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## ENVIRONMENTAL AUDIT REPORT

OFFSHORE EXPLORATION RIGHT 283ER: BLOCK 3A/4A







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## List of Abbreviations

Abbreviation	Item
<b>DAFF</b>	Department of Forestry and Fisheries (Previously)
<b>DEA</b>	Department of Environmental Affairs (Previously)
<b>DFFE</b>	Department of Forestry, Fisheries and Environment (Currently)
<b>EA</b>	Environmental Authorisation
<b>EAP</b>	Environmental Assessment Practitioner
<b>ECO</b>	Environmental Control Officer
<b>EIA</b>	Environmental Impact Assessment
<b>EIMS</b>	Environmental Impact Management Services (Pty) Ltd
<b>EMPr</b>	Environmental Management Programme Report
<b>EO</b>	Environmental Officer
<b>EWP</b>	Exploration Work Programme
<b>FLO</b>	Fisheries Liaison Officer
<b>GNR</b>	Government Notice Regulation
<b>GPS</b>	Global Positioning System
<b>I&amp;AP</b>	Interested and Affected Party
<b>IMO</b>	International Maritime Organisation
<b>MARPOL</b>	International Convention for the Prevention of Pollution from Ships
<b>MMO</b>	Marine Mammal Observer
<b>MPRDA</b>	Mineral and Petroleum Resources Development Act, Act 28 of 2002
<b>NA</b>	Not Applicable
<b>NEMA</b>	National Environmental Management Act, Act 107 of 1998
<b>PAM</b>	Passive Acoustic Monitoring
<b>PASA</b>	Petroleum Agency of South Africa
<b>RoD</b>	Record of Decision
<b>SABS</b>	South African Bureau of Standards

Abbreviation	Item
<b>SAEON</b>	South African Environmental Observation Network
<b>SAHRA</b>	South African Heritage Resources Agency
<b>SAMSA</b>	South African Maritime Safety Authority
<b>SANBI</b>	South African National Biodiversity Institute
<b>SANHO</b>	South African Navy Hydrographic Office
<b>STLM</b>	Sound Transmission Loss Modelling
<b>USD</b>	United States Dollar

## EXECUTIVE SUMMARY

Environmental Impact Management Services (Pty) Ltd (EIMS) was appointed by the Petroleum Oil and Gas Corporation of South Africa SOC LTD (hereafter referred to as PetroSA) to undertake an Environmental Audit of the Record of Decision (RoD) approving the Environmental Management Programme (EMPr) in terms of the Mineral and Petroleum Resources Development Act (Act No 28 of 2002) (MPRDA) (PASA Ref:12/3/1/283/2/2/1), as well as of the EMPr, for the Block 3A/4A Exploration Right (PASA Ref:12/3/283), off the West Coast of South Africa.

Regulation 54(a)(2) of the Environmental Impact Assessment (EIA) Regulations (GNR982- EIA Regulations) requires all rights and permits issued in terms of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 (MPRDA) and associated Environmental Management Plans and / or Programmes to be subjected to the audit requirements stipulated in Part 3 of Chapter 5 of the Regulations. Part 3, Chapter 5 of the EIA Regulations in turn require that compliance with the conditions of the environmental authorisation, and the EMPr is audited and an environmental audit report submitted to the relevant competent authority.

The scope of the audit is to assess compliance with the requirements of the EMPr and associated RoD for Block 3A/4A exploration activities for the initial exploration period (2021 – 2024) held by PetroSA, and to confirm the continued adequacy of the EMPr for the first renewal period exploration activities (application submitted 1 February 2024, not yet approved). The approved EMPr is the EMPr submitted by Jeffares and Green in 2014, which was approved in January 2015.

The purpose of the audit is to determine and report on:

- The level of performance against and compliance of the conditions with the provisions of the requisite RoD (of the EMPr) and EMPr; and
- The ability of the measures contained in the EMPr, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the exploration activities planned for the first renewal period applied for. The activities is described in Section 2 of this document.

Compliance with the requirements was evaluated using the pre-determined scoring criteria (described in Section 6.2) and the results of the audit are described in detail in Section 7 of this report.

A total of 16 conditions (commitments) were identified in the RoD and 135 commitments in the EMPr, that were evaluated. Since no exploration activities have been undertaken during the initial exploration period, none of the conditions were considered applicable in this audit. Therefore, no compliance score is provided for the RoD (of the EMPr) or the EMPr.

It is the auditors opinion that the approved EMPr offer generic, sometimes outdated impact management actions and fail to address specific activity and site impacts adequately. The EMPr should be updated with the recommended measures described in this report. In addition, further impact assessment is needed when specific location details and technical specifications for exploration activities are available, likely necessitating further amendments and supplements before exploration activities can commence.



# 1 INTRODUCTION

The Petroleum Oil and Gas Corporation of South Africa (Pty) Ltd (PetroSA) held an Exploration Right for petroleum issued in accordance with Section 80 of the Minerals and Petroleum Resources Development Act (Act 28 of 2002-MPRDA). This initial period of the exploration right and associated activities according to the approved work programme started on 5 February 2021 and lapsed on 4 February 2024. PetroSA submitted an application for renewal of this right on 1 February 2024 and is awaiting a decision. PetroSA is required to implement the exploration activities (as approved in the work programme) in accordance with the requirements of the approved Environmental Management Programme (EMPr) (Jeffares and Green, 2014). Regulation 34 of the National Environmental Management Act (Act 107 of 1998-NEMA), Environmental Impact Assessment Regulations (GNR982)(EIA Regulations) requires that the holder of an approved EMPr must, for the period during which the EMPr remains valid, ensure that the compliance with the conditions of the EMPr is audited.

This report aims to comply with these obligations to audit compliance with the EMPr, as well as the RoD in terms of the MPRDA, and submit the findings of the audit to the relevant competent authority, in this case the Department of Mineral Resources and Energy (DMRE).

# 2 ACTIVITY DESCRIPTION

PetroSA held an exploration right over offshore areas Block 3A/4A. Figure 1 provides a locality map showing the location and extent of the exploration right.

PetroSA's Block 3A/4A license area covers a surface area of 25 332 km<sup>2</sup> and is located off the West Coast of South Africa, close to shore and has water depths ranging from 20 m to about 480 m.

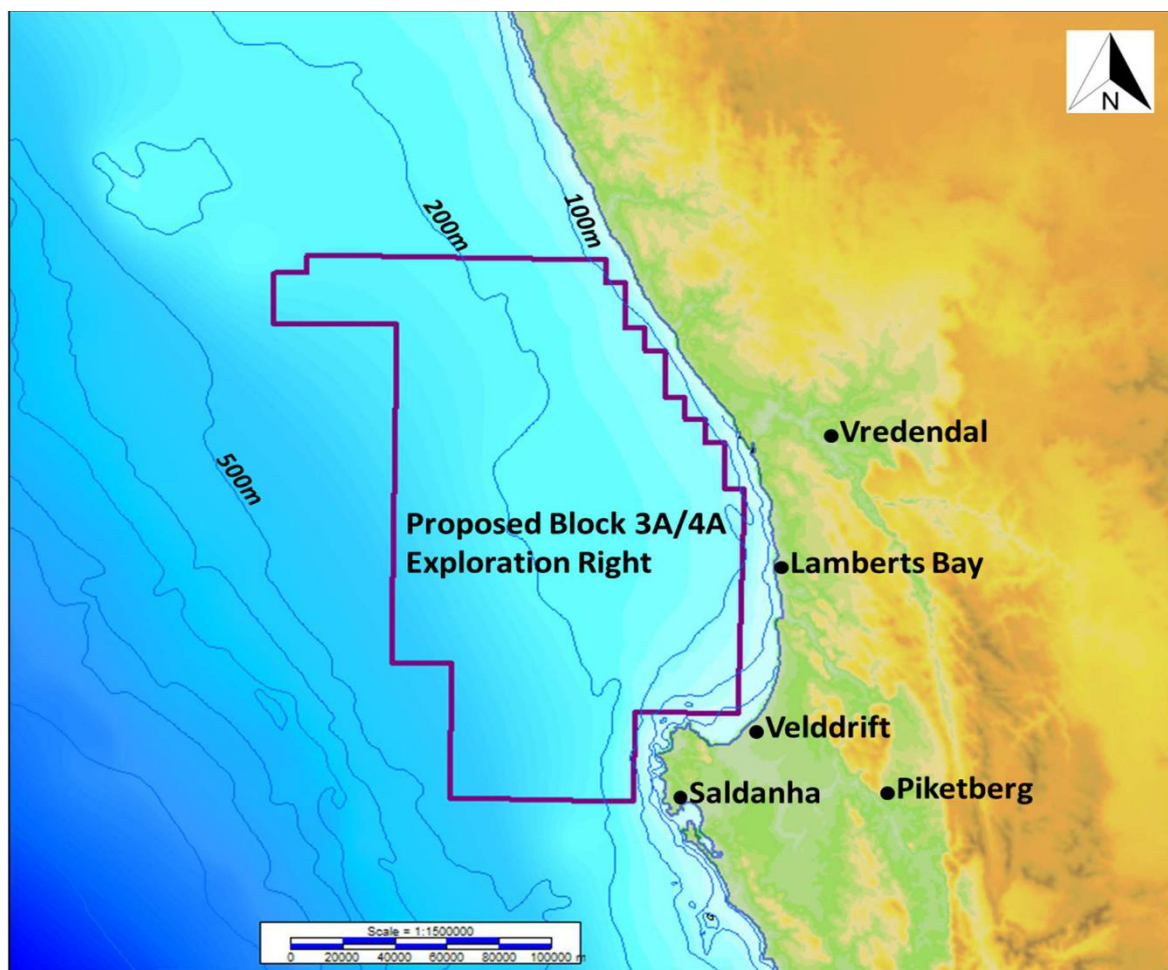


Figure 1: Locality map.

## 2.1 INITIAL PERIOD EXPLORATION ACTIVITIES

The approved exploration work programme and EMPr for the initial period included the following exploration activities:

- Aerial gravity and magnetic surveys;
- Seismic surveys;
- High resolution bathymetry surveys;
- Seabed sampling; and
- Heatflow measurements.

None of the above activities have been conducted in the initial exploration period.

A Section 102 application for the Initial Exploration Period was made by PetroSA and approved by PASA to reduce the work programme from Airborne Gravity and Magnetic Survey to licencing of 2D seismic data. This was completed.

## 2.2 FIRST RENEWAL PERIOD EXPLORATION ACTIVITIES

A renewal application was submitted on 1 February 2024 to conduct the following activities:

- Multibeam Bathymetry Survey;
- Seafloor Geochemical Survey and Sampling; and
- 3D Seismic Acquisition (contingent).

The application for the first renewal period is pending approval. The approved EMPr (Jeffares and Green , 2014) caters for the impact management outcomes and actions applicable to generic aerial gravity and magnetic surveys, seismic surveys, high resolution bathymetry surveys as well as seabed sampling and heatflow measurements. The EMPr and approved work programme does not provide a detailed description of exploration activities or locations (besides falling within Block 3A/4A).

## 3 LEGISLATIVE FRAMEWORK

Regulation 54(a)(2) of the EIA Regulations requires all rights and permits issued in terms of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 (MPRDA) and associated Environmental Management Plans/ programmes to be subjected to the audit requirements stipulated in Part 3 of Chapter 5 of the EIA Regulations.

Regulation 54 states that: *Where a right or permit issued in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) and the associated Environmental Management Programme or Environmental Management Plan approved in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) is still in effect after 8 December 2014, the requirements contained in Part 3 of Chapter 5 of these Regulations apply to such Environmental Management Programmes or Environmental Management Plans, and where-*

*(a) the audit or performance assessment cycle of the Environmental Management Programme or Environmental Management Plan exceeds five years, an audit report will be required to be submitted at least every five years commencing from the date of submission of the last audit, for the period during which the right or permit remains in effect; or*

*(b) no audit or performance assessment requirement was set in the Environmental Management Programme or Environmental Management Plan, an audit report will be required to be submitted to the competent authority no later than 7 December 2021 and at least every 5 years thereafter for the period during which the right or permit remains in effect.*



Part 3 of Chapter 5 of the Regulations refers to requirements for auditing and amendment of an Environmental Authorisation or Environmental Management Programme. This audit was undertaken in line with these requirements.

## 4 DETAILS OF THE AUDITOR

The environmental audit was undertaken by Monica Niehof from EIMS.

### 4.1 EXPERTISE OF THE AUDITOR

Monica Niehof is an Environmental Assessment Practitioner (EAP) and environmental auditor. She is registered as an Environmental Assessment Practitioner (EAP), and she holds a Bachelor of Science Honours degree in Environmental Management from the University of South Africa. She has 13 years experience in the environmental field, during which auditing has been one of her main responsibilities. She has extensive experience in Environmental Impact Assessments, including for Environmental Authorisation (EA), Water Use License (WUL), Air Emission License (AEL) and Waste Management License (WML) applications, as well as auditing of EAs, AELs and other authorisations and licenses. Experience was gained in sectors including residential, retail, manufacturing, mining, energy, fuel infrastructure etc. Either being part of the EAP or auditing team, or as auditor and as Senior EAP. Clients included Municipalities, Private Companies, individuals, State Owned Entities etc.

### 4.2 DECLARATION OF INDEPENDENCE

*I, **Monica Niehof**, declare that –*

- I act as the independent Environmental Auditor;*
- I will perform the work relating to the environmental audits in an objective manner, even if this results in views and findings that are not favourable to the Client;*
- I declare that there are no circumstances that may compromise my objectivity in performing such work;*
- I have expertise in conducting environmental audits, including knowledge of the environmental Acts, regulations and any guidelines that have relevance to the audited operations;*
- I will comply with the relevant Acts, regulations, and all other applicable legislation;*
- I have no, and will not engage in, conflicting interests in the audit process;*
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the NEMA; and*
- I do not have and will not have any vested interest (either business, financial, personal, or other) in the audit other than remuneration for work performed.*



## 5 SCOPE, PURPOSE AND OBJECTIVE OF THE AUDIT

The scope of the audit is to assess compliance with the conditions of the approved EMPr and the RoD (EMPr approval), and to confirm the continued adequacy of the EMPr. The purpose of the audit is to ensure compliance with the requirement of the EMPr and RoD and the NEMA EIA Regulation 34 to undertake scheduled compliance audits. The objectives of the audit are to determine:

- The level of performance against and compliance with the provisions of the requisite EMPr and RoD; and

- The ability of the measures contained in the EMPr, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the authorised activities.

The scope of this audit is defined as follows:

- Compliance with the requirements of the RoD and approved EMPr (Jeffares and Green, 2014), in so far as it relates to the following:
  - Exploration activities which were undertaken during the initial exploration period (5 February 2021 - 4 February 2024) (consideration of planning, operational, rehabilitation, closure and post closure management actions as applicable).
- The ability of the measures contained in the EMPr, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the authorised activities, in so far as it relates to the following:
  - Exploration activities planned for the first renewal period (to be confirmed) (consideration of planning, operational, rehabilitation, closure and post closure management actions as applicable) as per the work programme submitted with the renewal application (submitted on 1 February 2024).

## 6 AUDIT METHODOLOGY

### 6.1 PROCEDURE FOR THE AUDIT

Initial documentation was obtained and reviewed in preparation for the audit. A checklist was prepared based on the requirements of the EMPr. Compliance with the requirements was evaluated using the pre-determined scoring criteria as described in Section 6.2 and the results of the audit are described in Section 7 of this report.

The Environmental Audit is primarily a Compliance Audit against the conditions of the approved EMPr and associated RoD. Findings from the audit that did not relate to an EMPr or RoD condition did not contribute to the audit score. However, where deficiencies have been identified that do not necessarily correspond to specific EMPr or RoD conditions, these findings have been used to provide recommendations for improvement. Various documentation and records were required during the audit to confirm compliance with the requirements and were made available electronically for review.

There is wide variety of South African environmental legislation, and the Holder is required to comply with all relevant legislation. Whilst consideration was given to the relevant environmental legislation, a full comprehensive legal compliance audit is beyond the scope of this audit.

### 6.2 EVALUATION CRITERIA USED DURING THE AUDIT

The evaluation criteria for compliance scoring were based on a pre-determined scoring system. Each condition was weighted equally to determine a compliance score. The scoring criteria used during the audit are as follows:

- Fully Compliant: Indicating that the condition was fully complied with and provided with a compliance score of 4.
- Partially Compliant: Indicating that the condition has not been fully complied with and that additional measures are required to obtain full compliance. Partial compliances were provided with a compliance score of 2.
- Non-Compliant: Indicating that the condition has not been complied with and provided with a compliance score of 0.
- Not Applicable (N/A): Indicating that the condition is not currently applicable. Not applicable conditions were removed from the total number of conditions from which the compliance score was calculated during this reporting period.

## 6.3 CONSULTATION PROCESS UNDERTAKEN

The findings of this assessment are based only on interviews and documentation reviewed. No site visit, physical testing or analysis was performed (or necessary) during the assessment and information provided by employees was verified by review only.

As per Regulation 34 of the EIA Regulations, 2014, all potential and registered interested and affected parties should be notified of the submission of the audit report to the authorities and the report should be made available to anyone on request and it should be made available on a publicly accessible website, where the holder has such a website.

## 7 RESULTS OF THE AUDIT

The results of the audit have been described in this section of the report. The results include a summary of compliance with the requirements of the EMPr, the results of the compliance evaluation, summary of findings as well as a discussion on the continued adequacy of the EMPr within this section.

A total of 16 conditions (commitments) were identified in the RoD and 135 commitments were identified in the EMPr that were evaluated. Since no exploration activities have been conducted during the initial exploration period, none of the conditions in the RoD nor the EMPr were considered applicable for this audit. Therefore, no compliance score is provided.

Based on the audit, the EMPr is not considered adequate and effective to manage and mitigate the proposed exploration activities planned for the first renewal period. Various recommendations have been provided to ensure that the EMPr is updated and will be effective once operation commences.



## 7.1 COMPLIANCE EVALUATION

The compliance evaluation of the EMPr and the RoD is provided in Table 1 and Table 2. The conditions were rated according to the compliance evaluation criteria described in 6.2.

Table 1: Compliance evaluation of the EA conditions.

Ref #	Condition	Compliance Rating	Comments/ Verification
<b>Scope of the Authorisation</b>			
<b>4</b>	<b>RECOMMENDATION</b>		
4.1	All proposed exploration operations must be carried out and managed in accordance with the approved EMPr and this RoD conditions. Deviations from the approved EMPr requirements may lead to the cancellation or suspension of the right in terms of section 47 of the Act.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.2	Seismic survey and multi-beam bathymetry survey operations must be planned accordingly to avoid key cetacean species migration and breeding periods which is from the beginning of June to end of November. Furthermore, seismic or bathymetry surveys must be planned such that they do not overlap with tuna pole peak season on the West of St Helena Bay.	N/A	No exploration activities (described in Section 2 of this audit report) (including seismic and multi-beam bathymetry survey operations) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.3	Aerial gravity and magnetic surveys must avoid key cetacean species migration and breeding periods which is from the beginning of June to end of November.	N/A	No exploration activities (described in Section 2 of this audit report) (including aerial gravity and magnetic surveys) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.4	Positioning of seabed sampling and heat flow measurement devices must avoid locations of cultural heritage material and existing seafloor telecommunication cables identified during the multi-beam bathymetry. If any cultural heritage material is found during sampling operations SAHRA must be notified immediately.	N/A	No exploration activities (described in Section 2 of this audit report) (including seabed sampling and heat flow measurement) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.5	Precautionary measures to prevent injuries and mortality of marine fauna must be undertaken. In this regard, services of an independent Marine Mammal Observer, Passive Acoustic	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	Monitor and Fisheries Liaison Officer must be sourced to monitor the implementation of the requirements of the approved EMPr.		
4.6	Helicopter flight paths during operations must avoid sea-bird or seal colonies, coastal reserves and no aircraft may approach 300 m of whales in terms of the Marine Living Resources Act of 1998 (Act 18 of 1998).	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.7	All wastes and discharges aboard must be handled and managed according to the provisions of MARPOL 73/78 and Marine Pollution Act (Prevention of Pollution from Ships) of 1986.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.8	All key stakeholders, relevant departments and directly affected I&APs must be notified in writing of any planned operations 21 days before operations commence on site. Furthermore, on-going consultation with I&APs and other stakeholders including De Beers, Transhex and the fishing industry must be undertaken before commencement, during and at completion of planned activities.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.9	Effective communication channels to inform other potential marine users of proposed operations must be established by means of Radio Navigation Warnings, notices, and through South African Navy Hydrographic Office.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.10	Details and specifications of the contracted vessels and proofs of certification by relevant authorities must be submitted to the Agency 30 days before operations commence on site.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.11	Daily reports, monthly, quarterly environmental monitoring reports and annual EMPr performance assessment reports must be submitted to the Agency. A close-out report shall be submitted within 60 days of the end of all operations.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.12	Copy(s) of insurance documents in respect of financial provision for operational risks must be submitted to the Agency before the execution of the right.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
4.13	Plans to manage various emergency environmental incidents associated with operations i.e. Emergency Response Plan, Stakeholder Engagement Plan, Oil Spill Contingency Plan, etc. must be in place prior to the commencement of the proposed operations.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.14	All emergency and any significant environmental incidents must be reported to the Agency within 24 hours of occurrence and must be addressed with immediate effect.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.15	International and domestic laws regulating any activities taking place at sea must be adhered to.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
4.16	Translocation of alien invasive species through ballasting activities must be prevented at all times and recommendation measures implemented.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Table 2: Compliance evaluation of the EMPr commitments.

Ref #	Condition	Compliance Rating	Comments/ Verification
<b>Activities 1-3: Planning Phase</b>			
2014_1.1.1	Prepare a register of all legislation applicable to all exploration and geophysical survey activities.	N/A	No exploration activities (described in Section 2 of this audit report, including geophysical survey activities) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_1.1.2	Ensure all required permits and approvals are obtained prior to conducting exploration and geophysical activities and adhere to all conditions attached.	N/A	No exploration activities (described in Section 2 of this audit report, including geophysical survey activities) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_1.1.3	Prepare schedule of all environmental and compliance monitoring measures required during survey operations as well as a schedule of all reports required during and after the survey has been completed. The schedule must specify the inspection and reporting frequency and party responsible for the inspection and reporting, using Activity 3.13.2 as minimum guideline.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_1.1.4	All survey Contractors must be provided with a copy of the EMP and a written confirmation of receipt must be obtained. The survey Contractor as well as the Operator's representatives on the survey must be instructed to have the EMP available on board the survey and any support vessels at all times.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_1.1.5	Copies of the EMP must be readily available on-board the survey vessel and support vessels at all times and the necessary equipment and personnel must be available to meet the requirements of the EMP.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_1.1.6	Contracts with service providers shall specifically require that the service provider complies with all relevant legislation. PetroSA reserves the right to inspect survey activities at any time during the survey operation to assess compliance to the EMPr. Deviations from the EMPr without sound justification will be deemed a breach of contract.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.1	Ensure that the service providers (survey and support vessels, etc.) have the following subsidiary plans in place: o Oil Spill Contingency Plan; o Emergency Response Plan, including MedEvac plan;	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial

Ref #	Condition	Compliance Rating	Comments/ Verification
	<ul style="list-style-type: none"> <li>o Support Vessel and Helicopter Emergency Response Plans</li> <li>o Waste Management Plan; and</li> <li>o Incident Management and Reporting.</li> </ul>		exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.2	Compile a Communications Plan that outlines the communication procedures for all stakeholder engagement, including a Stakeholder Engagement Register, responsibilities for review of stakeholder comments, feedback to the stakeholder and close out actions and requirements.	N/A	No exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.3	Ensure that subsidiary plans are aligned with national plans (e.g. National Oil Spill Contingency and Response Plan) and other regional, provincial, local and the Operator's plans and procedures as relevant (e.g. Integrated Waste Management Plans, Incident Management Plan, Communications Plan etc.).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.4	All contingency response plans contain the following up to date details: <ul style="list-style-type: none"> <li>o Contact names and numbers for different response contingencies;</li> <li>o Clear lines of communication for specific tasks are tabulated;</li> <li>o Clear roles and responsibilities allocated to specific staff with incumbents particular to the operation specified;</li> <li>o Training and awareness needs and activities, if relevant; and</li> <li>o Formats for reporting e.g. filing incident reports, waste manifests, etc.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.5	All plans shall be readily available and accessible on the survey and support vessels at all times.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.6	The Operator to keep copies of all subsidiary plans (listed in Activity 3.2.1.1) in the Emergency Response Centre during survey activities.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.7	Retain copies of all subsidiary plans for five years.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_2.1.8	The pre-survey meeting agenda between the Operator and the survey Contractors must include a formal handover and acceptance of subsidiary	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this



Ref #	Condition	Compliance Rating	Comments/ Verification
	plans. All staff of the survey Contractor and Operator staff must be familiar with the content of the plans.		audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_3.1.1	The survey Contractors shall be registered with the International Association for Geophysics Contractors (IAGC) and shall be able to demonstrate a track record for maintaining optimum safety and environmental protection.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_3.1.2	Ensure the survey vessel is certified for seaworthiness through an appropriate internationally recognised certification programme (e.g. Lloyds Register, Det Norske Veritas).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_3.1.3	Ensure that the survey vessels holds certification for updated calibration of survey equipment.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 4: Stakeholder Engagement</b>			
2014_4.1.1	The Operator must implement and maintain a Stakeholder Engagement Register which shall include the following information: o Contact details of stakeholder o Date and time of stakeholder input o Nature of input o Stakeholder engagement form reference number o Name of reviewing manager for reviews of comments o Date of Review o Result of Review o Date of communication with stakeholder.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.2	The Operator shall meet with the fishing industry (demersal trawl, demersal hake-directed long-line, large pelagic long-line, tuna pole, traditional line fish, small pelagic purse-seine fisheries and West Coast rock lobster) and the managers of the DAFF fisheries research programmes to discuss their respective surveys and programmes in order to minimise or avoid disruptions to all parties.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_4.1.3	<p>Fishing industry bodies and other key affected parties should be informed of the proposed survey activities and requirements with regards to the safe operational limits around the survey vessels prior to the commencement of the project. The following industrial bodies and affected parties should be included:</p> <ul style="list-style-type: none"> <li>o Department of Agriculture, Forestry and Fisheries</li> <li>o Department of Environmental Affairs</li> <li>o South African Tuna Association</li> <li>o South African Tuna Long-Line Association</li> <li>o Fresh Tuna Exporters Association</li> <li>o South African Deep-Sea Trawling Industry Association</li> <li>o South African Commercial Line fish Association</li> <li>o West Coast and Peninsula Commercial Ski boat Association</li> <li>o Shark Longline Association</li> <li>o South African West Coast Rock Lobster Association</li> <li>o Transnet National Ports Authority (ports of Cape Town and Saldanha Bay)</li> <li>o South African Maritime Safety Association</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.4	<p>The specific details of the survey shall be compiled into an Environmental Notification for submission to PASA. The Environmental Notification will provide details on the following:</p> <ul style="list-style-type: none"> <li>o Survey lines, period and duration</li> <li>o Vessel specifications</li> <li>o Certification compliance</li> <li>o Relevant insurance</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.5	<p>Fishing stakeholders and other marine users who operate in the area shall be notified in writing of survey activities and the location and presence of exclusion and safety areas at least 14 days prior to the scheduled commencement of survey activities. Should survey activities extend beyond the original timeframe stakeholders should be notified within 24 hours. Stakeholders include:</p> <ul style="list-style-type: none"> <li>o Overlapping and neighbouring users with delineated boundaries in the marine petroleum and mineral prospecting and mining industries</li> <li>o Fishing industry operating in the survey area. South African and foreign fishing vessels can be informed through the recognized fishing associations (examples include the South African Deep Sea Trawling Association,</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	Inshore Pelagics, Rock Lobster and Tuna Associations, DAFF, fishing companies and fishing agents) o Government Departments with jurisdiction over marine activities, particularly DEA, PASA, DAFF, SAN Hydrographer, SAMSA and local Port Captains.		
2014_4.1.6	The Operator shall advertise the commencement of each surveying programme regionally in English	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.7	The Operator shall, in writing, request the South African Naval Hydrographic Office to put out daily Radio Navigational Warnings throughout the operational period and issue Notices to Mariners. The Notice to Mariners should give notice of: o the co-ordinates of the proposed survey area/s o an indication of the proposed survey timeframes and day-to-day location of the survey vessel o an indication of the proposed safe operational limits of the survey vessel	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.8	A Fisheries Liaison Officer (FLO) should be present on board the survey vessels to facilitate communications with vessels in the vicinity of the survey vessel – any fishing vessel targets at a radar range of 24 nautical miles from the survey vessel should be called via radio and informed of the navigational safety requirements	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.9	Daily reports shall be submitted, via email, to those stakeholders that request to be notified during the survey (see Activity 3.4.1.2). Daily reports should include, but not limited to, the following: o Survey details (incl. start-up procedure) o Vessel interaction o Meteorological conditions o Observation times and sightings of marine fauna o Waste management o Survey strategy (incl. survey progress and next line to be acquired)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.10	Stakeholder engagement process will be undertaken in accordance with a Communications Plan (see Activity 3.2.1.2)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial

Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.11	Any feedback from stakeholders concerning offshore exploration activities shall be reported in the Quarterly Report for that period	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_4.1.12	Inform all key stakeholders of the completion of survey activities within 24 hours	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 5: Environmental Training and Awareness</b>			
2014_5.1.1	Contractors must be registered with IAGC (see Activity 3.3.1.1) and all staff on the survey and support vessels must be suitably trained and qualified to fulfil their duties as demonstrated by the crew manifest and training records.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_5.1.2	Toolbox talks or similar shall be used to discuss environmental awareness and to report back on environmental performance applicable to the specific work area. Topics should include content of subsidiary plans as a minimum.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_5.1.3	All personnel shall receive regular training on the handling and management of waste.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 6: Pollution Prevention</b>			
<b>6.1 Helicopter Services and Airborne Gravity and Magnetic Surveys</b>			
2014_6.1.1	Existing aviation service providers' procedures, such as the Materials Handling & Transport and Marine Support Services procedures, shall be implemented to minimise the risk of objects and chemical substances being dropped overboard, during surveys, cargo transfer, leaking from storage containers and during handling.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_6.1.2	The contractor shall comply fully with aviation and authority guidelines and rules.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.1.3	All pilots must be briefed on ecological risks associated with flying at a low level parallel to the coast. All mitigation measures associated with ecological impacts linked to flying as listed in Activity 3.7.1 below must be complied with.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.1.4	Helicopter flight logs will be kept to demonstrate compliance with set flight paths. Airborne gravity and magnetic flight logs shall also be kept to ensure compliance with the pre-determined survey lines	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>6.2 Vessels and Other Shipping</b>			
2014_6.2.1	<p>All measures prescribed by SAMSA to minimise the risks of collision of marine traffic with the survey and support vessel(s) must be implemented and maintained. Measures to be implemented include:</p> <ul style="list-style-type: none"> <li>o Maintenance of safety and exclusion zones through Notices to Mariners issued by SAN Hydrographic Office 24 hours prior to commencement of survey (see Activity 3.4.1.7).</li> <li>o 24-hour chase vessel on patrol in exclusion zone during surveying</li> <li>o Maintenance of standard watch procedures</li> <li>o Issue Radio Navigational Warnings if visibility of vessel(s) is diminished (e.g. power outages or failure of fog horn)</li> <li>o Radio communication to alert approaching vessels</li> <li>o Use of flares and sirens where necessary</li> <li>o Recording of interactions with vessels in a log book</li> <li>o Collisions, near misses or other transgressions with associated pollution risks will be treated as incidents and handled according to the procedure detailed under Activity 3.11</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>6.3 Transfer of Materials / Dropped Objects</b>			
2014_6.3.1	Procedures shall be implemented to minimise the risk of objects and other materials being dropped overboard during transfer of goods or leaking from storage containers or during handling	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial

Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
2014_6.3.2	The incident management procedure should be followed in the event of a lost object or other materials (see Activity 3.11.2)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>6.4 Workshops, Repairs and Chemical Handling and Storage</b>			
2014_6.4.1	Repair and servicing of loose equipment or machinery shall be undertaken only in defined workshop areas or where adequate drainage is in place to contain spilled liquid and where risk of loss of object overboard is minimised	N/A	PetroSA does not have any equipment, or workshops associated with geophysical surveys for this block. No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.2	All valves, taps and pipe connections should be inspected regularly in accordance with the maintenance and monitoring schedule to check for leaks and should be immediately rectified in the event of leak detection.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.3	A chemical and hazardous material register shall be maintained and will detail: o All chemicals used and stored on the vessel Chemical characterisation of each chemical including SABS (or similar) class and hazard rating o Specific storage handling or disposal requirements for each chemical including Personal Protective Equipment o Emergency response actions for each chemical o The process used to verify the information contained in the register	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.4	All fuels, greases, oils and other chemicals shall be stored and handled as per chemical handling procedures specified in the contractor's standard operating procedures and in accordance with the Material Data Safety Sheets (MSDS)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.5	All chemicals shall have current MSDS prominently displayed at the location of storage and use	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this

Ref #	Condition	Compliance Rating	Comments/ Verification
			audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.6	Personnel using chemicals shall be trained in their use, disposal and clean-up	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.7	Expired chemicals shall be labelled as waste and treated in accordance with the disposal requirements specified in their MSDS	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.8	Appropriate absorbent materials and clean up equipment is on board and easily available in the event of a chemical spill.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.9	Any liquid spills of more than 5 litres shall be treated as an incident and handled according to the incident procedure detailed under Activity 3.11.1 below. All vessels shall at all times be equipped with the required spill kits to handle on-board spills or leaks	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.4.10	Any loss of chemicals overboard shall be treated as an incident and handled according to the procedure detailed under Activity 3.11.1	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>6.5 Refuelling / Bunkering</b>			
2014_6.5.1	No bunkering or refuelling while vessels are out at sea is permitted within 50 nautical miles of the coast	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.2	If bunkering at sea is found to be necessary, permission must be obtained from SAMSA five days prior to bunkering	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this

Ref #	Condition	Compliance Rating	Comments/ Verification
			audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.3	Diesel and other fuels must be stored in enclosed and secured tanks, designed to withstand extreme events and conditions	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.4	Drip trays must be in place to collect leakage from on-board connection and discharge points for both offshore and in-port bunkering and refuelling	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.5	Offshore bunkering will not be allowed in the following circumstances: o Wind force and sea state conditions of 6 or above on the Beaufort Wind Scale o During any workboat or mobilisation boat operations o During helicopter operations o During the transfer of in-sea equipment o At night or times of low visibility	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.6	Floating hoses will be made of flexible double carcass sections and will be equipped with a breakaway coupling for protection against excessive tension or overpressures in the fuel system. The closure time will be set to minimise the volume of oil spilled to the sea whilst being slow enough to prevent surge pressure building up. Hoses will also be fitted with marker lights and will have built-in buoyancy with a minimum reserve of 25% (to cope with a situation where the hose becomes filled with seawater and immersed). This will also prevent accidental damage to unseen hoses by supply / crew boats.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_6.5.7	Spillages of fuel during bunkering must be logged as an incident in accordance with the procedures given in Activity 3.11.1	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activities 7: Survey Operations</b>			
<b>7.1 Airborne Gravity and Magnetic Surveys (i.e. Aerial Surveys)</b>			



Ref #	Condition	Compliance Rating	Comments/ Verification
2014_7.1.1	An exemption permit shall be applied for from the Department of Environmental Affairs (DEA) for the entire survey area for aircraft to be able to approach to within 300 m of whales (in terms of the Marine Living Resources Act, 1998)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.1.2	Pre-plan flight paths (for mobilisation and demobilisation to and from the Exploration Area) and ensure that no flying occurs over coastal reserves, bird and seal colonies, coastal reserves, marine islands or the following Important Bird Areas (IBA): <ul style="list-style-type: none"> <li>o West Coast National Park and Saldanha Bay Islands</li> <li>o Bird Island</li> <li>o Olifants River estuary</li> <li>o Verlorenvlei</li> <li>o Lower Berg River wetlands</li> <li>o Dassen Island</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.1.3	Extensive coastal flights (parallel to the coast within 1 nautical mile (nm) of the shore) shall be avoided, particularly during the movement of migratory cetaceans (particularly baleen whales) from their southern feeding grounds into low latitude waters (June to end November). Utilise a precautionary approach to avoiding impacts throughout the year as no seasonal patterns of abundance are known for odontocetes occupying the Exploration Area. Should a survey be required to extend into the cetacean migration and breeding period (the beginning of June to the end of November), a formal request / motivation must be submitted to PASA for consideration	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.1.4	During mobilisation to and from the Exploration Area, aircraft shall maintain a minimum altitude of at least 300m above sea level and shall not hover or circle over whales, dolphins, sharks, turtles or aggregations of seabirds		No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.1.5	All pilots must be briefed on the ecological risks associated with flying at a low level parallel to the coast	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>7.2 Seismic Surveys, Acoustic Emissions from Airguns and Multi-beam Bathymetry Surveys</b>			

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_7.2.1	<p>Seismic surveys should be planned to avoid cetacean migration periods or winter breeding concentrations (June to end November) and ensure that migration paths are not blocked. However, as several of the large whale species are also abundant on the West Coast between September and February (inclusive), the best time of year to conduct seismic operations is late summer and early winter (end February – mid June), across the entire block. However, any surveys planned between December and end February should only be scheduled to operate in the northern section of the block, i.e. avoiding the southern portion of the block off Cape Columbine.</p> <p>Should a survey be required to extend into the cetacean migration and breeding period, a formal request / motivation must be submitted to PASA for consideration.</p>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.2.2	<p>All survey vessels must be fitted with Passive Acoustic Monitoring (PAM) technology, which detects animals through their vocalisations. As a minimum, PAM technology must be used during the pre-watch period for seismic and bathymetric surveys at night and when visibility is poor. PAM shall, however, be used 24 hours a day if surveying extends into the whale migration and breeding period from June to November. An on-board PAM operator shall be appointed for the duration of the survey. The duties of the PAM operator shall include the following:</p> <ul style="list-style-type: none"> <li>• Ensure that hydrophone streamers are optimally placed within the towed array. The hydrophone streamer should ideally be towed behind the airgun array to minimise the interference of vessel noise, and be fitted with two hydrophones to allow directional detection of cetaceans</li> <li>• Confirm that there is no marine mammal activity within 500m of the vessel for a 30 minute period prior to commencing with the 'soft-start' procedures</li> <li>• Record species identification, position (latitude/longitude) and distance from the vessel, where possible</li> <li>• Record airgun activities, including sound levels, 'soft-start' procedures and pre-firing regimes</li> <li>• Request the temporary termination of the survey, as appropriate. It is important that the PAM operator has a full understanding of the financial implications of terminating firing, and that such decisions are made</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	confidently and expediently. A log of all termination decisions must be kept for inclusion in both daily and "close-out" reports.		
2014_7.2.3	<p>An on-board Marine Mammal Observer (MMO) shall be appointed for the duration of the survey. The MMO must have experience in seabird, turtle, seal and marine mammal identification and observation techniques. The duties of the MMO shall include:</p> <p>Marine fauna:</p> <ul style="list-style-type: none"> <li>• Observing and recording responses of marine fauna to acoustic shooting, including seabird, turtle, seal and cetacean incidents and behaviour and any mortality of marine fauna as a result of the surveys. Data captured shall include species identification, position (latitude/longitude), distance from the vessel, swimming speed and direction (if applicable) and any obvious changes in behaviour (e.g. startle responses or changes in surfacing/diving frequencies, breathing patterns) as a result of the survey activities. Both the identification and the behaviour of the animals must be recorded accurately along with current survey sound levels</li> <li>• Any attraction of predatory seabirds, large pelagic fish or cetaceans (by mass disorientation or stunning of fish as a result of acoustic survey activities) and incidents of feeding behaviour among the hydrophone streamers should also be recorded</li> <li>• Recording airgun activities, including sound levels, "soft-start" procedures and pre-firing regimes</li> <li>• Requesting the temporarily termination of the survey, as appropriate. It is important that MMO's have a full understanding of the financial implications of terminating firing, and that such decisions are made confidently and expediently. A log of all termination decisions must be kept (for inclusion in both daily and "close-out" reports)</li> <li>• Recording sightings of any injured or dead protected species (marine mammals and sea turtles), regardless of whether the injury or death was caused by the vessel itself. If the injury or death was caused by a collision with the vessel, the date and location (latitude/longitude) of the strike and the species identification or a description of the animal should be recorded</li> </ul> <p>Fishing and other users of the sea:</p> <ul style="list-style-type: none"> <li>• Providing back-up on-board facilitation with the fishing industry and other users of the sea. This includes communication with fishing and shipping / sailing vessels in the area in order to reduce the risk of</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	<p>interaction between the proposed surveys and other existing or proposed activities</p> <ul style="list-style-type: none"> <li>• Daily electronic reporting of vessel activity and recording of any communication and/or interaction in order to keep I&amp;APs informed of survey activity and progress</li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>• Recording meteorological conditions</li> <li>• Preparing daily reports of all observations. These reports shall be forwarded to the necessary authorities on a daily or weekly basis</li> <li>• Monitoring compliance with international marine pollution regulations (MARPOL 73/78 standards)</li> </ul>		
2014_7.2.4	<p>Prior to the initiation of any acoustic impulses and the commencement of “soft starts”, pre-survey scans (visually and using PAM technology, when required) shall be undertaken by an on-board MMO and PAM operator for the presence of diving seabirds, turtles, seals and cetaceans within a 500m radius around the survey vessel (exclusion zone). This shall occur no later than 30 minutes prior to the start of survey equipment. A dedicated pre-shoot watch of at least 60 minutes (to account for deep-diving species) is recommended.</p>	N/A	<p>No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.</p>
2014_7.2.5	<p>Acoustic shooting shall follow the procedure below:</p> <ul style="list-style-type: none"> <li>• The use of the lowest practicable airgun volume, as defined by the operator, should be defined and enforced. Airgun use shall be prohibited outside of the licence area</li> <li>• All initiations of acoustic surveys shall be carried out as “soft-starts” for a minimum of 20 minutes. This requires that the sound source be ramped from low to full power rather than initiated at full power, thus allowing a flight response by marine fauna to outside the zone of injury or avoidance. Where this is not possible, the equipment should be turned on and off over a 20 minute period to act as a warning signal and allow cetaceans to move away from the sound source. When surveying in inshore areas (&lt;50 m depth), a “soft-start” procedure of 30 minutes’ duration shall be implemented</li> <li>• Where possible, “soft-starts” should be planned so that they commence within daylight hours</li> <li>• “Soft-start” procedures shall only commence once it has been confirmed (visually during the day and using PAM technology and night-vision/infra-</li> </ul>	N/A	<p>No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.</p>

Ref #	Condition	Compliance Rating	Comments/ Verification
	<p>red binoculars at night) that there is no seabird (diving), seal, turtle or marine mammal activity within 500m of the vessel. For cetaceans, the period of confirmation shall be for at least 30 minutes prior to the commencement of the “soft-start” procedures. “Soft starts” should be delayed until such time as this area is clear of diving seabirds, turtles and seals and in the case of cetaceans should not begin until 30 minutes after the animals depart the 500m exclusion zone or 30 minutes after they are last seen</p> <ul style="list-style-type: none"> <li>• All breaks in airgun firing of longer than 20 minutes must be followed by the 30-minute pre-shoot watch and a “soft-start” procedure of at least 20 minutes prior to the survey operation continuing. Breaks shorter than 20 minutes should be followed by a visual assessment for marine mammals within the 500m mitigation zone (not a 30 minute pre-shoot watch) and a “soft-start” of similar duration</li> <li>• In order to avoid unnecessary delays to the survey programme, it is recommended that a spare PAM cable and sensor are kept onboard should there be any technical problems with the system. If there is a technical problem with PAM during surveying, visual watches must be maintained by the MMO during the day and night vision / infra-red binoculars must be used at night while PAM is being repaired</li> <li>• During night-time line changes low level warning airgun discharges shall be fired at regular intervals in order to keep animals away from the survey operation while the vessel is repositioned for the next survey line</li> <li>• The firing of low-power guns during line turns that encroach within a 5 nautical mile radius of Tripp seamount shall be maintained. On lines beyond that the low power guns can be stopped during turns, but the normal start-up procedure shall nonetheless be maintained</li> <li>• During surveying, airgun firing should be temporarily terminated when: <ul style="list-style-type: none"> <li>o Obvious negative changes to turtle, seal and cetacean behaviour is observed</li> <li>o Turtles or cetaceans (excluding small toothed whales) are observed within 500m of the operating airgun and appear to be approaching the firing airgun, or</li> <li>o There is mortality or injuries to seabirds, turtles, seals or cetaceans as a direct result of the survey. Large mortality of invertebrate and fish species should also result in temporary termination.</li> </ul> </li> </ul>		

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_7.2.6	No survey-related activities are to take place within proclaimed MPAs	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.2.7	'Turtle-friendly' tail buoys shall be used or existing tail buoys shall be fitted with either exclusion or deflector 'turtle guards'	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.2.8	The survey shall be terminated if any marine mammals show affected behaviour within 500m of the survey vessel or equipment until the mammal has vacated the area	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.2.9	Seabird, turtle, seal, marine mammal and fish incidence and behaviour must be recorded by an onboard MMO. Any attraction of predatory seabirds (by mass disorientation or stunning of fish as a result of seismic survey activities) and incidents of feeding behaviour among the hydrophone streamers must also be recorded. All data recorded by MMOs shall as a minimum form part of a survey close-out report. Furthermore, daily reports should be forwarded to the necessary authorities(refer to Activity 3.4.1.3) to advise them of interactions and compliance with the mitigation measures	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.2.10	Marine mammal incidence data and acoustic source output data arising from surveys shall be included as an appendix to the Close-out report to be submitted to PASA after completion of the survey	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>7.3 Seafloor sampling programme and heat flow measurements</b>			
2014_7.3.1	The final positioning of the sample sites must avoid existing seafloor infrastructure (including seafloor telecommunication cables) and any cultural heritage material identified during the multi-beam bathymetry survey	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_7.3.2	If any cultural heritage material is found during sampling activities, SAHRA should be notified immediately. If any cultural heritage material older than sixty years is to be disturbed a permit would be required from SAHRA	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.3.3	No anchoring is permitted within 1 nautical mile of seafloor telecommunication cables	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.3.4	No survey-related activities are to take place within proclaimed MPAs	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>7.4 Maintenance of Exclusion Zones</b>			
2014_7.4.1	Comply with standard marine navigation warning requirements issued to keep other marine users informed of survey activities (see Activity 4), including Radio Navigational Warnings, Notices to Mariners and email notices to known marine users operating in the area	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.4.2	Keep constant watch for approaching vessels during operations (including radar) and issue warnings by radio and chase boat, if required	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.4.3	Vessels shall fly standard flags, lights (three all-round lights in a vertical line, with the highest and lowest lights being red and the middle light being white) or shapes (three shapes in a vertical line, with the highest and lowest lights being balls and the middle light being a diamond) to indicate that they are engaged in towing surveys and are restricted in manoeuvrability	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.4.4	Use warning lights during twilight, at night and in periods of low visibility. Lighting on board survey vessels shall be reduced to the minimum safety levels to minimise stranding of pelagic seabirds on the survey vessel at night	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
2014_7.3.5	Transgressions of the exclusion zone must be recorded as an incident and adhere to the incident reporting and investigation procedure in Activity 3.11.4	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_7.4.6	Report any emergency situation to SAMSA	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 8-10: Waste Management</b>			
<b>8.1 General Measures for Solid Waste Management</b>			
2014_8.1.1	The contractor is required to provide an integrated waste management plan in line with the waste management hierarchy presented in Figure 8.1 to the Operator prior to commencing survey operations	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.2	The survey vessel shall maintain a Waste Register which shall detail: <ul style="list-style-type: none"> <li>o Categories and volume estimates of different waste types generated on the survey and support vessels</li> <li>o Their source</li> <li>o Their SABS class and hazard rating</li> <li>o Their storage requirements</li> <li>o Their disposal methods</li> <li>o Any specific precautions or legislative requirements</li> </ul>	Noted	Context for previous condition- not a standalone action.
2014_8.1.3	The Waste Register shall be updated to record actual waste volumes generated during the Survey Operation.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.4	Waste shall be segregated into the following categories shown in Figure 8.2. Recyclables shall be stored separately as shall hazardous waste. Where possible, certain hazardous waste such as oil, e-waste, etc. shall be recycled.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.



Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.5	All wastes to be disposed of at land based facilities shall be handled according to the flow diagram in Figure 8.3 below while awaiting transport to disposal sites.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.6	No waste may be stored for more than 30 days on any vessel without formal permission from DEA.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.7	Wastes shall be stored in sealed containers or bags and protected from the environment according to specifications for storage in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste published by Department of Water Affairs and Forestry (DWAF) (now Department of Water Affairs [DWA]) in 1998 (or the latest update thereof).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.8	Incompatible waste may not be stored in the same location (see the hazard ratings for wastes in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste published by DWAF (now DWA) in 1998 for compatibility, or the latest update thereof).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.9	Galley waste shall be macerated at sea to pieces smaller than 25 mm and deposited overboard at a distance at least 12 nautical miles from shore in accordance with MARPOL requirements. No galley waste to be discharged within 3 nautical miles ( $\pm$ 5.5 km) of shore. Vessels undertaking survey operations in Block 3A/4A should, where possible, discharge galley wastes into the sea as far as possible from the coast.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.10	Sewage shall be discharged as outlined in Activity 3.9.2	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.11	The survey Contractor shall develop and maintain a waste manifest system as part of the waste register which includes:	Noted	This action will be audited for compliance under item 9.2. No survey or logistics Contractors have been engaged, as

Ref #	Condition	Compliance Rating	Comments/ Verification
	<ul style="list-style-type: none"> <li>o The quantities of different categories of waste leaving the vessel</li> <li>o The nature and source of the waste types</li> <li>o The date upon which the waste was removed</li> <li>o The date upon which they were received by the disposal facility</li> <li>o Proof of correct disposal by the landfill site (including a safe disposal certificate for any hazardous waste)</li> <li>o Obtaining completed waste disposal certificates including quantities and method of disposal for different waste types</li> </ul>		no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.12	Hazardous waste shall be disposed of at a registered waste disposal site and a safe disposal certificate shall be issued for all hazardous waste.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_8.1.13	Waste manifests shall be provided to the Operator and reported in the survey Contractor's Monthly Report	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>9.1 Discharge of Effluent</b>			
2014_9.1.1	Drainage water from deck and bilges shall be routed to separate drainage systems on survey vessels and shall include contaminated oily water from closed drains and drainage water from non-process areas (open drains)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.2	Drip trays or bunds shall be provided to contain contaminated water from all work areas that do not drain or route to a closed drainage system	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.3	No deck or bilge water may be discharged to the sea unless the oil concentration is below 15ppm (MARPOL standard)	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.4	In the event that the discharged oil concentration exceed 15ppm it shall be treated as an incident as per 3.11.1	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this

Ref #	Condition	Compliance Rating	Comments/ Verification
			audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.5	Oil concentration records shall be retained and submitted to the Operator in the Monthly Report	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.6	Where possible, environmentally-friendly, low toxicity and biodegradable cleaning materials shall be used	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_9.1.7	Discharge deck and bilge wastes from vessels undertaking survey operations in Block 3A/4A to be disposed of in the marine environment should comply with the relevant MARPOL standards	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>9.2 Sewage</b>			
2014_9.2.1	Discharge comminuted and disinfected sewage waste no closer than 3 nm from the coast. All sewage waste not comminuted and disinfected to be discharged no closer than 12 nm from the coast in accordance with MARPOL standards. Vessels must be en-route at a speed not less than 4 knots	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>10.1 Gaseous Emissions</b>			
2014_10.1.1	Ensure that vessels, aircraft and associated infrastructure used for the relevant surveys have an up-to-date maintenance plan to ensure all equipment functions optimally to prevent build-up of soot, unburnt diesel and other particulate matter that may increase atmospheric emissions.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_10.1.2	Incinerators, if used on board, shall be maintained to ensure efficient combustion of waste. Instances of release of excessive black smoke shall be investigated and rectified.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_10.1.3	Incineration of waste on marine vessels must comply with MARPOL standards	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_10.1.4	Sustained emissions of black smoke for a period of more than 24 hours shall be recorded as an incident (see Activity 3.11.4) and incinerator waste should be stored separately until the problem is rectified	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 11: Incidents and Emergencies</b>			
<b>11.1 Uncontrolled Release of Polluting Liquids</b>			
2014_11.1.1	The survey Contractor must comply with the incident management steps outlined in Activity 3.11.1.2 below and with the Contractor's Incident Management Plan and Emergency Response Plan in place prior to commencing survey activities	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_11.1.2	<p>Incident management shall entail the following key steps:</p> <ul style="list-style-type: none"> <li>o Incident detection</li> <li>o Rapid assessment of incident severity</li> <li>o Implement response actions, as follows:</li> </ul> <p>Routine Incident: In the case of an on-board spill or leak confined to the survey vessel the following steps may be taken:</p> <ul style="list-style-type: none"> <li>o Mobilisation of on-board response person or team to: <ul style="list-style-type: none"> <li>• contain the spill and shut off or control the source of the incident event</li> <li>• clean up the spill or take steps to rectify the incident consequences</li> </ul> </li> <li>o Complete an incident report form</li> <li>o Conduct an investigation, and</li> <li>o Close out the incident</li> </ul> <p>Overboard Spill (Emergency): In the case of a spill to sea , the following key steps will be required:</p> <ul style="list-style-type: none"> <li>o Classify the spill scenario, size and nature of the spill</li> <li>o Notify the Operator, who will in turn notify DEA, SAMSA and other relevant authorities to respond depending on the nature of the emergency</li> <li>o Mobilise on-board resources and take all practical steps on the survey vessel to contain the spill</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	o Adhere to all notification, investigation procedures and reporting requirements.		
2014_11.1.3	An incident and the results of any investigation shall be recorded and submitted to the Operator in the Monthly Report.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>11.2 Materials and Equipment Lost Overboard</b>			
2014_11.2.1	If a solid object falls overboard, the incident shall be managed as follows: <ul style="list-style-type: none"> <li>• Retrieve object if possible to do so</li> <li>• If object not retrievable, record location (GPS Coordinates) and assess whether it will pose a hazard to other marine users.</li> <li>• If object poses a hazard then notify PetroSA who in turn will inform SAMSA / HydroSAN</li> <li>• Complete the Incident Report Form and Dropped Object Log</li> <li>• Conduct an Incident Investigation through to close out.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_11.2.2	Notifiable incidents as set out in the Incident Management Plan shall be reported by the survey Contractor to the Operator within 24 hours and must be included in the monthly report to the Operator. Incidents posing a threat to human life or significant marine pollution should immediately be reported to the Operator's Operational Geophysicist	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>11.3 Injury or Death of Marine Fauna</b>			
2014_11.3.1	Notifiable incidents related to death or injury of marine fauna that may be discovered during surveys shall follow the general incident reporting requirements outlined in Activity 3.11.4 below and shall include: <ul style="list-style-type: none"> <li>o completion of an incident reporting form including recording of details such as time of observation, status of acoustic firing, location in relation to survey vessel and streamers, GPS coordinates, type and number of animals involved and other comments relating to possible correlation with survey activities</li> <li>o Immediately reported to the Operator and included in the monthly report to the Operator</li> <li>o Operator shall immediately report to the DEA: Oceans and Coasts who will in turn follow the correct procedures to investigate or retrieve injured or dead animals</li> <li>o Follow up investigations and close-out of the incident</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	Immediately on occurrence		
2014_11.3.2	All seabirds stranded on vessels shall be retrieved and released according to appropriate guidelines.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>11.4 General Incident Reporting and Auditing</b>			
2014_11.4.1	General Reporting All incidents that may occur during surveys will require the following investigation and reporting and which shall be detailed in the Incident Management Plan <ul style="list-style-type: none"> <li>o Recording the date and time</li> <li>o Description of incident</li> <li>o Assessment of the nature and source of the incident</li> <li>o Assessment and evaluation of the impact and affected environmental receptors</li> <li>o Actions taken to remedy the incident and report the incident</li> <li>o Investigation into root cause</li> <li>o Identification of measures to prevent reoccurrence and communication of such.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 12: Decommissioning and Close Out</b>			
<b>12.1 Restoration of Pre-Survey Conditions</b>			
2014_12.1.1	Retrieve all deployed equipment and any dropped objects from the marine environment prior to cessation of survey activities	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_12.1.2	Inform all key stakeholders (see Activity 3.4.1.12) of the closure of survey activities within 24 hours.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_12.1.3	Dispose of all waste retained on-board at a licensed landfill site using a licensed waste disposal contractor and obtain a final waste disposal certificate.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial

Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
<b>2014_12.1.4</b>	Compile a Survey Close-Out Report at the end of the survey which shall document compliance with the provision of this EMP, deviations from specified standards and details of any incidents arising (see Activity 3.13.3.4 for contents).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>12.2 Financial Provision</b>			
2014_12.2.1	Environmental management actions that would be required as a result of an incident or accident would be covered by PetroSA's insurance, as described below: o Third Party liability which includes personal injury, property damage and seepage and pollution as a result of any offshore exploration and production operations is covered up to USD150,000,000 per occurrence o Well control insurance which would include blowouts and seepage and pollution is covered up to USD150,000,000 per occurrence.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_12.2.2	In addition, as a condition of contract, PetroSA requires contractors to carry the following insurance and will not permit any of its contractors to undertake any work until certificates of insurance are provided o workmen's compensation insurance as required in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act, Act No. 130 of 1993 o employer's liability insurance with a limit of liability at all times of not less than USD1,000,000 (one million US Dollars) for each occurrence or such larger amounts for which Contractor already have cover o non-ownership aviation liability with a limit of liability at all times of not less than US\$50,000,000 (fifty million US Dollars) for each occurrence or such larger amounts for which Contractor already has cover o comprehensive general public liability insurance including pollution with a limit of liability of not less than USD1,000,000 (one million US Dollars) per occurrence o motor vehicle liability insurance including passenger liability indemnity o Physical Damage Insurance for loss or damage to contractor's equipment and machinery. Such coverage shall be on All Risks Insurance basis or its equivalent for full value of Contractor Group material and equipment	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	<ul style="list-style-type: none"> <li>o Hull and Machinery Insurance in the form of Full Form Hull and Machinery Insurance, including collision liability, with limits of liability at least equal to the full value of the vessel</li> <li>o Standard Protection and Indemnity Insurance, at least equal to the value of each vessel owned or chartered (including Towers Liability, where applicable)</li> </ul>		
2014_12.2.3	<p>Reporting of Financial Provision</p> <p>Proof of Financial Provision will be provided to PASA in the following manner:</p> <ul style="list-style-type: none"> <li>o A copy of the insurance certificate for the year will be provided on the renewal date of each year</li> <li>o Copies of the insurance cover carried by the contractors will be provided together with the environmental notification submitted to PASA at least 7 days prior to the commencement of any drilling or survey activity.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>Activity 13: System Administrative Requirements</b>			
<b>13.1 Monitoring</b>			
2014_13.1.1	Deck & bilge water discharge: oil concentrations to ensure compliance with MARPOL standards of <15 ppm (refer to Activity 3.9.1.3).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.2	Solid waste production and disposal (refer to Activities 3.8.1.3 and 3.8.1.12).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.3	Marine fauna: sightings (refer to Activity 3.7.4.2).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.4	Survey procedure (refer to Activity 3.7.1).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial



Ref #	Condition	Compliance Rating	Comments/ Verification
			exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.5	Monitoring results shall be reported to the Operator in the contractor's Monthly Report.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.6	The operator shall report monitoring results to PASA in the Quarterly Report.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.1.7	Monitoring results shall be retained for 5 years.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>13.2 Reporting</b>			
2014_13.2.1	Reporting Requirements for a Survey Operation are indicated in the flow chart below: (Figure 13.1).		
2014_13.2.2	Reporting by the Operator to PASA		
2014_13.2.2.1	EMP In accordance with the requirements of the MPRDA (Act 4.9 of 2008), the Operator shall submit an EMP to obtain approval for an exploration right (as per this EMP).	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.2.2.2	Notification of PASA The Operator shall notify PASA in writing of the commencement of survey activities 14 days prior to starting activities (see Activity 3.4.1.2). The specific details of the survey shall be compiled into an Environmental Notification for submission to PASA. The Environmental Notification shall provide details on the following: o Survey lines, period and duration o Vessel / Aircraft specifications o Certification compliance o Relevant insurance	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_13.2.2.3	<p>Quarterly Reports:</p> <p>The Operator shall submit Quarterly Reports to PASA, which shall include key information on:</p> <ul style="list-style-type: none"> <li>o The progress of survey activities and any changes to the survey schedule</li> <li>o Any incidents (e.g. pollution spills, navigational incidents, loss of equipment etc.)</li> <li>o Non-compliance with or exceedance of monitoring standards and steps taken to rectify these</li> </ul>	N/A	It is understood that these reports function as quarterly progress reports during survey activities. No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.2.2.4	<p>Close-Out Report</p> <p>The Operator shall submit a Close-Out Report to PASA within 60 days of completing a Survey Operation. The information contained in this report shall be based on the monthly reports compiled by the MMO, survey Contractor and other data and records compiled during the Survey Operation. The Close-Out Report shall contain a full description of all aspects of the Survey Operation, including:</p> <ul style="list-style-type: none"> <li>o The survey Contractor and vessel details</li> <li>o MMO details</li> <li>o Description of the Survey Operation (location, timetable &amp; duration)</li> <li>o Establishment information (e.g. receipt of EMP by Contractor and notification of other sea users / stakeholders)</li> <li>o Operational Phase Activities (e.g. environmental awareness, communications, provision for emergencies, waste management, lost equipment, helicopter use, acoustic emissions; faunal monitoring results (including final MMO report)</li> <li>o Monitoring and performance assessments</li> <li>o Decommissioning and Closure (e.g. notification, close out reporting, and final waste disposal).</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.2.3	Contractor Reporting to the Operator and Documentation Requirements		
2014_13.2.3.1	<p>Pre-Survey Agreements and Documentation</p> <p>Prior to surveys, the following documentation will be provided to the Operator by the survey Contractor:</p> <ul style="list-style-type: none"> <li>o Signed Contractor's Acknowledgement of Receipt of EMP</li> <li>o Environmental Safety and Health Policy</li> <li>o Sea Worthiness, Air Worthiness and Safety &amp; Pollution Prevention Certificates</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
	o Plan for supply of information to compile the Environmental Close-Out report		
2014_13.2.3.2	<p>Monthly Report</p> <p>The following information shall be compiled by the survey Contractor, and submitted to the Operator on a monthly basis in the form of a Monthly Report:</p> <ul style="list-style-type: none"> <li>o Incidents, including tangling of gear, incidents with marine fauna, spills and discharges, encroachments in the exclusion zone, etc.</li> <li>o Amount and type of waste generated and disposed of</li> <li>o Times and durations of firing including number and duration of soft starts.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.2.4	Reporting by the Operator to other government department and institutes		
2014_13.2.4.1	Marine mammal incidence data and data arising from surveys shall be included as an Appendix in the Close-out report to be submitted to PASA after completion of the survey	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.2.2.4	<p>Close-Out Report</p> <p>The Operator shall submit a Close-Out Report to PASA within 60 days of completing a Survey Operation. The information contained in this report shall be based on the monthly reports compiled by the MMO, survey Contractor and other data and records compiled during the Survey Operation. The Close-Out Report shall contain a full description of all aspects of the Survey Operation, including:</p> <ul style="list-style-type: none"> <li>o The survey Contractor and vessel details</li> <li>o MMO details</li> <li>o Description of the Survey Operation (location, timetable &amp; duration)</li> <li>o Establishment information (e.g. receipt of EMP by Contractor and notification of other sea users / stakeholders)</li> <li>o Operational Phase Activities (e.g. environmental awareness, communications, provision for emergencies, waste management, lost equipment, helicopter use, acoustic emissions; faunal monitoring results (including final MMO report)</li> <li>o Monitoring and performance assessments</li> <li>o Decommissioning and Closure (e.g. notification, close out reporting, and final waste disposal).</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.

Ref #	Condition	Compliance Rating	Comments/ Verification
<b>13.3 Auditing</b>			
2014_13.3.1	General		
2014_13.3.1.1	Compliance with the EMP may be subject to an internal audit before, during or at the end of a Survey Operation. The findings of these audits shall contribute towards the Operator's annual performance report on EMP compliance.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.3.1.2	The audits shall review and report on the auditing guidelines detailed in each section of this EMP	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.3.2	Pre-survey audit		
2014_13.3.2.1	The pre-survey audit shall check the following: o The EMP has been approved by PASA and all reporting requirements have been complied with o The survey Contractor has received a copy of the EMP and understands the content; the content of the EMP is aligned with the survey Contractor's standard operating procedures and has agreed to its implementation o The survey Contractor has the necessary equipment and protocols in place and staff on the vessel are suitably trained to implement the monitoring requirements outlined in the EMP	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.3.3	During survey audit		
2014_13.3.3.1	Audits during the Survey Operation shall check the following: o Monitoring is being undertaken in accordance with the requirements described in this EMP for the variables summarised in Activity 3.13.1 o Monitoring data are retained and all deviances reported correctly in the Monthly Reports o Incidents, where relevant, have been reported as per the incident reporting and investigating requirements (see Activity 3.11) o Observations made on the vessels check the contractor's commitments to good housekeeping and waste management protocols o General audit measures indicated in Activity 13.3.5.	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
2014_13.3.4	Post-survey audit		
2014_13.3.4.1	The post-survey audit shall take the form of a close out report and shall check and include the following:	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this

Ref #	Condition	Compliance Rating	Comments/ Verification
	<ul style="list-style-type: none"> <li>o Monitoring was undertaken in accordance with the requirements described in this EMP for the variables summarised in Activity 3.13.1</li> <li>o Monitoring data are retained and all deviances reported correctly in the Monthly Reports</li> <li>o Incidents, where relevant, have been reported as per the incident reporting and investigating requirements and have been closed out (see Activity 11)</li> <li>o All records comply with EMP requirements and are stored in an accessible and logical manner.</li> </ul>		audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>13.4 Record keeping</b>			
2014_13.4.1	All records shall be retained for 5 years		Considering that exploration rights can remain valid for a duration exceeding 5 years, it is recommended that the documentation and retention period requirement in the EMP be amended to provide for retention for a minimum of 5 years after the validity of the petroleum right ends.
2014_13.4.2	<p>The following records shall be maintained as part of the EMP and cross-referenced for auditing purposes:</p> <ul style="list-style-type: none"> <li>o Effluent discharge volumes, quality results, including non-compliance</li> <li>o Incident reports, including incident close out results</li> <li>o Water manifests and disposal certificates</li> <li>o Training records</li> <li>o Prosecutions / notices of non-compliance</li> <li>o Stakeholder inputs and the review thereof</li> <li>o Audit reports</li> <li>o Results of management reviews</li> <li>o Weekly, monthly and annual internal reports</li> <li>o Planned maintenance reports / logs</li> <li>o All previous versions of the EMP</li> <li>o All EIAs and application for environmental authorisations</li> <li>o Correspondence with permitting authorities such as PASA, DEA, SAMSA etc.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.
<b>13.5 EMP Review and Revision</b>			

Ref #	Condition	Compliance Rating	Comments/ Verification
2014_13.5.1	<p>The EMP shall be subject to review at least upon renewal of exploration right and updated if required. The review shall consider the following information:</p> <ul style="list-style-type: none"> <li>o Audit reports</li> <li>o Feedback from stakeholders</li> <li>o Technology changes</li> <li>o Performance assessment reports</li> <li>o Changes in regulations / legal compliance.</li> </ul>	N/A	No survey or logistics Contractors have been engaged, as no exploration activities (described in Section 2 of this audit report) have been conducted during the initial exploration period. Therefore, this condition is not applicable to this audit.



## 7.2 FINDINGS OF THE AUDIT

Compliance with the requirements was evaluated using the pre-determined scoring criteria (described in Section 6.2) and the results of the audit are described in detail in Section 7 of this report. A total of 16 conditions (commitments) were identified in the RoD and 135 commitments in the EMPr, that were evaluated. Since no exploration activities (as described in Section 2 of this audit report) have been conducted in the initial exploration period, none of the conditions were considered applicable to this audit. Therefore, no compliance score is provided for the RoD or the EMPr.

Based on the audit, the EMPr is not considered adequate and effective to manage and mitigate the exploration activities planned for the first renewal period (as described in Section 2 of this audit report). Various recommendations have been provided to ensure that the EMPr is updated and will be effective once operation commences (refer to Section 7.3).

## 7.3 CONTINUED ADEQUACY OF THE EMPr

As per the requirements of Regulation 34(3) of the EIA Regulations (GNR982), the environmental audit report contemplated in sub-regulation (1) must determine- the ability of the EMPr, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. The continued adequacy of the EMPr is discussed in this section of the report. The EMPr evaluated for continued adequacy is the same EMPr audited for the initial exploration period. No new EMPr has been submitted or approved for the renewal period application, and thus, the Jeffares and Green, 2014 EMPr is the EMPr that is evaluated against the exploration activities applied for in the first renewal period as described in Section 2 of this document.

### 7.3.1 EMPr EVALUATION

The evaluation of the adequacy of the EMPr considers the following:

1. Compliance with the EMPr content requirements defined in Appendix 4 of the EIA Regulations (GNR982);
2. Review of latest compliance audit findings;
3. Review of the authorised activities (and the activities to be authorised for the renewal period) to confirm that all relevant impacts have been identified and adequately assessed, and that relevant impact management outcomes and actions are adequate; and
4. Review of the EMPr to confirm adequate measures to ensure compliance with the provisions of the EMPr.

The remaining sub-sections present the evaluation and consequent recommendations.

#### 7.3.1.1 COMPLIANCE WITH NEMA EMPr REQUIREMENTS

Appendix 4 of the NEMA EIA Regulations provides for the requirements of an EMPr in compliance with Section 24N of the NEMA. Table 3 below provides a breakdown of the prescribed requirements, an evaluation of compliance with the current EMPr, and recommendations to address shortcomings. Note that this evaluation aims to check whether the prescript of the regulations are included in the current EMPr and does not aim to evaluate the completeness or adequacy thereof. The adequacy of the EMPr impact management outcomes and actions are evaluated in Section 7.3.1.3.

Table 3: NEMA EIA Regulations Appendix 4 Evaluation.

Requirement		Evaluation EMPr's	Recommendations
<b>NEMA Regulation 982 (2014) Appendix 4</b>			
<b>Appendix 4(1)(1)(a):</b>	<p>Details of –</p> <ul style="list-style-type: none"> <li>i. The EAP who prepared the EMPr; and</li> <li>ii. The expertise of that EAP to prepare an EMPr, including a curriculum vitae;</li> </ul>	<p>The EMPr provide details on the authors (Tamryn Heydenrych and Anèl Dannhauser) from Jeffares and Green. The details include a summary of the authors relevant experience and qualifications. Full curricula vitae are not included.</p>	<p>EMPr to be revised to reflect the details, including curricula vitae, of the EAP(s) responsible for amending and updating the EMPr.</p>
<b>Appendix 4(1)(1)(b):</b>	<p>A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;</p>	<p>Section 1 provides an Introduction to the project. Section 2 provides general context to the activities, receiving environment, impacts, and the legal frameworks.</p> <p>The EMPr provide a generic description of activities with no site specific definition (beyond the block boundaries). The EIA Regulations require a detailed description. The generic description provided is inadequate.</p>	<p>As and when the Holder defines the specific location, and extent of future exploration activities, further assessment of the impacts of these activities in the relevant site specific context must be undertaken and the EMPr consequently amended. Formal EMPr amendment processes as prescribed by Regulations 31 to 33 of the EIA Regulations or alternative as agreed to with the Competent Authority.</p>
<b>Appendix 4(1)(1)(c):</b>	<p>A map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers;</p>	<p>Section 1 of the EMPr includes a locality map of the entire exploration right blocks. No site specific detail is provided in respect of proposed exploration activities. Sections 2.2. and 2.3 of the EMPr identify and describe, at a high level, the environmental components and sensitivities likely to be affected by the activities.</p> <p>The sensitivities described and depicted spatially in the reports are dated (2014) and require update and amendment to reflect current sensitivities. Of specific note is the changes to the relevant Marine Protected Areas, Critical Biodiversity Areas, and ecologically important</p>	<p>As and when the Holder defines the specific location, and extent of future exploration activities, the locality, layout and sensitivity maps will require updating and the EMPr amended accordingly.</p> <p>For the purposes of the fixed non-invasive exploration activities defined in the submitted Exploration Work Programme (EWP), the generic EMPr are adequate.</p>



Requirement		Evaluation EMPr's	Recommendations
		and sensitive areas within the Blocks which would require specific description and impact assessment once future exploration activities are defined.	
<b>Appendix 4(1)(1)(d):</b>	<p>A description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including –</p> <ul style="list-style-type: none"> <li>i. Planning and design;</li> <li>ii. Pre-construction activities;</li> <li>iii. Construction activities;</li> <li>iv. Rehabilitation of the environment after construction and where applicable post closure; and</li> <li>v. Where relevant, operation activities;</li> </ul>	<p>Section 2.3 of the EMPr identifies and describes the impacts associated with the exploration activities.</p> <p>Section 3 of the EMPr lists the impact management rationale and objectives. The objectives and actions are listed for each project activity and include activities associated with the planning, operations, and closure.</p>	None.
<b>Appendix 4(1)(1)(f):</b>	<p>A description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraphs (d) will be achieved, and must, where applicable, include actions to –</p> <ul style="list-style-type: none"> <li>i. Avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;</li> <li>ii. Comply with any prescribed environmental management standards or practices;</li> </ul>	<p>Section 3 of the EMPr lists the impact management rationale and objectives. The impact management hierarchy has been applied in the identification of relevant impact management actions.</p>	None.

Requirement		Evaluation EMPr's	Recommendations
	<ul style="list-style-type: none"> <li>iii. Comply with any applicable provisions of the act regarding closure, where applicable; and</li> <li>iv. Comply with any provisions of the Act regarding financial provisions for rehabilitation, where applicable.</li> </ul>		
<b>Appendix 4(1)(1)(g):</b>	The method of monitoring the implementation of the impact management actions contemplated in paragraph (f);	<p>For each activity identified in Section 3 associated audit guidelines are provided which include requirements for documentation and monitoring.</p> <p>Activity 13.1 of Section 3 of the EMPr provides a breakdown of required monitoring.</p>	None.
<b>Appendix 4(1)(1)(h):</b>	The frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Activity 13.2 and 13.3 of Section 3 of the EMPr provides a breakdown of required reporting and auditing, including the frequency thereof.	None.
<b>Appendix 4(1)(1)(i):</b>	An indication of the persons who will be responsible for the implementation of the impact management actions.	For each impact management action listed in Section 3 a specific party is assigned responsibility.	None.
<b>Appendix 4(1)(1)(j):</b>	The time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	For each impact management action listed in Section 3 the relevant timing is provided.	None.
<b>Appendix 4(1)(1)(k):</b>	The mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	Activity 13.2 and 13.3 of Section 3 of the EMPr provides a breakdown of required reporting and auditing.	None.
<b>Appendix 4(1)(1)(l):</b>	A program for reporting on compliance, taking into account the requirements as prescribed by the Regulations;	Activity 13.2 and 13.3 of Section 3 of the EMPr provides a breakdown of required reporting and auditing.	None.

Requirement		Evaluation EMPr's	Recommendations
<b>Appendix 4(1)(1)(m):</b>	An environmental awareness plan describing the manner in which – <ul style="list-style-type: none"> <li>i. The applicant intends to inform his or her employees of any environmental risk which may result from their work; and</li> <li>ii. Risks must be dealt with in order to avoid pollution or the degradation of the environment; and</li> </ul>	Activity 5 of Section 3 of the EMPr provides the requirements for training and awareness.	None.
<b>Appendix 4(1)(1)(n):</b>	Any specific information that may be required by the competent authority.	Specific requirements are listed in the conditions of the RoD. Most conditions are already included in the EMPr, except for part of one condition.	It is recommended to include the following condition of the RoD (4.2) in the updated EMPr:  Seismic or bathymetry surveys must be planned such that they do not overlap with tuna pole peak season on the West of St Helena Bay.

#### 7.3.1.2 AUDIT FINDINGS AND RECOMMENDATIONS

The audit findings are presented in Section 7.2. It is recommended that the documentation and retention period requirement in the EMPr be amended to provide for retention for a minimum of 5 years after the validity of the petroleum right ends. Currently it indicates a minimum of 5 years only. The EMPr will need to be amended accordingly.

#### 7.3.1.3 ADEQUACY OF IMPACT MANAGEMENT

This section aims to present the findings of an evaluation of the current EMPr and the ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity. The approach taken included:

- Consideration of the impacts identified and presented in the EMPr, and to determine whether any additional impacts and associated management outcomes and actions should be included.
- Consideration of the current impact management actions, their adequacy and potential changes to align with good international industry practice (GIIP).

The findings of this evaluation are presented in Table 4.

Table 4: Recommended amendments and additions to the impact management outcomes and actions.

Relevant EMPr Section	Comments	Nature of change	Recommendations
<b>2.1.2</b>	The stakeholder communications requirements in the EMPr, do not include the need to develop and maintain an effective grievance mechanism.	Amend	2.1.2. Compile a Communications Plan that outlines the communications procedures for all stakeholder engagement, including a Stakeholder Engagement Register, responsibilities for review of stakeholder comments, feedback to the stakeholder and close out actions and requirements. The plan must include an effective Grievance Mechanism aligned with the requirements of the IFC, considering mechanisms for grievance input, assessment, action, monitoring, and closure.
<b>4.1</b>	Additional engagement requirements for the fishing industry.	Additional	<ul style="list-style-type: none"> <li>• An experienced Fisheries Liaison Officer (FLO) should be placed on board the survey or escort vessel to facilitate communications with fishing vessels in the vicinity of the survey area.</li> <li>• Ensure project vessels fly standard flags and lights to indicate that they are engaged in towing surveys and are restricted in manoeuvrability.</li> <li>• Notify any fishing vessels at a radar range of 24 nm from the survey vessel via radio regarding the safety requirements around the survey vessel.</li> </ul>
<b>4.1.5</b>	The current pre-survey notification is 14 days prior. This should be extended to at least 3 weeks, and additional stakeholders included.	Amend	<p>4.1.5 Fishing stakeholders and other marine users who operate in the area shall be notified in writing of survey activities and the location and presence of exclusion and safety areas at least 3 weeks prior to the scheduled commencement of survey activities. Should survey activities extent beyond the original time frame stakeholders should be notified within 24 hours. Stakeholders include:</p> <ul style="list-style-type: none"> <li>• Overlapping and neighbouring users with delineated boundaries in the marine petroleum and mineral prospecting and mining industries</li> <li>• South African and foreign fishing vessels, who can be informed through the recognized fishing associations and Department of Forestry and Fisheries and the Environment (DFFE) examples include the South</li> </ul>

Relevant EMPr Section	Comments	Nature of change	Recommendations
			<p>African Deep Sea Trawling Association, Inshore Pelagic, Rock Lobster and Tuna Associations, fishing companies and fishing agents</p> <ul style="list-style-type: none"> <li>Government Departments with jurisdiction over marine activities, particularly DFFE and PASA, SAN Hydrographer, South African Maritime Safety Authority (SAMSA) and local Port Captains.</li> <li>DFFE Vessel Monitoring, Control and Surveillance Unit in Cape Town.</li> </ul>
<b>5.1.3</b>		Amend	5.1.3. All personnel shall receive regular training on the handling and management of waste, and incident response and reporting procedures.
<b>6.1.4</b>	The existing EMPr requires that helicopter flights must follow set flight paths, the restrictions or guidance on how to define these flight paths is not provided. Depending on the specific location of future surveys, it may be necessary to adjust flight paths to avoid sensitive areas.	Amend	<p>6.1.4. Helicopter flight logs will be kept to demonstrate compliance with set flight paths. Pre-planned flight paths must avoid sensitive areas and colonies.</p> <p>Helicopter flight logs will be kept to demonstrate compliance with set flight paths. Airborne gravity and magnetic flight logs shall also be kept to ensure compliance with the pre-determined survey lines. Pre-planned flight paths must avoid sensitive areas and colonies.</p>
<b>6.2</b>	Disturbance and behavioural changes in pelagic fauna due to vessel lighting on marine fauna was not specifically identified.	Additional	The lighting on the survey and support vessels should be reduced to a minimum compatible with safe operations whenever and wherever possible. Light sources should, if possible and consistent with safe working practices, be positioned in places where emissions to the surrounding environment can be minimised.
	Impacts of marine biodiversity through the introduction of non-native species in ballast water and on ship hulls was not specifically identified in the EMPr	Additional	<ul style="list-style-type: none"> <li>Avoid the unnecessary discharge of ballast water.</li> <li>Use filtration procedures during loading in order to avoid the uptake of potentially harmful aquatic organisms, pathogens and sediment that may contain such organisms.</li> <li>Ensure that routine cleaning of ballast tanks to remove sediments is carried out, where practicable, in mid-ocean or under controlled arrangements in port or dry dock, in accordance with the provisions of the ship's Ballast Water Management Plan.</li> </ul>

Relevant EMPr Section	Comments	Nature of change	Recommendations
			<ul style="list-style-type: none"> <li>• Ensure all infrastructure (e.g. arrays, streamers, tail buoys etc.) that has been used in other regions is thoroughly cleaned prior to deployment.</li> <li>• Comply with the requirements of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention).</li> </ul>
6	Pollution Prevention	Amend	Ensure that solid streamers rather than fluid-filled streamers are used. Alternatively, low toxicity fluid-fill streamers could be used.
6.3.2	Impacts of the unplanned loss of equipment to sea from the survey vessel on commercial fishing. The current controls do not include notification of such to the SAN Hydrographic Office (SANHO).	Amend 6.3.2	6.3.2. The incident management procedure should be followed in the event of a lost object or other materials (see Activity 11.2). Notify SANHO of any hazards left on the seabed or floating in the water column, and request that they send out a Notice to Mariners with this information.
6.5.1		Additional	<p>6.5.1 The Regulations for the environmental management of offshore ship-to-ship transfer in terms of section 83(1) of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008), must be complied with, including but not limited to the requirement to:</p> <ul style="list-style-type: none"> <li>• Prepare, and comply with an authorised Ship-to-ship (STS) environmental management plan that has been— <ul style="list-style-type: none"> <li>○ developed by an independent specialist in accordance with the content requirements of regulation 8(2); and</li> <li>○ approved by the Minister.</li> </ul> </li> </ul>
7.	Whilst the general impacts on marine ecology from survey sources are identified, no acoustic sound transmission loss modelling (STLM) was done. This is accepted standard practice for current EIAs to be able to inform the impact	Additional	Once specific target areas for future seismic surveys are defined the following must be undertaken prior commencement:

Relevant EMPr Section	Comments	Nature of change	Recommendations
	<p>assessment. Without this it is not possible to define the impact zones applicable to the survey and thereby assess the impact.</p> <p>Whilst the generic impacts of surveys on marine ecology are listed, they are not substantiated on a site specific level. This necessitates an update to the impact assessment, informed by site specific marine acoustic modelling once survey details are available.</p>		<ul style="list-style-type: none"> <li>• Undertake survey (technical specifications) and location specific sound transmission loss modelling (acoustic modelling) in order to define the magnitude and extent of potential underwater noise.</li> <li>• A cultural heritage impact assessment should be undertaken by a suitable qualified specialist with specific focus on the intangible heritage.</li> <li>• Revise the impact assessment on the basis of the outcomes of the acoustic modelling (with inputs from relevant specialists including but not limited to marine ecology, and fisheries). Impact on Small Scale Fisheries must be included.</li> <li>• Supplement the impact management actions and impacts contained in the EMPr to account for the site and survey specific controls.</li> <li>• Obtain relevant approvals from the competent environmental authority in accordance with relevant legal requirements (e.g. amendments to EA and/or EMPr in accordance with NEMA requirements).</li> </ul>
	<p>The current marine mammal monitoring relies on daylight MMO observations only. It is current best practice to supplement the MMO's with Passive Acoustic Monitoring (PAM), especially during nighttime and low visibility conditions.</p>	Additional	<ul style="list-style-type: none"> <li>• All seismic vessels must be fitted with Passive Acoustic Monitoring (PAM) technology, which detects animals through their vocalisations.</li> <li>• The PAM technology must have enough bandwidth to be sensitive to the whole frequency range of sensitive marine life expected in the area.</li> <li>• The use of PAM 24-h a day must be implemented to detect deep diving species.</li> <li>• Ensure the PAM streamer is fitted with at least four hydrophones, of which two are HF and two LF, to allow directional detection of cetaceans.</li> <li>• Ensure the PAM hydrophone streamer is towed in such a way that the interference of vessel noise is minimised.</li> <li>• Ensure spare PAM hydrophone streamers (e.g. 4 heavy tow cables and 6 hydrophone cables) are readily available in the event that PAM breaks down, in order to ensure timeous redeployment.</li> </ul>



Relevant EMPr Section	Comments	Nature of change	Recommendations
			<ul style="list-style-type: none"> <li>An independent Passive Acoustic Monitoring (PAM) Operator is required on board at all times. As a minimum, at least one PAM must be on watch at all times while the acoustic source is active. The duties of the PAM operator would be to: <ul style="list-style-type: none"> <li>Provide effective regular briefings to crew members, and establish clear lines of communication and procedures for onboard operations;</li> <li>Ensure that the hydrophone cable is optimally placed, deployed and tested for acoustic detections of marine mammals;</li> <li>Confirm that there is no marine mammal activity within 500 m of the seismic source array prior to commencing with the "soft-start" procedures;</li> <li>Record species identification, position (latitude/longitude), distance and bearing from the vessel and acoustic source, where possible;</li> <li>Record general environmental conditions;</li> <li>Record seismic source activities, including sound levels, "soft-start" procedures and pre-start regimes;</li> <li>Request the delay of start-up and temporary termination of the seismic survey, as appropriate.</li> </ul> </li> </ul>
		Additional	Define and enforce the use of the lowest practicable seismic source volume for production. Design arrays to maximise downward propagation, minimise horizontal propagation and minimise high frequencies in seismic source pulses (have this verified by independent evaluators).
	Impacts on turtles and cetaceans due to ship strikes, collision and entanglement with towed equipment was not specifically identified.	Additional	<ul style="list-style-type: none"> <li>The vessel operators should keep a constant watch for marine mammals and turtles in the path of the vessel.</li> <li>Keep watch for marine mammals behind the vessel when tension is lost on the towed equipment and either retrieve or regain tension on towed gear as rapidly as possible.</li> </ul>

Relevant EMPr Section	Comments	Nature of change	Recommendations
			<ul style="list-style-type: none"> <li>• Ensure that 'turtle-friendly' tail buoys are used by the survey contractor or that existing tail buoys are fitted with either exclusion or deflector 'turtle guards'.</li> <li>• Ensure vessel transit speed between the survey area and port is a maximum of 12 knots (22 km/hr), except in MPAs where it is reduced further to 10 knots (18 km/hr).</li> <li>• Should a cetacean become entangled in towed gear, contact the South African Whale Disentanglement Network (SAWDN) formed under the auspices of DEA to provide verbal specialist assistance in releasing entangled animals where necessary.</li> <li>• Report any collisions with large whales to the International Whaling Commission (IWC) database, which has been shown to be a valuable tool for identifying the species most affected, vessels involved in collisions, and correlations between vessel speed and collision risk</li> </ul>
7.2.1		Amend	<p>7.2.1. Seismic surveys should be planned to avoid cetacean migration periods or winter breeding concentrations (1<sup>st</sup> of June to 30<sup>th</sup> of November) and ensure that migration paths are not blocked. However, as several of the large whale species are also abundant on the West Coast between September and February (inclusive), the best time of year to conduct seismic operations is late summer and early winter (end February – mid June), across the entire block. However, any surveys planned between December and end February should only be scheduled to operate in the northern section of the block, i.e. avoiding the southern portion of the block off Cape Columbine.</p> <p>Should a survey be required to extend into the cetacean migration and breeding period, a formal request / motivation must be submitted to PASA for consideration.</p> <p>In addition, seismic survey and multi-beam bathymetry survey operations must be planned accordingly to avoid overlap with tuna pole peak season on the West of St Helena Bay.</p>

Relevant EMPr Section	Comments	Nature of change	Recommendations
7.2.5	The 500 m mitigation zone should be defined as being from the seismic source and not the vessel.	Amend	7.2.5. "Soft-start" procedures shall only commence once it has been confirmed (visually during the day and using PAM technology and night-vision/infra-red binoculars at night) that there is no seabird (diving), seal, turtle or marine mammal activity within 500 m of the seismic source. For cetaceans, the period of confirmation shall be for at least 30 minutes prior to the commencement of the "soft-start" procedures. "Soft starts" should be delayed until such time as this area is clear of diving seabirds, turtles and seals and in the case of cetaceans should not begin until 30 minutes after the animals depart the 500m exclusion zone or 30 minutes after they are last seen.
7.2.8	The 500 m mitigation zone should be defined as being from the seismic source and not the vessel.	Amend	The survey shall be terminated if any marine mammals show affected behaviour within 500 m of the seismic source or equipment until the mammal has vacated the area.
13.2	As environmental monitoring information gathered during surveys is of high scientific value, such information should be made available (inter alia to SANBI, SAEON, and the DFFE) to contribute to the knowledge base of deep-water environments	Additional	The environmental monitoring data collected (including the MMO and PAM) must be made available to the DFFE, SANBI and SAEON for their use in future scientific research.
	The potential impact on tangible and intangible cultural heritage has not been assessed. Whilst impacts on tangible features is unlikely from normal seismic operations they may be impacted in the event of unplanned events (e.g. large spills). The nature and extent of the intangible attachments and cultural significance of the sea to the coastal communities has not been assessed. Intangible heritage is	Additional	Once specific target areas for future seismic surveys are defined, a cultural heritage impact assessment should be undertaken with specific focus on the intangible heritage and that relevant management and mitigation measures are incorporated into the EMPr.

Relevant EMPr Section	Comments	Nature of change	Recommendations
	linked to the health of the marine ecosystem as a whole as well as the livelihoods that are dependent on the ocean in the area.		

#### 7.3.1.4 ADEQUACY OF COMPLIANCE MECHANISMS

It is necessary to evaluate the ability of the EMPr to ensure compliance with the provisions of the EMPr. The EMPr provide clear mechanisms for reporting and auditing, which are aligned with current practice. The EMPr do not specifically provide for independent auditing as is required by Regulation 34 of the EIA Regulations. It is recommended that the EMPr be amended to incorporate this requirement (Activity 1 of Section 3). The following requirements should be added to the EMPr:

- The Holder must appoint an independent Environmental Control Officer (ECO) prior to commencement of any offshore exploration activities.
- The ECO should have appropriate training and/or experience in the implementation of environmental management specifications. The ECO must preferably have a tertiary qualification in an Environmental Management or appropriate field. The ECO's key role is auditing the implementation of the EMPr.
- The ECO will be responsible for the auditing function as well as the clarification of environmental conditions contained in this EMPr to anyone working on the site. The ECO does not necessarily have to be onboard the survey vessel, provided that relevant information is provided by the MMO / PAM.
- The ECO roles include:
  - Recommendations for review and update of the EMPr;
  - Liaison between the Applicant, Contractors, authorities and other lead stakeholders on high importance environmental concerns;
  - Ensures that correct shape files have been uploaded into the vessel navigation systems to support effective implementation of spatial controls;
  - Review the site induction training to ensure environmental issues receive adequate attention and important site-specific issues are included
  - Conduct environmental audits of the site/contractors including relevant documentation on a monthly basis;
  - Validating the regular site inspection reports, which are to be prepared by the relevant contractor's EO or Lead MMO/PAM (who will be tasked with the onsite responsibilities of the ECO);
  - Maintain a record of all non-conformances and incidents to ensure that measures are put in place to remedy such;
  - Maintain a public consultation register in which all complaints are recorded, as well as action taken; and
  - Verification that all environmental monitoring programmes (sampling, measuring, recording etc. when specified) are carried out according to protocols and schedules.

#### 7.3.2 EMPr SHORTCOMINGS AND RECOMMENDATIONS

It is the auditors opinion that the 2014 EMPr offer generic, sometimes outdated impact management actions and fail to address specific activity and site impacts adequately. Further assessment is needed when specific location details and technical specifications are available, likely necessitating amendments and supplements to the current EMPr. This requirements has been incorporated into the recommended amendments to the EMPr presented in Section 7.3.1.3 above.

Based on the time that has lapsed between the latest EMPr update in 2014 the following is recommended:

- The social landscape may have changed significantly since the latest 2014 EMPr update. It is recommended that additional stakeholder engagement be undertaken once the project plans are

finalized in order to determine if any updates to the EMPr are required and to determine if the list of stakeholders identified in the EMPr is still adequate. If significant new issues are raised during the engagement process, then the EMPr may need to be amended to address these issues.

- At the time the original EIA was conducted no climate change assessment was required to be undertaken. It is recommended that a climate change specialist be engaged to determine if any updates are required to the EMPr in order to effectively deal with climate change adaptation and vulnerability.

## 8 CONCLUSION

EIMS was appointed to undertake the Environmental Audit to assess compliance during the initial exploration period, with the conditions of the EMPr and associated RoD. None of the conditions in the RoD or the EMPr were considered applicable to the initial exploration period as none of the exploration activities (Section 2.1) have been conducted, therefore, no compliance score is provided for the RoD conditions or the EMPr measures. Based on the audit, the approved EMPr (Jeffares and Green, 2014), is not considered adequate and effective to manage and mitigate the exploration activities approved for the initial exploration period or the planned exploration activities in the work programme submitted (not yet approved), for the first renewal period. Various recommendations have been provided to ensure that the EMPr is updated and will be effective once operation commences.

It is the auditors opinion that the approved EMPr offers generic, sometimes outdated impact management actions and fails to address specific activity and site impacts adequately. The EMPr should be updated with the recommended measures described in this report. In addition, further impact assessment is needed when specific location details and technical specifications for exploration activities are available, likely necessitating further amendments and supplements before exploration activities can commence.

PetroSA is reminded of the requirements of Regulations 34 of the EIA Regulations, 2014 with regards to findings of the adequacy of the EMPr and access to the audit report. Regulation 34 states:

- 4) *“Where the findings of the environmental audit report contemplated in sub-regulation (1) indicate-*
- a) insufficient mitigation of environmental impacts associated with the undertaking of the activity; or*
  - b) insufficient levels of compliance with the environmental authorisation or EMPr and, where applicable the closure plan;*
- the holder must, when submitting the environmental audit report to the competent authority in terms of sub-regulation (1), submit recommendations to amend the EMPr or closure plan in order to rectify the shortcomings identified in the environmental audit report.*
- 5) *When submitting recommendations in terms of sub-regulation (4), such recommendations must have been subjected to a public participation process, which process has been agreed to by the competent authority and was appropriate to bring the proposed amendment of the EMPr and, where applicable the closure plan, to the attention of potential and registered interested and affected parties, including organs of state which have jurisdiction in respect of any aspect of the relevant activity and the competent authority, for approval by the competent authority.*
- 6) *Within 7 days of the date of submission of an environmental audit report to the competent authority, the holder of an environmental authorisation must notify all potential and registered interested and affected parties of the submission of that report, and make such report immediately available-*
- a) to anyone on request; and*
  - b) on a publicly accessible website, where the holder has such a website.”*

## 9 ASSUMPTIONS, LIMITATIONS AND GAPS IN KNOWLEDGE

The following assumptions, limitations and gaps in knowledge apply to the audit:

- The information contained in this report was sourced from information and data supplied by third parties that is assumed to be complete, valid and true.
- This report is based on information available at the time of the assessment. The information, data, observations and evidence on what this report is based is beyond the control of EIMS and may change without notice. EIMS will not be liable for any loss or damage which may arise directly or indirectly because of such changes.
- Where reference is made to legislation or other statutory provisions in this report the original legislation or other statutory provisions will always take precedence, and the reader is directed to revert to the original legislation or statutes.
- The audit was limited to the 2014 EMPr. This audit does not consider any other exploration activities undertaken in past renewal periods.
- A comprehensive legal compliance audit is beyond the scope of this audit.