situation and maintenance periods where injection is not possible. The management of Greenhouse Gas Emissions will be addressed further in the SLIP.	The ESPP will include an Air Emissions Management Plan (Construction and Operations). It is expected that this will include a procedure for emissions management and annual collation and reporting of greenhouse gas emissions at project level.	Operator EHS Team The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks
Performance Standard 4 Community Health, Safety, and Security				
<i>Community Health and Safety, Security and Emergency Response Plan</i>	As assessment of community health and safety, security and emergency preparedness and response issues will be addressed in the SLIP. This will include risks from infrastructure, equipment, hazardous materials and disease. Community health, safety and security issues related to Influx management will also be addressed.	The ESPP will include a Community Health and Safety Management an Emergency Preparedness and Response Plan, and a Security Plan and covering the Construction and Operations phases. These will include commitments to the Voluntary Principles on Security and Human Rights. The relevant requirements in these plans will be contractual obligations for contractors and sub-contractors. POK related community health, safety and security issues and the Emergency Response Plan should be communicated to Affected Communities as well as relevant government bodies (e.g. emergency services, healthcare facilities and police) through the POK Stakeholder Engagement Plan.	Operator HSE Team The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
Performance Standard 5 Land Acquisition and Involuntary Resettlement				
<i>Land Access and Resettlement Framework</i>	A Land Access Strategy (March 2020) and a Resettlement and Livelihood Restoration Framework (Feb 2021) were previously reviewed. These documents define the land acquisition process, identifying the GoK led statutory land acquisition process and POK's commitments for PS 5 alignment, including supplementary compensation.	<p>As part of the SLIP and ESPP, a POK Resettlement and Livelihoods Restoration Plan will be produced. This will build on previously reviewed framework plans and will be finalised once detailed household surveys have been completed by the NLC as part of the GoK-led land acquisition process. Support measures for identified households will be based on an agreed entitlement matrix.</p> <p>A Community Development Plan that addresses additional livelihood restoration measures, social investments, local content plans, training and project benefits to be produced as part of the ESPP. Additional POK-led stakeholder engagement will be undertaken with Affected Communities and other stakeholders. This should include a grievance mechanism.</p>	<p>Operator SP Team</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>
Performance Standard 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources				
<i>Assessment of Risk and Impacts Biodiversity Action Plan</i>	The identification of modified, natural and critical habitat was undertaken in the POK ESIA's with the mitigation hierarchy (i.e. starting with avoidance) applied where possible. A further Critical and Natural Habitat Assessment, Biodiversity Action Plan (if required), Biodiversity Management Plan and associated studies will be addressed in the SLIP.	<p>The ESPP includes a Biodiversity Management Plan (BMP) for construction and operations.</p> <p>Outputs from the habitat mapping study along with mitigation measures within the ESPP to be used to develop the BMP and BAP. The ESPP is scheduled for mid-2023.</p> <p>This will include ongoing habitat monitoring and collaboration with the Kenya Wildlife Service as required to protect sensitive habitats and species.</p>	<p>Operator HSE Team</p> <p>The ESPP, BMP and BAP are planned for mid-2023.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks</p>

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
<i>Restoration activities</i>	A number of sites that are no longer required have been or are planned to be restored and a site-specific approach requires to be developed.	A Land Disturbance and Rehabilitation Management Plan for construction activities is planned to be developed as part of the ESPP. This should also make reference to drilling activities and the restoration of any well pads no longer required, and also to the decommissioning phase. Standards for restoration and hand-back of sites should be agreed with the relevant Country Governments. The plan should include monitoring and maintenance schedules, where required.	Operator HSE Team The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks.
<i>Invasive Species Management</i>	The risk of introducing invasive species was assessed in the POK ESIA's.	An Invasive Species Management Plan for the construction phase will be part of the ESPP. The invasive species management list contained in the Kenyan Biodiversity Management Plan should be used as a basis for identify the site-specific requirements	Operator HSE Team The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks.
<i>Supply Chain Sustainability Assessment</i>	An assessment of the supply chain to determine the sustainability of Natural Resources supplied should be undertaken.	The ESPP will include a Supply Chain & Local Content Management Plan for construction and operations. This should include an assessment of use of natural resources (e.g. water, road and well pad construction materials)	Operator HSE Team The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks.
Performance Standard 7 Indigenous People				
<i>Informed Participation and Consent</i> <i>Mitigation and Development Benefits</i>	An assessment of impacts on Affected Communities has been undertaken as part of the POK ESIA's and a further assessment of Indigenous Peoples and the application of Free Prior and Informed Consent will be undertaken in the SLIP.	The POK Stakeholder Engagement Plan is underdevelopment. It is planned that this builds on previous engagements through the ESIA processes with respect to Informed Consultation and Participation. The Community Development Plan to be developed as part of the ESPP for the delivery of project benefits. POK will seek to develop this plan	Operator SP Team The ESPP is scheduled for mid-2023 with associated p Stakeholder Engagement Plan and Community Development Plan being made operational prior to the start of construction.	Level I Action required to address this issue to avoid future risks.

Key Topics	Status	Planned Actions	Responsibility and Timing	IMG Rating
	From the ESIA process no communities defined as Indigenous Peoples under Kenya law were identified within the POK development area. The approach that was adopted to address potential impacts on the nomadic pastoralists within the POK development area is based on defining these communities as Vulnerable and Marginalised groups, and developing consultations, land access negotiations and community benefits accordingly.	in consultation with Affected Communities. This will include the documentation of discussions and agreements to demonstrate ICP.		
Performance Standard 8 Cultural Heritage				
<i>Project Design and Execution Chance Finds Procedure and Training</i>	The POK team has assessed the potential impacts on Cultural Heritage through the ESIA processes for the different POK components. No significant impacts on cultural heritage were identified due to the design, construction, and operation of POK.	<p>As part of the ESPP there will be a Construction Heritage Management Plan. This should make reference to site-specific surveys that may be required, community consultations (for example in relation to the locations of graves) and a Chance Find Procedure during construction operations. This plan should also apply to drilling operations where new well pads are being constructed</p> <p>The Chance Find Procedure will require to Identify training needs for field staff that will be responsible for the management of impacts to cultural heritage resources and actions to be taken in the event of a find (i.e. further evaluation by competent professionals).</p> <p>The relevant requirements in these plans will be contractual obligations for contractors and sub-contractors.</p>	<p>Operator SP Team</p> <p>The ESPP is scheduled for mid-2023 with associated plans being made operational prior to the start of construction.</p>	<p>Level I</p> <p>Action required to address this issue to avoid future risks.</p>

6. ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM REVIEW

6.1 AOC ESMS Framework

AOC has developed a Corporate ESMS Framework and associated corporate policies, procedures and standards of operation to apply to potential future operational roles as well as for oversight of AOC's current and any new interests in non-operated assets. These were reviewed in previous IMG reviews and recommendations made in the previous IMG review for fuller alignment with the IFC PS. These documents have been uploaded onto AOC's website. The ESMS Framework is subject to annual review (last review was in May 2022 and no material changes were made other than an update to the AOC Human Rights Policy and a new Diversity, Equity and Inclusion Policy) and the associated Policies and Standards of Operations are to be reviewed every two years (next review due in May 2023).

6.2 ESG Management and Reporting

AOC has integrated its ESG risks into the AOC Corporate Risk Register. The risk register is reviewed quarterly by the members of the management team responsible for each of the risks and then annually by the whole management team. The AOC Q3 2022 Risk Register was provided as part of the current review. The top ESG risk was identified as climate-related market risk, resulting in reduced demand for oil and gas with the transition to a lower carbon future. AOC's ESG priorities for 2022 include the Energy Transition Strategy and carbon offsets, described in Section 6.3 below, as well as social investments and asset specific ESG risk assessments and plans.

An ESG Strategy has been developed by PRIME for its non-operated assets offshore Nigeria. The approach developed drew on the approach that AOC has adopted. To inform the development of the strategy an Environmental and Social Due Diligence study was undertaken by an independent consultancy (Petrenel report dated 12/07/2022) and an ESAP prepared for the further development of the ESG strategy and associated plans. These include further development of policies, management systems, ESG standards of operation, emissions reporting and independent review. A key element of the strategy is the reduction of emissions of GHG with interim milestones to be set on a path to net zero by 2050. A preliminary goal has been set for a 20% reduction in attributable GHG emissions by 2025 compared to 2020 levels. One key source of GHG emission is the routine flaring from the Agbami in OML 127. It was reported in the ESDD report that there has been a reduction in routine gas flaring from Agbami over the last few years and that the Operator (Chevron) is committed to eliminating routine gas flaring. To achieve its GHG reduction goals, however, Prime will need to continue to influence the Operator to the extent that it can as a non-operator to reduce gas flaring.

AOC issued its first Sustainability Report, for year ending 31st December 2020, on 25th March 2021 and its second Sustainability Report, for the year ending 31st December 2021, on 28th February 2022. The third Sustainability report, covering 2022, is expected to be issued in Q1 2023. AOC has aligned its Sustainability Reports with the SASB reporting standards and the Task Force on Climate Related Financial Disclosures (TCFD) reporting requirements.

6.3 Energy Transition Strategy

6.3.1 Overview

AOC has developed an Energy Transition Strategy that aims to build the consideration of climate change risks into its policies, plans, projects and investment decision-making. Comments on the planned approach were provided in previous IMG reviews, including recommendations on shadow pricing, setting science-based targets, the use of Marginal Abatement Cost Curves and benchmarking emissions, leakage and flaring against sector best practice.

In 2022, AOC announced its commitment to being carbon neutral across its direct operations from 2025 and eliminating flaring by 2030 and has developed a climate framework with three pillars: Reporting and Disclosure, Emissions Management and Offsets, and Responsible Investment.

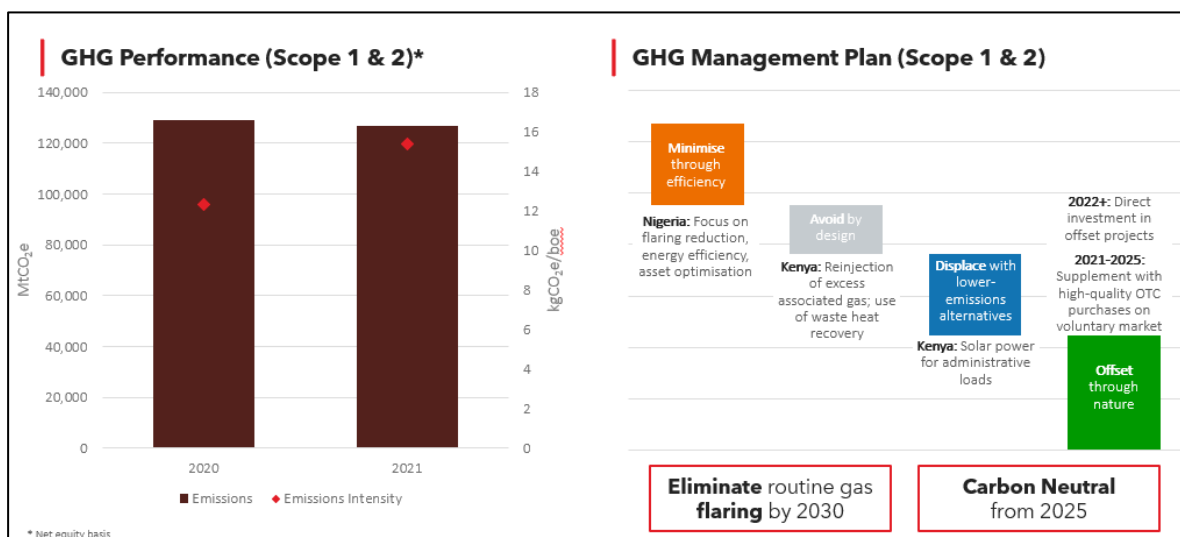
Where AOC is an Operator or has a high degree of influence (e.g. for POK), the aim is to reduce emissions through design, energy efficiency and renewable sources of energy, with offsetting applied to its attributable residual emissions (Scope 1 and Scope 2).

Where AOC is an investor and has only a limited degree of influence on emission reduction strategies, the approach is to provide optionality for its partners to offset their attributable residual emissions to further support project financing.

As part of this strategy, AOC has commenced the planning of offset projects in three different locations in Kenya. Details of this approach are illustrated in Figure 6.1.

AOC undertook a Climate Risk and Resilience Review in Q4 2021, in alignment with TCFD, to look at short, medium and long-term strategy implications and targets. It will continue to report on its ESG performance in the AOC annual Sustainability Report, that follows SASB standards, allowing stakeholders and investors to monitor and assess its performance. As part of its carbon neutral commitment, AOC has undertaken a Scope 3 assessment and plans to develop more extensive GHG metrics to inform the development of Science Based Targets (SBTs).

Figure 6.1 GHG Management Plan & Performance (Scope 1 and 2)



Source: AOC ESG Presentation 2022

6.3.2 AOC’s Carbon Offset Projects

AOC has identified two prospective proprietary offset projects in Kenya to offset its Scope 1 and 2 emissions. A third project is at the pre-feasibility stage. Each project has been selected based on its type, quality, geographic location and environmental and social compliance. The overall focus is on carbon removal as opposed to carbon avoidance ⁽¹⁾. A set of evaluation criteria was used for project selection, as summarised below.

Type of the Project

The project must remove CO₂ from the atmosphere. As a preference, it should be a nature-based forestry project (reforestation, afforestation, or improved forest management); however,

⁽¹⁾ Current SBTi guidance on science-based net zero targets categorizes offsets into ‘compensation’ and ‘neutralisation’. The former refers to actions taken to reduce or avoid emissions; the latter refers to direct removals of greenhouse gases from the atmosphere. Companies are increasingly expected to prioritise removal projects to reach their net zero status. In 2021, the SBTi released its Corporate Net-Zero Standard under which unabated emissions must be “counterbalanced through the permanent removal and storage of carbon from the atmosphere.” The need to prioritise removal project is thus crucial in meeting net zero commitments.

AOC will consider other forms of nature-based solutions as well as engineered solutions if these are appropriate to the nature and scale of its business. The maturity date for projects (i.e., the time frame over which emissions offsets would accrue) must be clearly defined.

Quality

1. The project is/was made possible because of specific additional finance and would not have happened otherwise.
2. The project baseline is/was set in a conservative and auditable manner.
3. The project is/will remove emissions in a durable way (only projects in which CO₂ has/will be sequestered on a multi-decadal time scale will be considered) and all reasonable steps are taken to guarantee that the CO₂ will not be released.
4. The project takes/will take precautions to reduce the risk of displacing emissions to another location, and the project measures and subtracts emissions that are displaced using the best available science.
5. All meaningful greenhouse gas-related fluxes related to the project are/will be accounted for in a conservative manner.
6. The project does/will not negatively impact communities or ecosystems.
7. The project avoids any form of double counting.

Geographical Location

The location of the project (or credits stemming from an existing project) should ideally be in Sub-Saharan Africa, in a country close to our areas of operation (e.g., Namibia, Nigeria, Kenya, and South Africa). However, AOC will consider projects and credits from other geographic areas beyond the African continent in which AOC has a presence, including Canada and Latin America.

Environmental & Social Compliance

The project will be required to be developed in accordance with host country requirements and consistent with the IFC PSs and in line with applicable World Bank Group Environmental, Health and Safety Guidelines.

Feasibility studies have been conducted for two of the projects which together have a predicted annual carbon reduction and removal of 800,000 tonnes of CO₂e per year.

The two selected projects are described below.

1. REDD+ and ARR project. AOC has completed a study to analyse the various methodologies used to implement REDD+ and ARR activities and identified a project methodology, to be confirmed by prospective project partners that offers the greatest potential carbon benefits.
2. Rangeland Management. The project follows a Verified Carbon Standard (VCS) methodology for the Adoption of Sustainable Grasslands through Adjustment of Fire and Grazing. The carbon stocks were calculated using historic soil maps of Kenya overlaid with project area and project components. The potential annual tonnes of carbon removed was then calculated using data from a comparable project using the same methodology. The risks and uncertainties were identified and accounted for in the calculations.

A pre-feasibility study for a third project has been undertaken during 2022. Further screening studies to identify and evaluate further potential opportunities are planned to be undertaken in 2023.

In combination, these three projects are sufficient to offset AOC's anticipated annual Scope 1 and 2 emissions and a substantial proportion of AOC's partners' attributable emissions. Acquiring and retiring these credits would therefore achieve AOC's primary objective (Scope 1 and Scope 2 carbon

neutrality) and offer a way for partners to achieve carbon neutrality, or used to offset Scope 3 emissions, as a secondary objective.

In addition to analysing the adequate methodologies for each of the projects, AOCs feasibility assessments cover project activities, baseline assessments, financial projections, carbon estimates and risks for successful completion. The assessment also considered criteria such as permanence and additionality, both of which are necessary criteria for verified carbon credits.

6.3.3 Future Considerations

Selection of Offsetting Projects

When selecting particular projects, the rationale for their selection and the contribution of each project to carbon neutral and net zero objectives should be explained, for example, the share of avoidance and removals credits generated by each.

Alignment to new Core Carbon Principles

It is recommended AOC considers the Core Carbon Principles (CCP) ⁽¹⁾ of the new Integrity Council for Voluntary Carbon Markets to ensure its projects are aligned with best practice. The Integrity Council is drafting these CCPs to provide minimum standards for carbon credits. The Integrity Council's role is to set and enforce a definitive global threshold standard for high-quality carbon credits. The purpose of the draft CCPs and Assessment Framework is to provide a credible, rigorous, and readily accessible means of identifying high-quality carbon credits that create real, additional and verifiable climate impact with high environmental and social integrity.

Monitoring and Due Diligence

SBTi has currently paused the validation of fossil fuel sector targets and commitments as it works on developing a new methodology for oil and gas sector companies. The policy is currently under review and will be updated in late 2022. It is understood that AOC tracks these developments and is currently assessing its Scope 3 emissions using SBTi's current oil and gas sector guidance and O&G Interim Report ⁽²⁾.

AOC's due diligence and monitoring processes should be applied to the chosen projects through their life cycle. These processes should address the concerns raised by stakeholders. For example, some concerns have been raised about REDD+ projects regarding the accurate quantification of baseline deforestation, permanence (referring to the longevity of a carbon pool) and the stability of its stocks (e.g. through natural events, ineffective management, insecure tenure rights to the forest, or political risks).

Communicating Additional Benefits

Nature-related themes are becoming an issue of interest to investors and are being realised through frameworks such as Taskforce on Nature-related Financial Disclosures (TNFD). AOC should consider highlighting the nature-related benefits of its projects, and to seek quantified impacts where possible. These could be linked to the United Nations Sustainable Development Goals (UN SDGs), for example 'responsible consumption and production' and 'life on land'. Similarly, AOC could outline its key partnerships and points of engagement with local communities, governments, and organisations through its projects, as well as additional benefits such as increased welfare through job creation and food security.

(1) <https://icvcm.org/wp-content/uploads/2022/07/ICVCM-Public-Consultation-FINAL-Part-1.pdf>

(2) <https://sciencebasedtargets.org/sectors/oil-and-gas#development-process>
<https://sciencebasedtargets.org/resources/files/SBTi-OG-Interim-Report-Final.pdf>

7. CONCLUSIONS

7.1 ESAP Requirements

The ESAP requirements relevant to the current and planned POK operations in South Lokichar are mainly closed, with some pending revisions to draft documents or completion of management plans, scheduled for mid-2023. The ESAP may be revised at some stage by the IFC to take into account AOC's broader portfolio of interests developed since the original ESAP was agreed and the further development of POK.

7.2 Project Oil Kenya

The revised upstream ESIA was submitted to NEMA in September 2021 and the revised water supply pipeline ESIA was submitted to NEMA in February 2022 and are currently being reviewed. POK is awaiting confirmation from NEMA on the dates of the Public meetings and determination. A SLIP to address specific IFC PSs and other lender requirements is planned to report in mid-2023. An addendum to the midstream ESIA (already licenced) to address the Load Out Facility at the Port of Lamu is pending further negotiations with the GoK on potential berth locations.

The main activity now underway for POK is the development of the SLIP to address the gaps between the NEMA-compliant ESIA and lender requirements. In parallel with this the overall POK Construction and Operations ESMSs and ESPPs are being developed along with a series of subsidiary management plans and procedures. POK plans to have these drafted by mid-2023 and finalised prior to FID, scheduled for the end of 2023. Some of these plans and procedures have been or are being developed to address current and planned pre-FID site activities (including permit to work, incident management, land transport and EHS assurance). Planned actions to meet IFC PS requirements are mostly associated with the planned SLIP and development of the POK ESMSs/ESPPs and associated subsidiary plans. For this review these have been assigned a Level 1 rating as they are mainly relevant to the construction and operations phases of POK.

7.3 AOC ESMS, ESG Management, Reporting and Energy Transition

AOC Corporate ESMS Framework and associated corporate policies, procedures and standards of operation were reviewed in May 2022 with no material changes made. The Standards of Operations biannual review is due May 2023. AOC's third annual Sustainability Report (to 31 December 2022) is due to be issued in Q1 2023.

AOC has integrated its ESG risks into the AOC Corporate Risk Register with the top ESG risk identified as climate-related market risk, resulting in reduced demand for oil and gas with the transition to a lower carbon future. AOC's ESG priorities include the Energy Transition Strategy and carbon offsets, which include a commitment to be carbon neutral from 2025 eliminate flaring by 2030. As part of this strategy, AOC has commenced the planning of offset projects, alongside the adoption of an emissions reduction strategy. AOC continues to work through Prime to influence the Operators' ESG performance for its non-operated offshore Nigeria assets, in particular to reduce GHG emissions from routine and non-routine flaring.

AOC's third Sustainability report, covering 2022, is expected to be issued in Q1 2023. AOC has aligned its Sustainability Reports with the SASB reporting standards and the Task Force on Climate Related Financial Disclosures (TCFD) reporting requirements.

7.4 Recommendations for Next Review

The focus of the next review will be dependent on the level of activity at existing assets and any future investment decisions, as well as the outcome of any update of the ESAP. The further development of POK, following the determination by NEMA of the licence application and progress with the SLIP and the ESMSs/ESPPs and associated subsidiary plans as POK moves towards FID at the end of 2023

are likely to be key elements of the review. A site visit is also likely to be included in the next review, assuming an acceptable security situation.

There will also be a review of AOC's ongoing oversight and ESG reporting in relation to its non-operated assets and progress with its Energy Transition Strategy. The next review is currently scheduled for the end of the first quarter of 2023.

APPENDIX A ADDITIONAL DOCUMENTS PROVIDED BY AOC FOR CURRENT REVIEW

SOURCE/TOPIC	DOCUMENT TITLE
AOC Updates	Africa Oil ESG Presentation March 2022 Africa Oil Corporate Slides IMG Review 08092022 IMG Presentation- POK Current Status 070922 IMG Presentation-POK Future Plans 070922 AOC – Materiality Assessment v7 AFRICA OIL CORP 2021 Sustainability Report 2022-08-08 AOI - Risk Register 2022-08-08 AOI - Material Disputes, Risk Register POK E&S Risk Management - Lender Overview 060522
POK - Upstream ESIA	Narrative Summary - POK Upstream ESIA ESIA 2021 A1 - Volume I ESIA 2021 A1 - Volume II V2 including drawings ESIA 2021 A1 - Volume III V4 Redacted
POK –Midstream ESIA	NEMA - Environmental Impact Assessment License - 17 Nov 2021 1772867.554.A1 ESIA Report 31.10.19 LLCOP ESIA Addendum Final Report
POK Lamu Marine Terminal	Narrative Summary - Lamu Port Off Loading Facility 808535-00-CS-REP-0001 Rev 0 - Lamu Port Crude Oil Loading Options Study
POK Supplementary assessment	POK Supplemental Lenders Information Pack - Scope of Work 220622 Narrative Summary - Supplemental Assessment
POK Fatality and Incident Investigation	TKE-let-0018-EPRA-22 Incident Reporting 07/07/2022 Appendix E UK HSE Explosives Disposal Guidance Attachment 3 - Approved Destruction Methodology Attachment 4 - Explosives SME Report Attachment 5 - Explosives Tally in Incident 20 May 2022 Incident Investigation Summary & Lessons Learnt 01/08/22 Incident Response Desk-Top Exercise Sequence of Events Summary of De-Brief 3 August 2022 Synergi 4958 investigation Report 07/08/2022
POK Emissions management	Narrative Summary - Emissions Management GHG emissions note v1 300621 L-200545-S00-MINS-008 - Attachment 1 - L-200545-S00-PRES-008-R01 L-200545-S00-MINS-008 Gas and GHG Emissions Management L-200545-S00-P-REPT-005_R01 L-200545-S00-P-REPT-007_A01 POK Construction GHG calculations 170621 POK GHG Emissions White Paper Upstream Greenhouse Gas Emissions
POK – Water Supply Pipeline ESIA	Narrative Summary - POK Water Supply Pipeline ESIA POK Water Supply Pipeline FINAL ESIA 14-02-2022
POK - Waste	Narrative Summary - Drill Cuttings Management Pilot sampling of Twiga 1 reports

SOURCE/TOPIC	DOCUMENT TITLE
	<p>Pilot waste sampling at Twiga draft report Ver2</p> <p>Copy of Appendix1_ Daily Soil Sample Collection Logs</p> <p>Lab result 1</p> <p>Lab result 2</p> <p>Lab result 3</p> <p>Waste consolidation</p> <p>1 Draft Factual Report</p> <p>2 Laboratory SGas Results</p> <p>3 Laboratory Evaluation Report</p> <p>Environmental Risk Assessment Report</p> <p>Etiir and Amosing 3 Laboratory Soil Gas Results</p> <p>Evaluation of Geological Anomalies in sub-surface soils at Etiir and Amosing 3 Final</p> <p>POK - Interim Cuttings Management Plan FINAL 161220</p> <p>Record of waste consolidation activities</p> <p>Sample Results</p> <p>Remediation of Etiir and Amosing 3</p> <p>1 Draft Factual Report</p> <p>2 Laboratory SGas Results</p> <p>3 Laboratory Evaluation Report</p>
<p>POK Land, Resettlement, Livelihoods</p>	<p>Narrative Summary - POK Land Access Livelihood Restoration</p> <p>Upstream and Make up water Land access public participation summary</p> <p>LLCOP PipeCo RLRf final 240820</p> <p>Midstream Land gazette notice</p> <p>Midstream land gazette ment</p> <p>Land Public Participation Phase 1 - Draft 072022</p> <p>Land Public participation Phase 2 - Draft Report 072022</p> <p>Gazette ment_ Overview_ 20220818</p> <p>Gazette Vol. 58 1-4-22 Main</p> <p>Gazette Vol. 37 25-2-22 Special (NLC)</p> <p>Gazette Vol. 8 14-1-22 Special (NLC) [41]</p>
<p>POK Biodiversity</p>	<p>Narrative Summary - Biodiversity</p> <p>Africa Oil Biodiversity Framework 160617</p> <p>AOC Biodiversity Advisory Panel Report Dec 2021</p> <p>AOC Water Supply Pipeline Field Trip 10 Dec 2021</p> <p>BAP Agenda 24 June 2021 v2</p> <p>POK BAP slides 24 June 2021</p> <p>T-KE-ESP-FRM-0001 Biodiversity – FINAL</p> <p>Samburu Grevy's Zebra Re-route</p> <p>LLCOP ESIA Grevy's Zebra Field Notes 17-18 Nov 2018</p> <p>Collared Area Reroute A3 20181115</p> <p>Field Visit Annotated Map</p>

SOURCE/TOPIC	DOCUMENT TITLE
	<p>LLCOP Wamba Re-Route Option Dec 2018</p> <p>LLCOP Biodiversity Offset Discussion Grevy's Zebra Trust</p>
<p>POK Community Water Supply</p>	<p>Narrative Summary - POK In-field Community Water Resources Plans and Agreements</p> <p>Community Water Access Namantalem Water Reticulation Project June 2021 CL</p> <p>Copy of Nakukulas BH 9 10 Diagram</p> <p>Kode - sustainable project operation proposal. BS 15092020</p> <p>Kode water project – MOU</p> <p>LOMOKAMAR COMMUNITY PROPOSAL TO JOINT VENTURES_ POK 2021 Water Strategy 2021-03-26 REV 1</p> <p>Tracing and testing of existing Kapese-Twiga -Agete waterline report</p> <p>Water distribution</p> <p>Engagements</p> <p>09062020 Kode water reticulation project handover meeting</p> <p>TCG Min of Water_16032022</p> <p>TCG Min of Water_26012022</p> <p>TCG working group meeting 11th January 2018</p> <p>Narrative Summary - POK In-field Community Water Resources</p> <p>Narrative Summary - POK Water Supply Pipeline ESIA</p>
<p>POK Community Development Plan</p>	<p>Narrative Summary - POK Community Development</p> <p>POK Community Development Plan 160322</p>
<p>Human Rights</p>	<p>Narrative Summary - POK Human Rights</p> <p>AOI - Human Rights Policy_2022 update Final</p> <p>Modern Slavery Statement_April_2021</p> <p>Tullow-oil human-rights policy-2017</p>
<p>POK – Stakeholder Engagement</p>	<p>Narrative Summary - POK Stakeholder Engagement</p> <p>Narrative Summary - POK Grievance Management</p> <p>POK Stakeholder Engagement Plan 200122</p> <p>Consolidated Grievance Register -June 2021</p> <p>POK SEP July 2021 180821</p> <p>PPMT-FRM-STKHO-001 (1)</p>
<p>POK Governance & Risk Management</p>	<p>Narrative Summary - EHS Monitoring and Assurance</p> <p>Narrative Summary - POK ESMS Development</p> <p>Narrative Summary - POK Governance & Operational Control</p> <p>Narrative Summary - POK Operational Procedures</p> <p>EHS assurance</p> <p>POK EHS Assurance Procedure</p> <p>Tullow Kenya BV crude oil facility follow up audit report 2022</p> <p>Twiga 1Waste Transfer Station Environmental Audit 2021</p> <p>Twiga sample results 2021 audit</p>

SOURCE/TOPIC	DOCUMENT TITLE
	POK Work Control Procedures 220727 RMS AOK Medical Response Plan POK Incident Management Procedure 290722 FINAL POK Land Transport Procedure - Issued - 180722 POK Permit to Work Procedure FINAL 180722 POK E&S Risk Management - Lender Overview 060522 POK Env & Social Risk Management 010722 POK Performance Management System Development 16 Aug 22
Prime Updates	Prime HSEC GHG Statistics 2022_template Prime ESG Strategy - draft v5 POGBV_ESHS DD Report_12-07-2022_Final_Signed June 2022 SVB Meeting Shared
AOC Emission offsets	Africa Oil Corporate Slides IMG Review_08092022 Africa Oil ESG Presentation Mar 2022 AOC Mount Kenya REDD+ Feasibility Study DRAFT 310522 AOI - Offsets - 2H 2022 Status Review Budget 290722 EP-3 Arabuko Sokoke Screening Study SOW 060722 Galana Ranch - Feasibility Study Final 29112021 Prime ESG Strategy - draft v5

APPENDIX B ACCIDENT INVESTIGATION REVIEW

1. ACCIDENT INVESTIGATION REVIEW

This document reviews the investigation documentation and findings relating to a fatal accident. The investigation was led by Tullow's Chief Well Engineer and completed in line with Tullow Kenya BV's incident management process.

1.1 Incident Summary

The incident that was investigated was an uncontrolled explosion during the disposal of surplus expired explosives by POK, in which two people were injured, one fatally.

Burning was the method of disposal identified as most appropriate. Despite having no explosives qualifications, the contractor AQS scoped and planned the burn which was overseen by a Certified Blaster they had contracted. Government permits were obtained even though the planning and risk analysis of the task was below standards, with an unamended risk assessment from a previous burn being submitted to obtain the permits. The existing, permitted methodology was changed at the last minute, with explosives and combustibles contained within a wall cellar (metal box). An unexpected detonation created an explosion that fragmented the metal box, causing heavy debris to travel up to 500 m away. Two people were injured by the flying metal; one died from his wounds approximately 3 hours after the explosion, the other was med-evacuated to Nairobi for hospital treatment. Treatment for both was significantly delayed due to administrative issues.

1.2 Report Review

1.2.1 Structure

The incident investigation report comprised a written report with supporting technical data, expert advice, timelines and contemporaneous documentation, plus a separate POK summary document. The written report provided a detailed description of proceedings leading to the event, the post incident actions, and a background to the disposal activity, all supported by photographs and technical data. Immediate and root causes were included within the written report together with remedial actions.

1.2.2 Terms of Reference

The brief terms of reference for the investigation, outlined only in the POK document, required the investigation to determine:

- What happened?
- Why did it happen?
- What can be done to prevent it happening again?

A further key question that should be asked when such events occur is 'how did this happen?'. This is a distinctly different question as the questions 'why?' relates to the immediate acts, omissions and conditions that lead to an incident happening, whereas the questions 'how?' relates to organisational and safety culture, accountability, lack of control and process failings.

1.2.3 Methodology

The investigation methodology was structured as follows.

- Gather information to understand what happened and the actions leading up to/following the event and create timelines.
- Identify critical factors.
- Identify the immediate and root causes of those factors.
- Allocate remedial actions to reduce risk of reoccurrence.

Information was gathered for the investigation via the following process.

- Interviews.
- Witness statements.
- Expert advice.
- Published industry best practice (UK best practice in form of CBI Explosives Industry Group Guidance) to compare approved vs actual methodologies.

Interviewees and witness Police statements were obtained from personnel listed in Table B1.

Table B1 Investigation Interviewees and Submitted Police Statements

Interviewees	Police Statements Submitted
POK Project Director	POK Operations Supervisor
POK ESG Advisor	POK Construction Supervisor
POK Security Manager	MoPM Inspector of Explosives
AQS Senior Technical Manager	AQS Senior Technical Manager
Registered Blaster	Registered Blaster
POK Senior Social Performance Advisor	Casual Labour
POK Commercial Advisor	Casual Labour
	Casual Labour

The content of the interviews and statements made were not reported in the investigation documentation.

A separate and comprehensive technical note was obtained from an independent explosives' expert (OnePoint4 Ltd) that offered a cause for the explosion in addition to identifying errors and omissions during the planning and execution of the disposal operations.

1.2.4 Critical Factors

Critical factors to the incident were identified in the report, with root and immediate causes attached. Identified critical factors were as follows.

1. The Certified Blaster was not satisfied with pit construction.
2. Decision was made by the Certified Blaster to use a wall cellar.
3. The Site Supervisor/others did not initiate management of change and fully risk assess and document changes to the disposal method. All parties endorsed change without re-assessing.
4. Excessive inventory burn at one time.

The identification of the critical factors omits the original decision by the JV to contract AQS to undertake the tasks, given they have no formal explosives qualifications, and they had unsuccessfully overseen the disposal of explosives at Moi's Bridge quarry. This is a critical decision that initiated the sequence of events.

Critical Factor 3 cites perceived time pressures from AQS and the field team as a root cause, however this is contrary to the statement that

'During the investigation and interviews, key persons were asked if they felt undue pressure to perform the explosive destruction in spite of encountering operational problems. No one interviewed suggested that they felt undue pressure'¹

¹ Doc No: Synergi 4958 page14

1.2.5 Immediate Causes

Two immediate causes of the incident were identified.

- Improper use of equipment. The wall cellar not designed for containing the blast.
- Use of protective methods. Lack of knowledge of hazards present: hazards associated with the burn were wrongly judged.

The lack of suitable medical provision should also be cited as an immediate cause; a direct consequence of inadequate contingency planning. Consideration of site suitability should have included the ability to treat injuries caused by worst case scenarios. The movement and transport of injured persons by non-medics, and onward transport by vehicle over rough roads may have caused injuries to be exacerbated. The drive to the clinic also added to the delay in mustering med-evacuation. While it is not possible to ascertain whether this would have saved the deceased, it is possible that this time could have been critical.

1.2.6 Root Causes

The report lists root causes to be as follows.

- The Contractor (AQS) and subcontractor (Certified Blaster) lacked the appropriate formal competence and experience.
- There was a lack of recognition of the significant risk associated with disposal of explosives within all parts of the organisation.
- The onsite supervision lacked hazard awareness specific to the disposal of explosives.
- There was inadequate management of change of the burn process.

A review of the critical factors identifies the following additional potential root causes that should be considered.

- Inadequate POK planning and preparation ahead of the burn.
- Inadequate POK procedure and method statement.
- Inadequate POK contractor selection.
- Conflicting demands – commercial and time pressures.
- Safety culture of acceptance of advice by Certified Blaster.

The identified root causes relate only to the competence of those with immediate responsibility for the disposal who were on site at the time of the incident, they do not consider potential systemic failings at a more senior management level. It is important to consider failures in the lines of accountability in addition to responsibility, therefore an evaluation of any safety management system at the time of the incident should identify omissions or failures of the system, its processes, procedures and accountabilities that allowed the causative conditions to exist.

Examples are provided below.

- How was over 100 kg of surplus, expired explosive allowed to accumulate?
- How was there an expectation that the operational team could manage a high-risk activity outside of their capabilities?
- How were AQS contracted without due diligence?
- How was a high-risk activity signed off with inadequate planning, methodology and risk management?
- How was the Emergency Plan allowed to be out of operation for at least 18 months?

None of the immediate or root causes of the medical treatment and evacuation issues have been identified.

The absence of an EHS professional to advise those on site would appear to be a significant root cause of the incident, and the reason for this is briefly addressed in the incident summary but not included in the root causes. The appointment of an EHS professional, however, is included in the remedial actions.

Lack of on-site competence is a repeating feature of the report. The lack of an explosives' guidance document (again listed as a remedial action but not a cause) would indicate that management and regulators had not established the levels of knowledge, experience and training necessary for the safe disposal, nor communicated the requirements beforehand, therefore compelling the local team to work outside of their capabilities and without direction. One root cause identified was a 'culture of acceptance of advice by Certified Blaster', however it should be recognised that it would be reasonable for those without expertise to follow the advice and actions of an expert, especially a government licensed expert. A key consideration here is that it was management and regulatory failings that allowed an 'expert' in blasting without sufficient knowledge or experience of explosives disposal to lead the operations.

1.2.7 Remedial Actions

A series of actions have been identified, all with actionee and due dates attached. Those actions are as follows.

- Appoint an Operational EHS professional.
- Undertake an audit of the EHS management, including emergency response, and agree a plan to align EHS systems and processes.
- Introduce forward planning to identify and manage high-risk activities at a senior level.
- Develop high level guidance on the disposal of explosives.
- Produce and implement a medical evacuation procedure.
- Discuss evacuation delays with AMREF.
- Deliver leadership training and ensure everybody has awareness of Tullow's Life Saving Rules, including their ability to halt work they feel is unsafe.
- On site instruction not to allow under 18 years old on site.
- AQS and Certified Blaster not to be contracted for future disposal

The following additional actions should be considered.

- Introducing a methodical contractor due diligence process.
- Developing a process to monitor the amount of explosives on site to prevent a surplus of stock.

Regarding the EHS system alignment and audit, it was not clear what standards or systems the EHS systems will be aligned to, nor what standards will be audited against. The last action has a causation reference of RP6 which is not listed in the Critical Factors.

1.2.8 Corporate Responsibility

Neither Tullow's written document nor POK's summary clarify the relationship between Tullow Kenya BV, Africa Oil and Project Oil Kenya. A brief explanation of the structure is made in AQS' scoping document, but this does not clarify organisational responsibilities for H&S management at both corporate and operational levels, nor which company contracted AQS to dispose of the explosives. This information should be explicit to ensure responsibility for remedial actions is allocated to the correct organisation and personnel

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ERM's Nairobi office
Senteu Plaza, 1st Floor
Lenana/Galana Road
Kilimani
PO Box 29170-00100
Nairobi
Kenya
T +254 20 493 8113 /4