EIMS | ENVIRONMENTAL IMPACT MANAGEMENT SERVICES

T 011 789 7170 E info@eims.co.za W www.eims.co.za

ENVIRONMENTAL AUDIT REPORT

PETROSA OFFSHORE PRODUCTION RIGHT: BLOCK 9 - SCG PRODUCTION AREA

DOCUMENT DETAILS

EIMS REFERENCE: 1730-4

DOCUMENT TITLE: Environmental Audit Report for PetroSA offshore Production Right Block 9: SCG Production Area

DOCUMENT CONTROL

	NAME	SIGNATURE	DATE
COMPILED:	John von Mayer		2026/08/04
CHECKED:	Liam Whitlow		2026/08/04
AUTHORIZED:	Liam Whitlow		2026/08/04

REVISION AND AMENDMENTS

REVISION DATE:	REV #	DESCRIPTION
2026/08/04	ORIGINAL DOCUMENT	Audit Report

Table of Contents

List of Figures

List of Tables

List of Abbreviations

Abbreviation	Item
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EMC	Environmental Monitoring Committee
EIA	Environmental Impact Assessment
EIMS	Environmental Impact Management Services (Pty) Ltd
EMPr	Environmental Management Programme Report
PWP	Production Works Programme
HSE	Health, Safety, and Environment
I&AP	Interested and Affected Party
IMO	International Maritime Organization
MMO	Marine Mammal Observer
MPRDA	Mineral and Petroleum Resources Development Act, Act 28 of 2002
NADF	Non-Aqueous Drilling Fluid
NEMA	National Environmental Management Act, Act 107 of 1998
OSCP	Oil Spill Contingency Plan
PASA	Petroleum Agency of South Africa
PetroSA	Petroleum Oil and Gas Corporation of South Africa (Pty) Ltd
ROV	Remote Operated Vehicle
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SANHO	South African Hydrographic Office
SAMSA	South African Maritime Safety Authority

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 the Record of Decision (RoD[1]) and Environmental Management Programme (EMPr) for the SCG Production Operations in Block 9 off the South Coast of South Africa.

PetroSA's Block 9 licence area covers a surface area of 22,756km^2 and presently includes four production lease areas: FA-EM; South Coast Gas (SCG), FO-EM (Sable) and Oribi/Oryx. Each of these areas has its own EA (or RoD) and associated EMPr. **This audit report is relevant to the SCG Production Area and associated RoD and EMPr (DEA ref 12/12/20/719).**

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 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 requires that compliance with the conditions of the environmental authorisation, and the EMPr is audited and an environmental audit report be submitted to the relevant competent authority.

The period of assessment for this audit is 2015 - 2025. The scope of the audit is to assess compliance with the requirements of the RoD and EMPr for the SCG Production area currently held by PetroSA, and to confirm the continued adequacy of the EMPr. 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 approved 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 applicable exploration activities.

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 118 conditions (commitments) were identified in the EMPr[2]. 92 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 12 were regarded as being fully compliant, 3 non-compliant and the remaining 11 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **46,15%** was obtained for the EMPr and a **weighted compliance** score of **67,31%.**

A total of 32 conditions (commitments) were identified in the RoD[3]. 23 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 1 was regarded as being fully compliant, 5 non-compliant and the remaining 3 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **11,11%** was obtained for the RoD and a **weighted compliance** score of **27,78%.**

The Auditor also undertook an evaluation of the adequacy of the EMPr to determine the ability of the EMPr's, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. It is the auditors opinion that the 2010 EMPr does, in large part, sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. However, certain shortcomings have been identified in the preceding sections of this audit report which should be amended. It is the auditors suggestion that the holder should consider the findings of this audit and prepare recommendations for amendment to the EMPr, as provided for in Regulation 34 (4) of the EIA Regulations. Such recommendations must be subjected to a public participation process together with the amended EMPr.

[1] Please note that the EIA and subsequent approval of the EMPR predates the requirement for an Environmental Authorization under the National Environmental Management Act.
[2] The applicable EMPr is dated January 2007 and is compiled by CCA Environmental
[3] The applicable DEA RoD is dated 13 December 2006 (12/12/20/719)

1 INTRODUCTION

The Petroleum Oil and Gas Corporation of South Africa (Pty) Ltd (PetroSA) is the holder of a Production Right for petroleum issued in accordance with the Minerals and Petroleum Resources Development Act (Act 28 of 2002-MPRDA). PetroSA is required to implement the production activities in accordance with the requirements of the approved Record of Decision RoD and associated Environmental Management Programme (EMPr). Regulation 34 of the National Environmental Management Act (Act 107 of 1998-NEMA), Environmental Impact Assessment Regulations (GNR982) requires that the holder of an approved RoD and EMPr must, for the period during which the RoD and EMPr remain valid, ensure that the compliance with the conditions of the EMPr and RoD are audited.

This report aims to comply with these obligations to audit compliance with the RoD and associated EMPr and submit the findings of the audit to the relevant competent authority, in this case the Petroleum Resources Agency of South Africa (PASA).

2 ACTIVITY DESCRIPTION

PetroSA's Block 9 licence area covers a surface area of 22,756km^2 and presently includes four production lease areas: FA-EM; South Coast Gas (SCG), FO-EM and Oribi/Oryx. Each of these areas has its own RoD and associated EMPr. **This audit report is relevant to the SCG Production Area and associated RoD and EMPr.**

The South Coast Gas (SCG) operation comprises subsea gas production and associated control facilities and infrastructure, constructed and installed in 2007. The SCG production area is in Petroleum Licence Block 9, located offshore the South coast of South Africa within what is known as the Bredasdorp Basin. South coast gas wells comprise of six wells. Wells E-AA3, E-BA4, E-BB3, E-CA2a and E-CE5 were online until March December 2020. Well E-BT1 was shut-in (i.e. in suspension but not decommissioned) in June 2016. All five SCG wells are currently shut-in.

The SCG wells are situated about 100 km from the FA Platform. The SCG well are control directly from the FA Platform via an electro-hydraulic umbilical to the subsea wells. The wells are approximately 40 km in a roughly East-West line located ~90 km south-west of the FA platform and ~120 km southwest of Mossel Bay. A single 'northern' well is situated ~30 km to the north of this line (Figure 1).

The wells are connected by subsea production pipelines and gas is drawn from these to supply the FA Platform, where the gas is processed before export via pipelines to land (to sustain the current gas supply to the Gas to Liquids (GTL) plant in Mossel Bay). In September 2008 the Sable well, E- CE5 was tied into the SCG line and produced via the FA Platform. Gas from the single well (E-CE5) was routed to the F-A platform via a dedicated 23km long pipeline. A locality map is provided in Figure 2 showing the location and extent of the production right and the SCG Production area.

An Environmental Authorization (EA) was issued on 13 December 2006 by the Department of Environment and Tourism (DEA, now DFFE) for the SCG production area (12/12/20/719). The current approved EMPr prepared by CCA Environmental (Pty) Ltd in January 2007 caters for the impact management outcomes and actions applicable to offshore production activities for the SCG production area. An updated EMPR was prepared by Lwandle Technologies in May 2011 however there is no record of approval of this EMPr by PASA and the 2007 EMPr prepared by CCA is therefore still considered the most recent approved EMPr.

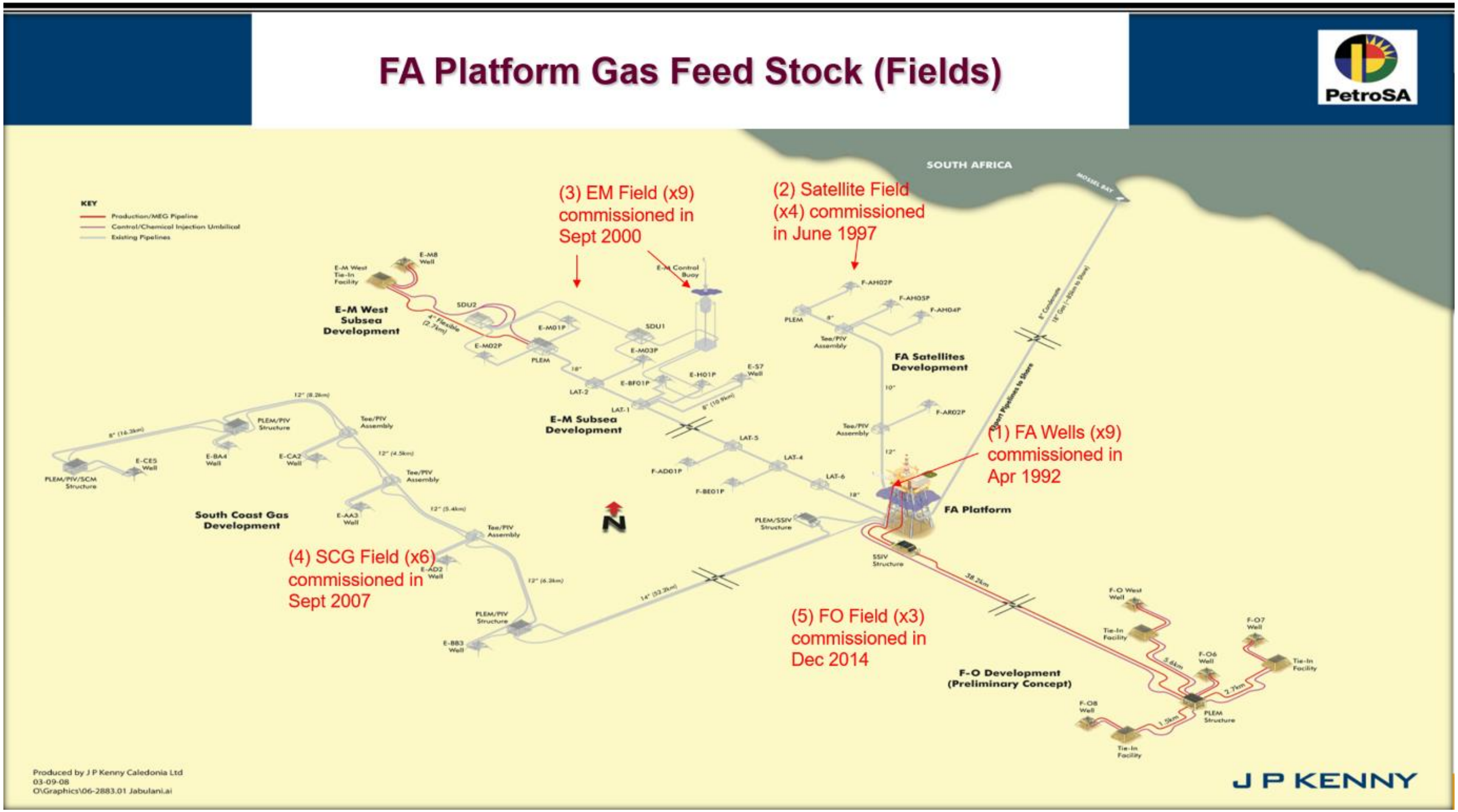

Figure 1: PetroSA Wells and Subsea Network

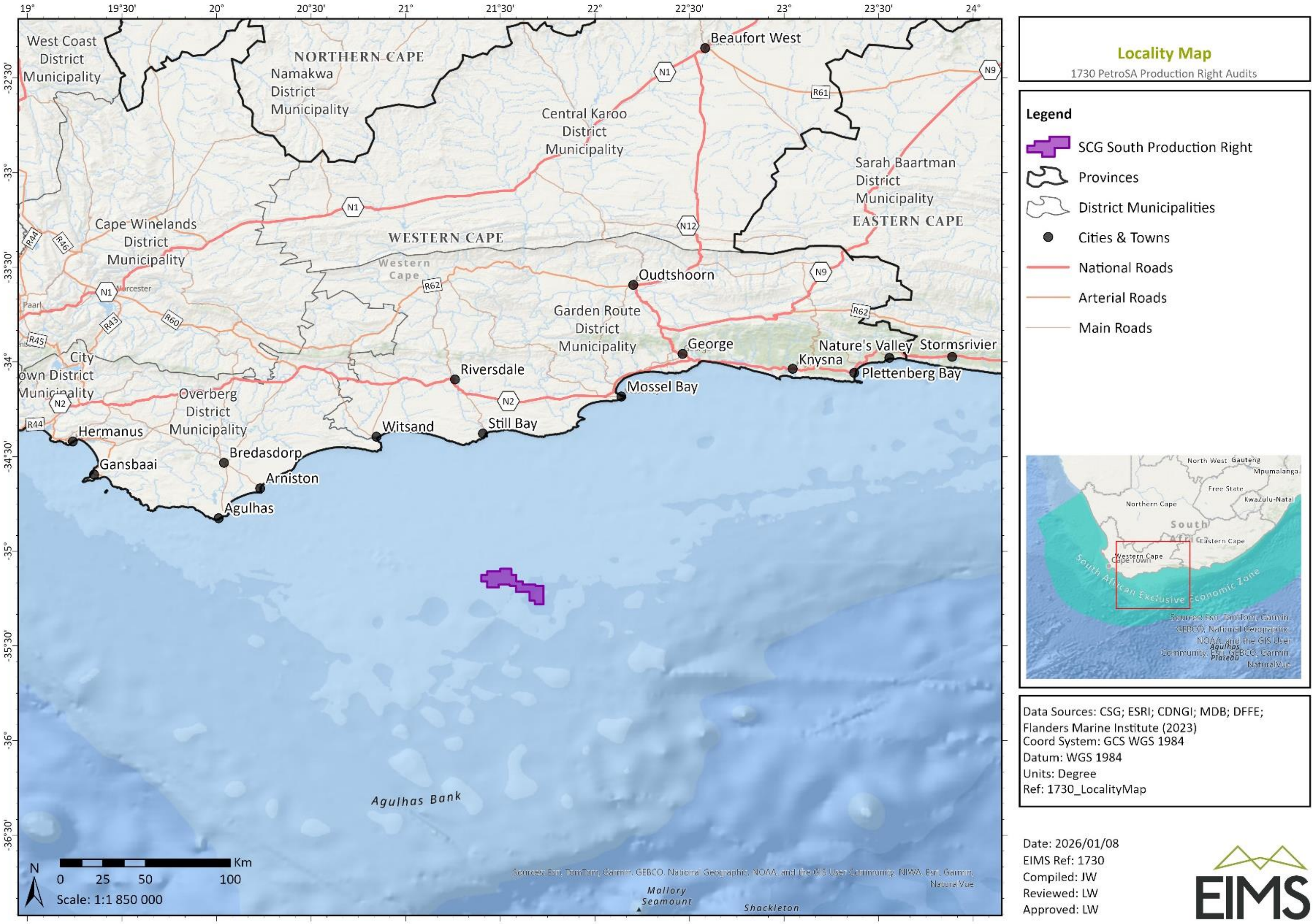

Figure 2: Locality map.

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 John von Mayer from EIMS.

4.1 EXPERTISE OF THE AUDITOR

Mr John von Mayer is a senior consultant at EIMS and has been involved in numerous significant projects the past 17 years. He has experience in Project Management, small to large scale Environmental Impact Assessments, Environmental Auditing, Water Use Licensing, and Public Participation. He is a Registered Professional Natural Scientist (400336/11) with the South African Council Natural and Scientific Professions (SACNASP) as well as a registered EAPASA Environmental Practitioner (2019/1247).

4.2 DECLARATION OF INDEPENDENCE

*I, **John von Mayer**, 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.*

Signature of Auditor

5 SCOPE, PURPOSE AND OBJECTIVE OF THE AUDIT

The scope of the audit is to assess compliance with the conditions of the RoD and approved EMPr and to confirm the continued adequacy of the EMPr. The purpose of the audit is to ensure compliance with the requirement of the RoD and EMPr 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 RoD & 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 authorised activities.

The scope of the audit is defined by the activities that were undertaken for each area since the last NEMA Regulation 34 Audit or MPRDA Performance Assessment. The period of assessment for the SCG audit is 2015 – 2025.

The scope of this audit is defined as follows:

- Compliance with the requirements of the 2006 RoD in so far as it relates to ongoing production activities during the audit period (2015 – 2025); and
- Compliance with the requirements of the approved EMPr (CCA, 2007) in so far as it relates to ongoing production activities during the audit period (2015 – 2025).

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 RoD and EMPr respectively. 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 RoD and EMPr. Findings from the audit that did not relate to an RoD or EMPr condition did not contribute to the audit score. However, where deficiencies have been identified that do not necessarily correspond to specific EMPr 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 organisation 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

Compliance scoring is based on a pre-determined system, with each EMPr condition weighted equally. The audit used the following compliance scoring criteria:

- Fully Compliant: Indicating that the condition was fully complied with and provided with a compliance rate 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 rating score of 2.
- Non-Compliant: Indicting that the condition has not been complied with and provided with a compliance rating 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.
- Not Verified: Where the auditor could not confirm compliance due to insufficient, incomplete or unavailable evidence, the term “Not Verified” has been used as an evidentiary status. This does not constitute a formal compliance rating and does not replace the rating categories defined above. Where the absence of evidence relates to a condition that requires active implementation, record keeping, labelling, monitoring or reporting, the auditor may, depending on the nature of the condition and the available evidence, rate the condition as Partially Compliant or Non-Compliant. “Not Verified” is therefore used only to explain the evidentiary basis for the finding and should not be interpreted as confirmation of compliance.

It is noted that the overall compliance is presented in both a straight compliance (i.e. strict compliant/ non-compliant) as well as the weighted compliance (i.e. where partial compliance is represented).

6.3 CONSULTATION PROCESS UNDERTAKEN

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

This section of the report details the audit results. It comprises a summary of compliance with RoD and EMPr requirements, the compliance evaluation results, a summary of findings, and an analysis of the ongoing adequacy of the EMPr. The level of compliance for each commitment was calculated according to the methodology described in section 6.2.

A total of 118 conditions (commitments) were identified in the EMPr. 92 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 12 were regarded as being fully compliant, 3 non-compliant and the remaining 11 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **46,15%** was obtained for the EMPr and a **weighted compliance** score of **67,31%.**

A total of 32 conditions (commitments) were identified in the RoD. 23 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 1 was regarded as being fully compliant, 5 non-compliant and the remaining 3 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **11,11%** was obtained for the RoD and a **weighted compliance** score of **27,78%.**

7.1 COMPLIANCE EVALUATION

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

Table 1: Compliance evaluation of the relevant EMPr conditions.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
PART 2A: DEVELOPMENT WELL DRILLING					
1: PRE-ESTABLISHMENT PHASE					
EMPr	2007_1.1	Communicate with fishing operators and vessels regarding exclusion areas around the rig(s) and timing of the operation in order to minimise disruption to the operation and other activities in the area.	N/A	N/A	This is a pre-establishment phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.2	Ensure that financial provision is in place to execute the requirements of this EMP.	N/A	N/A	This is a pre-establishment phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.3	Are the following emergency plans, equipment and personnel in place to deal with all emergencies: • Company Emergency Response Plan, including MEDIVAC plan; • Company Oil Spill Contingency Plan; • Rig Contractor Emergency Response Plan; • Support Vessel Contractor Emergency Response Plan; • Helicopter Operator Emergency Response Plan; • South African Search and Rescue (SASAR) Manual; • The drilling unit's own Oil Pollution Emergency Plan approved by the South African Maritime Safety Authority (SAMSA); • Pollution Safety Certificate(s) for the drilling rig(s), issued by SAMSA; and • Adequate protection and indemnity insurance cover for oil pollution incidents.	N/A	N/A	This is a pre-establishment phase requirement. No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		Note that in case of a major oil spill, emergency responses and/or Oil Pollution Contingency Plan(s) refer to the coastal oil spill contingency plan(s) of DEAT (MCM).			
EMPr	2007_1.4	Ensure that the following documents have been approved: • Scoping Report and Environmental Impact Report for SCG development Project; • EMP report for the Production Rights area; and	N/A	N/A	An RoD was issued by DEA in 2006. An updated EMPr was prepared and submitted in May 2011 for approval by PASA however it does not appear that any approvals were received for this EMPr and that the 2007 EMPr is still considered the most recent approved EMPr. That said this is an establishment phase requirement and no well drilling or construction activities took place during the audit period.
EMPr	2007_1.4	Ensure that any alteration or modifications are submitted to PASA and DEAT for approval.	N/A	N/A	This is a pre-establishment phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.5	Acquire high-resolution seismic data to detect shallow gas pockets.	N/A	N/A	This conditions falls outside the audit period. No establishment phase activities are applicable to the current audit period.
EMPr	2007_1.6	Establish an Environmental Monitoring Committee (EMC). The EMC shall be comprised of government authorities (local, provincial and national), Non-governmental Organisations, Community-based Organisations, Civil Society and Private Sector. The EMC's role shall be: • Regular and participative monitoring and review of PetroSA's adherence to the ROD, monitoring reports / data during the operation and decommissioning phases, and EIR mitigation measures; • Informing DEAT and other relevant authorities of non-compliance with the ROD; • Promoting participation of key stakeholders; • Providing a forum for discussing issues related to the South Coast Gas project and monitoring / review; • Supervision and management of Environmental Control Officer (ECO); and Providing a forum for establishing a fund, as a trade-off, together with the fishing industry.	N/A	N/A	This related to pre-establishment only. No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_1.7	Report EMC findings to DEAT	N/A	N/A	This related to pre-establishment only. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.8	Appoint an ECO to ensure compliance with ROD conditions, Environmental Impact Report (PSA04SCG/FEIR, dated Aug 06) recommendations and Environmental Management Programme.	N/A	N/A	It is expected that this condition relates to the pre-establishment phase only. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.9	Notify DEAT of the commencement of well-drilling / construction activities.	N/A	N/A	This related to pre-establishment only. No well drilling or construction activities took place during the audit period.
2. ESTABLISHMENT PHASE					
EMPr	2007_2.1	Ensure that a copy of the approved EMP report is on board the drilling unit(s) during the operation. • Ensure procedures and systems for compliance are in place. • Appropriately inform the drilling unit's personnel of the purpose and requirements of the EMP. • Ensure correct equipment and personnel are available to meet the requirements of the EMP. • Ensure responsibilities are allocated to personnel. • Operator to commit organisation and contractor to meet the requirements of the EMP.	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_2.2	In writing, request the SAN Hydrographic Office (Silvermine) to release Radio Navigation Warnings and Notices to Mariners throughout the well-drilling period. Notify the following interested and affected parties in order to keep them updated on the drilling programme: • Overlapping and neighbouring users with delineated boundaries in the marine petroleum prospecting and mining industries; • South African and foreign fishing vessels, who can be informed through the recognised fishing	N/A	N/A	No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		associations and Marine and Coastal Management Section of DEAT, examples include the SA Deep Sea Trawling Association and the South East Coast Inshore Fishing Association, although communication with fishing companies and agents is also advised; • Government departments with jurisdiction over marine activities, particularly DEAT, DME and PASA; and • SAMSA and local Port Captains. Notice should include dates and durations of drilling, location/s (co-ordinates) and point out the presence of the 500 m exclusions zone around drilling unit. Note: Contact details are given in Appendix 5.			
EMPr	2007_2.3	Ensure that no other mining/exploration activity, pipeline or telecommunication cable will be affected by the drilling activities. Ensure that known ammunitions dumping grounds are avoided. Avoid any shipwrecks and any other cultural heritage / archaeological material. Notify the South African Heritage Resource Agency (SAHRA) regarding requirements to disturb any such wrecks or any cultural heritage / archaeological material	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_2.4	Ensure that no construction debris or dropped equipment that may be detrimental to environment or other users of the sea is left on the seafloor.	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_2.5	Undertake and/or have in place the following in order to minimise environmental risk: • A hazard identification and risk assessment document; • The Contractor must apply relevant national codes and standards in accordance with good oilfield practice;	N/A	N/A	No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		• The Contractor must operate in accordance with procedures laid down in the vessel's marine operations manual as approved by the relevant classification society; • All anchor chains and anchors must be certified; and • The rig(s) must be maintained to class standard throughout the project.			
EMPr	2007_2.6	Vessels must be certified for seaworthiness through an appropriate internationally recognised certification programme (e.g. Lloyds Register, Det Norske Veritas).	N/A	N/A	No well drilling or construction activities took place during the audit period.
3. OPERATIONAL PHASE					
EMPr	2007_3.1	• Comply fully with the EMP (compliance would mean that all activities were undertaken successfully and details recorded and included in the Close-out Report). • Subscribe to the principles of an internationally acceptable Environmental Management System onboard the drill rig(s) and support vessels. This includes environmental awareness training, waste management, environmental monitoring, record keeping and continuous improvement. • Ensure all hazardous materials are correctly labelled, stored, packed and sealed with proper markings for shipping.	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_3.1	A copy of the EMP must be supplied to all Contractors.	N/A	N/A	It is assumed that this condition refers to specific requirements for contractors related to the operational phase of the drilling only. No well drilling or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.2	Through normal communication channels, Radio Navigation Warnings and Notices to Mariners, keep	N/A	N/A	No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		the following interested and affected parties updated on the drilling programme: • Overlapping and neighbouring users with delineated boundaries in the marine petroleum prospecting and mining industries; • South African and foreign fishing vessels, who can be informed through the recognised fishing associations and Marine and Coastal Management Section of DEAT, examples include the SA Deep Sea Trawling Association and the South East Coast Inshore Fishing Association, although communication with fishing companies and agents is also advised; • Government departments with jurisdiction over marine activities, particularly DEAT, DME and PASA; and • SAN Hydrographer, SAMSA and local Port Captains.			
EMPr	2007_3.2	Take steps to share information and co-operate with other marine users and resource managers in the marine environment generally, to mutual benefit.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.2	Keep constant watch for approaching vessels during operations and warn by radio and standby vessel, if required.	N/A	N/A	No well drilling or construction activities took place during the audit period.
	2007_3.3	Prevent collisions by ensuring that the drilling unit displays correct signals by day and lights by night (including twilight), by visual radar watch and standby vessel(s). Service equipment regularly, and practice weekly, etc. (refer to Mine Health and Safety Act and regulations).	N/A	N/A	No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.4	In the event of an oil spill immediately implement: • the PetroSA Oil Spill Contingency Plan; and • the vessel's Emergency Response Plan. Adhere to obligations regarding other vessels in distress. Implement health and safety procedures (see emergency plans above). Notify SAMSA about wrecked vessels (safety and pollution) and the Department of Finance (salvage, customs, royalties). Give location details to SAN Hydrographer.	N/A	N/A	There have been no reported incidents of spills or leaks relating to subsea infrastructure within the audit period relating specifically to SCG infrastructure. The leak involving the export pipeline (11 November 2022) where the condensate/ water mixture was being conveyed from the FA Platform to the GTL Refinery was recorded as a land-based leak as it occurred at the insulating joint manhole on the 8" export pipeline at Nautilus Bay Onshore on land approximately 85.6km from the FA Platform. The incident dealt with accordingly and is excluded from this audit. Oil spills at the FA-platform were also recorded during the audit period, however these spill are not of specific relevance to SCG infrastructure and are dealt with separately for the FA-platform, which has a separate EMPr and separate audit and reporting requirements.
EMPr	2007_3.5	Blow out preventers (BOPs) must be appropriate for the intended use. Fully inspect the BOPs on the rig(s) in accordance with the American Petroleum Industries (API) recommended practices (or equivalent) prior to well drilling. Ensure that all responsible personnel are qualified in accordance with International Well Control Forum requirements or equal. Follow written and internationally established procedures for well control. Identify hazards and put risk control systems in place. Implement monitoring and management to assist in the detection of uncontrolled gas releases.	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_3.6	Optimally recycle the mud for use downhole to minimise mud disposal overboard and reduce concentrations of mud chemicals released. Use water-based (rather than the more toxic oil-based drilling muds) where possible and use low toxicity	N/A	N/A	No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		mud additives. Note that the use of any oil-based mud requires a special application to DME. In addition, the following measures should be implemented if nonaqueous drilling fluids (NADF) are used: • The drilling fluid should be centrifuged to remove as much of the finer particles. • Only Synthetic Based Drilling Fluid (OGP Type III) should be used with a low polycyclic aromatic hydrocarbon (PAH) content. • All recovered NADF should be stored on board and taken to shore for treatment and reuse. • NADF cuttings should also be stored on board for onshore disposal or should be treated to reduce to oil-content before discharge into the ocean. Estimate the volume of rock cuttings dumped onto the sea floor before connection of the marine riser pipe. Estimate the volume of cuttings disposed overboard.			
EMPr	2007_3.7	Use high efficiency flare to maximise combustion of hydrocarbons. Use well control procedures to ensure that there are no discharges to the sea. For each drillstem flow test, provide an estimate of the volume of any oily discharge into the sea and the size of the resulting slick / sheen.	N/A	N/A	No well drilling or construction activities took place during the audit period.
EMPr	2007_3.8	Implement the PetroSA waste management procedure (EP/SHE/PO/001). Comply with legal requirements for waste management and pollution control (for air and water quality levels at sea), and employ "good housekeeping" and monitoring practices. • General waste: Initiate a waste minimisation system. No disposal overboard. • Galley (food) waste: Dispose overboard after	N/A	N/A	The SCG well field has no surface infrastructure, platforms, or vessels and consequently no waste is generated, stored, or disposed of. The SCG Field is connected via subsea pipelines to the FA Platform. The FA Platform has its own approved EMPr that must be complied with.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		macerating according to MARPOL standard (less than 25 mm size) – prohibited if distance to nearest land is < 3 nautical miles. • Medical waste: Seal in aseptic containers for appropriate disposal ashore. • Neon lights: Crush discarded tubes and send to shore in designated, marked containers. • Metal: Send to shore for recycling or disposal. • Other waste: Send remaining waste to a licensed waste site. Ensure waste disposal is carried out in accordance with appropriate laws and ordinances. • Waste oil: Return used oil to a port with a registered facility for processing or disposal. • Empty oil drums: Not to be filled with chemicals. Send to shore for disposal / recycling. • Empty chemical containers: Mark and seal appropriately and send to shore for disposal / recycling. • CFCs: Limit CFC based fire-fighting or refrigeration equipment. • Wastewater: Comply with MARPOL. • Minor oil spill: Use oil absorbent. • Emissions to the atmosphere: Properly tune and maintain all engines, motors, generators and all auxiliary power to contain the minimum of soot and unburned diesel. • Deck drainage: Ensure that weather decks are kept free of spillage. Mop up any spills immediately with biodegradable low toxicity detergents. • Machinery space drainage: Drilling unit and supply vessels must comply with international agreed standards regulated under MARPOL. • Sewage - use approved treatment plants to the MARPOL standard. Record types and volumes of			

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		chemical and hazardous substances brought on board (e.g. radioactive devices/materials, neon lights, toner cartridges, etc.) and destination of wastes. Ensure that waste returned to port is disposed of by a licensed waste disposal contractor using an approved landfill site.			
EMPr	2007_3.9	Comply with necessary regulations for the transport, storage and handling of radioactive devices. Transport and store radioactive devices in specially designed secured (locked) storage containers. Designate competent person/s in charge and to handle the radioactive devices. Follow strict approved procedures when handling the devices. Wear personal monitoring devices to measure any unusual exposure. Follow radioactive sources procedure. When radioactive sources are to be used, secure the area between and around the storage containers and the floor and only allowed key personnel in the area. Set up incident and emergency reporting procedures for actual or suspected individual over-exposure, theft or loss, logging tools stuck downhole in wells, and release or spillage into the environment. Test the sources every three to six months to document leak levels.	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.10	Co-operate with other legitimate users of the sea to minimise disruption to other marine activities and marine life.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.10	Use effective communication channels (see section 2.2) to inform all other potential users about the	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		location, timing, priority of passage and size of exclusion zones (500 m from edge of the rig). To avoid any interference with anchors and anchor chains it is suggested that the Notice to Mariners advises of a stay clear area of 1 500 m from the corners of the drilling unit(s).			fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.11	Keep a record of lost equipment and all items lost overboard and not recovered. When any items that constitute a seafloor or navigational hazard are lost on the seabed, or in the sea, complete a standard form / record sheet, which records the date and cause of loss, details of equipment type, etc.	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.11	Pass information to PASA, SAMSA and DME. Notify SAN Hydrographer, relevant mining companies and fishing associations. SAN Hydrographer will send out Notice to Mariners with this information.	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.12	No discharge of any oil whatsoever is permitted within 50 nautical miles of the coast.	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.13	Establish, with pilots, flight paths that do not over-pass Ramsar sites, islands, coastal reserves, bird and seal breeding colonies or bird breeding colonies / sanctuaries on the coast (minimum altitudes of 2000 feet above ground level over nature conservation areas). Extensive coastal flights (parallel to the coast within 1 nautical mile of the shore) are limited on the south coast between the months of June and November to avoid southern right whale nursery areas. Aircraft may not approach to within 300 m of whales. Deviations from set flight plans must be reported.	N/A	N/A	No well drilling or construction activities took place during the audit period.
4. DEMOBILISATION PHASE					

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_4.1	Place Xmas trees on the wellheads and ensure they are sealed off.	N/A	N/A	This condition relates to demobilization of the drilling phase. No well drilling took place during the audit period and therefore this condition is not applicable.
EMPr	2007_4.2	Ensure that all equipment not required for gas production is retrieved from the seafloor.	N/A	N/A	This condition relates to demobilization of the drilling phase. No well drilling took place during the audit period and therefore this condition is not applicable.
EMPr	2007_4.3	Inform the SA Navy Hydrographic Office that the rig is off location. Notify fishing operators and vessels through recognised fishing associations (see Section 2.2). Notify PASA, SAMSA and DEAT.	N/A	N/A	This condition relates to demobilization of the drilling phase. No well drilling took place during the audit period and therefore this condition is not applicable.
EMPr	2007_4.4	Dispose all waste retained onboard at a licensed waste site using a licensed waste disposal contractor.	N/A	N/A	This condition relates to demobilization of the drilling phase. No well drilling took place during the audit period and therefore this condition is not applicable.
5. MONITORING, COMPLIANCE AUDITING AND THE SUBMISSION OF INFORMATION PHASE					
EMPr	2007_5.1	Undertake appropriate monitoring (as per specific topics), and track performance against objectives and targets. Document all activities and results for internal and external auditing. Encourage monitoring/observation of marine animals, including: • Marine mammals, penguins and turtles sighted from the rig; • Record any unusual bird sightings; • Record actual bird reaction to lights and real incidents of injury or death. Ringed or banded birds should be reported to the appropriate scheme (details on ring); • Keeping any disorientated seabirds in dark containers (e.g. cardboard boxes) for release during daylight hours • Freeze any dead birds and make available to	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		appropriate museums for research; and • Interaction with other vessels.			
EMPr	2007_5.2	• An operation specific Close-out Report must be compiled subsequent to completion of each well drilling operation. • Close–out Report must be based on requirements of the monitoring and EMP Performance Assessment. • Provide information / records as indicated in the Close-out Report column of the EMP and the model Close-out Report within 90 days of the drilling operation. • Provide copy of report to the relevant regional office of DME and to PASA. • Provide a copy of any video footage that was shot during the course of the drilling operation to PASA.	N/A	N/A	As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
PART 2B: PIPE-LAYING AND CONSTRUCTION OF ASSOCIATED INFRASTRUCTURE					
1: PRE-ESTABLISHMENT PHASE					
EMPr	2007_1.1	Communicate with fishing operators and vessels regarding exclusion areas around the rig(s) and timing of the operation in order to minimise disruption to the operation and other activities in the area.	N/A	N/A	This is a construction phase requirement relating to the pipe laying and construction phase only. No pipe laying, well drilling or construction activities took place during the audit period.
EMPr	2007_1.2	Ensure that financial provision is in place to execute the requirements of this EMP.	N/A	N/A	This is a pre-establishment phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.3	Are the following emergency plans, equipment and personnel in place to deal with all emergencies: Ensure the following emergency plans, equipment and personnel are in place to deal with all emergencies: • Company Emergency Response Plan, including	N/A	N/A	This is a construction phase requirement relating to the pipe laying and construction phase only. No pipe laying, well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		MEDIVAC plan; • Company Oil Spill Contingency Plan; • Vessel Contractor Emergency Response Bridging Document; • Helicopter Operator Emergency Response Plan; • South African Search and Rescue (SASAR) Manual; and • Adequate protection and indemnity insurance cover for oil pollution incidents.			
EMPr	2007_1.4	Ensure that the following documents have been approved: • Scoping Report and Environmental Impact Report for SCG development Project; • EMP report for the Production Rights area; and	N/A	N/A	An RoD was issued by DEA in 2006. An updated EMPr was prepared and submitted in May 2011 for approval by PASA however it does not appear that any approvals were received for this EMPr and that the 2007 EMPr is still considered the most recent approved EMPr. That said this is a construction phase requirement and no well drilling or construction activities took place during the audit period.
EMPr	2007_1.4	Ensure that any alteration or modifications are submitted to PASA and DEAT for approval.	N/A	N/A	This is a construction phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.5	Establish an Environmental Monitoring Committee (EMC). The EMC shall be comprised of government authorities (local, provincial and national), Non-governmental Organisations, Community-based Organisations, Civil Society and Private Sector. The EMC's role shall be: • Regular and participative monitoring and review of PetroSA's adherence to the ROD, monitoring reports / data during the operation and decommissioning phases, and EIR mitigation measures; • Informing DEAT and other relevant authorities of non-compliance with the ROD; • Promoting participation of key stakeholders; • Providing a forum for discussing issues related to the South Coast Gas project and monitoring / review; • Supervision and management of Environmental	N/A	N/A	This is a construction phase requirement. No well drilling or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		Control Officer (ECO); and Providing a forum for establishing a fund, as a trade-off, together with the fishing industry.			
EMPr	2007_1.7	Report EMC findings to DEAT	N/A	N/A	This is a construction phase requirement. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.8	Appoint an ECO to ensure compliance with ROD conditions, Environmental Impact Report (PSA04SCG/FEIR, dated Aug 06) recommendations and Environmental Management Programme.	N/A	N/A	It is expected that this condition relates to the construction phase only. No well drilling or construction activities took place during the audit period.
EMPr	2007_1.9	Notify DEAT of the commencement of pipe-laying / construction activities.	N/A	N/A	This related to pre-establishment only. No pipe laying or construction activities took place during the audit period.
2. ESTABLISHMENT PHASE					
EMPr	2007_2.1	• Ensure that a copy of the approved EMP report is on board the pipe-laying vessel during the operation. • Ensure procedures and systems for compliance are in place. • Appropriately inform the drilling unit's personnel of the purpose and requirements of the EMP. • Ensure correct equipment and personnel are available to meet the requirements of the EMP. • Ensure responsibilities are allocated to personnel. • Operator to commit organisation and contractor to meet the requirements of the EMP.	N/A	N/A	No pipe laying or construction activities took place during the audit period.
EMPr	2007_2.2	In writing, request the SAN Hydrographic Office (Silvermine) to release Radio Navigation Warnings and Notices to Mariners throughout the pipe-laying period. Notify the following interested and affected parties in order to keep them updated on the drilling programme: • Overlapping and neighbouring users with	N/A	N/A	No pipe laying or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		delineated boundaries in the marine petroleum prospecting and mining industries; • South African and foreign fishing vessels, who can be informed through the recognised fishing associations and Marine and Coastal Management Section of DEAT, examples include the SA Deep Sea Trawling Association and the South East Coast Inshore Fishing Association, although communication with fishing companies and agents is also advised; • Government departments with jurisdiction over marine activities, particularly DEAT, DME and PASA; and • SAMSA and local Port Captains. Notice should include dates and durations of drilling, location/s (co-ordinates) and point out the presence of the 500 m exclusions zone around drilling unit. Note: Contact details are given in Appendix 5.			
EMPr	2007_2.3	Ensure that no other mining/exploration activity, pipeline or telecommunication cable will be affected by the pipe-laying activities. Ensure that known ammunitions dumping grounds are avoided. Avoid any shipwrecks and any other cultural heritage / archaeological material. Notify the South African Heritage Resource Agency (SAHRA) regarding requirements to disturb any such wrecks or any cultural heritage / archaeological material	N/A	N/A	No pipe laying or construction activities took place during the audit period.
EMPr	2007_2.4	Ensure that no construction debris or dropped equipment that may be detrimental to environment or other users of the sea is left on the seafloor.	N/A	N/A	No pipe laying or construction activities took place during the audit period.
EMPr	2007_2.5	Undertake and/or have in place the following in order to minimise environmental risk: • A hazard identification and risk assessment	N/A	N/A	No pipe laying or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		document; • The Contractor must apply relevant national codes and standards in accordance with good oilfield practice; • The Contractor must operate in accordance with procedures laid down in the vessel's marine operations manual as approved by the relevant classification society; • All anchor chains and anchors must be certified; and • The pipe-laying vessel must be maintained to class standard throughout the project.			
EMPr	2007_2.6	Vessels must be certified for seaworthiness through an appropriate internationally recognised certification programme (e.g. Lloyds Register, Det Norske Veritas).	N/A	N/A	No pipe laying or construction activities took place during the audit period.
3. OPERATIONAL PHASE					
EMPr	2007_3.1	• Comply fully with the EMP (compliance would mean that all activities were undertaken successfully and details recorded and included in the Close-out Report). • Subscribe to the principles of an internationally acceptable Environmental Management System onboard the drill rig(s) and support vessels. This includes environmental awareness training, waste management, environmental monitoring, record keeping and continuous improvement. • Ensure all hazardous materials are correctly labelled, stored, packed and sealed with proper markings for shipping.	N/A	N/A	No pipe laying or construction activities took place during the audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.1	A copy of the EMP must be supplied to all Contractors.	N/A	N/A	It is assumed that this condition refers to specific requirements for contractors related to the pipe-laying construction phase only. No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.2	Through normal communication channels, Radio Navigation Warnings and Notices to Mariners, keep the following interested and affected parties updated on the drilling programme: • Overlapping and neighbouring users with delineated boundaries in the marine petroleum prospecting and mining industries; • South African and foreign fishing vessels, who can be informed through the recognised fishing associations and Marine and Coastal Management Section of DEAT, examples include the SA Deep Sea Trawling Association and the South East Coast Inshore Fishing Association, although communication with fishing companies and agents is also advised; • Government departments with jurisdiction over marine activities, particularly DEAT, DME and PASA; and • SAN Hydrographer, SAMSA and local Port Captains.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.2	Take steps to share information and co-operate with other marine users and resource managers in the marine environment generally, to mutual benefit.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to construction / pipe laying. As no pipe laying activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.2	Keep constant watch for approaching vessels during operations and warn by radio and standby vessel, if required.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	2007_3.3	Prevent collisions by ensuring that the drilling unit displays correct signals by day and lights by night (including twilight), by visual radar watch and standby vessel(s). Service equipment regularly, and practice weekly, etc. (refer to Mine Health and Safety Act and regulations).	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.4	In the event of an oil spill immediately implement: • the PetroSA Oil Spill Contingency Plan; and • the vessel's Emergency Response Plan. Adhere to obligations regarding other vessels in distress. Implement health and safety procedures (see emergency plans above). Notify SAMSA about wrecked vessels (safety and pollution) and the Department of Finance (salvage, customs, royalties). Give location details to SAN Hydrographer.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.5	Comply with legal requirements for waste management and pollution control (for air and water quality levels at sea), and employ "good housekeeping" and monitoring practices. • General waste: Initiate a waste minimisation system. No disposal overboard. • Galley (food) waste: Dispose overboard after macerating according to MARPOL standard (less than 25 mm size) – prohibited if distance to nearest land is < 3 nautical miles. • Medical waste: Seal in aseptic containers for appropriate disposal ashore. • Neon lights: Crush discarded tubes and send to shore in designated, marked containers. • Metal: Send to shore for recycling or disposal. • Other waste: Send remaining waste to a licensed	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		waste site. Ensure waste disposal is carried out in accordance with appropriate laws and ordinances. • Waste oil: Return used oil to a port with a registered facility for processing or disposal. • Empty oil drums: Not to be filled with chemicals. Send to shore for disposal / recycling. • Empty chemical containers: Mark and seal appropriately and send to shore for disposal / recycling. • CFCs: Limit CFC based fire-fighting or refrigeration equipment. • Wastewater: Comply with MARPOL. • Minor oil spill: Use oil absorbent. • Emissions to the atmosphere: Properly tune and maintain all engines, motors, generators and all auxiliary power to contain the minimum of soot and unburned diesel. • Deck drainage: Ensure that weather decks are kept free of spillage. Mop up any spills immediately with biodegradable low toxicity detergents. • Machinery space drainage: Pipe-laying vessel and supply vessel(s) must comply with international agreed standards regulated under MARPOL. • Sewage - use approved treatment plants to the MARPOL standard. Record types and volumes of chemical and hazardous substances brought on board (e.g. radioactive devices/materials, neon lights, toner cartridges, etc.) and destination of wastes. Ensure that waste returned to port is disposed of by a licensed waste disposal contractor using an approved landfill site.			

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.6	Co-operate with other legitimate users of the sea to minimise disruption to other marine activities and marine life.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable
EMPr	2007_3.6	Use effective communication channels (see section 2.2) to inform all other potential users about the location, timing, priority of passage and size of exclusion zones (500 m from edge of the rig). To avoid any interference with anchors and anchor chains it is suggested that the Notice to Mariners advises of a stay clear area of 1 500 m from the corners of the drilling unit(s).	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.7	Keep a record of lost equipment and all items lost overboard and not recovered. When any items that constitute a seafloor or navigational hazard are lost on the seabed, or in the sea, complete a standard form / record sheet, which records the date and cause of loss, details of equipment type, etc.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.7	Pass information to PASA, SAMSA and DME. Notify SAN Hydrographer, relevant mining companies and fishing associations. SAN Hydrographer will send out Notice to Mariners with this information.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.8	No discharge of any oil whatsoever is permitted within 50 nautical miles of the coast.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_3.9	Establish, with pilots, flight paths that do not over-pass Ramsar sites, islands, coastal reserves, bird and seal breeding colonies or bird breeding colonies / sanctuaries on the coast (minimum altitudes of 2000	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		feet above ground level over nature conservation areas). Extensive coastal flights (parallel to the coast within 1 nautical mile of the shore) are limited on the south coast between the months of June and November to avoid southern right whale nursery areas. Aircraft may not approach to within 300 m of whales. Deviations from set flight plans must be reported.			
4. DEMOBILISATION PHASE					
EMPr	2007_4.1	Ensure that all equipment not required for the gas pipeline and associated infrastructure is retrieved from the seafloor.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_4.2	Inform the SA Navy Hydrographic Office that the rig is off location. Notify fishing operators and vessels through recognised fishing associations (see Section 2.2). Notify PASA, SAMSA and DEAT.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
EMPr	2007_4.3	Dispose all waste retained onboard at a licensed waste site using a licensed waste disposal contractor.	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.
5. MONITORING, COMPLIANCE AUDITING AND THE SUBMISSION OF INFORMATION PHASE					
EMPr	2007_5.1	Compile monitoring programme and EMP Performance Assessments and submit to PASA. Undertake appropriate monitoring (as per specific topics), and track performance against objectives and	N/A	N/A	No well drilling, pipe laying or construction activities took place during the audit period and therefore this condition is not applicable.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		targets. Document all activities and results for internal and external auditing			
PART 2C: GAS FIELD OPERATIONS					
1: PRE-ESTABLISHMENT PHASE					
EMPr	2007_1.1	Communicate with fishing operators and vessels regarding exclusion areas around the platform and safety zone around pipelines, wellheads and related subsea infrastructure, and timing of the operation in order to minimise disruption to the operation and other activities in the area.	N/A	N/A	Evidence was provided of the radio operation logbook which records all iterations with vessels in proximity to the platform and associated zones around the FA platform. No proof of navigation warnings related specifically to the SCG subsea infrastructure was provided however.
EMPr	2007_1.2	Ensure that financial provision is in place to execute the requirements of this EMP.	N	2	PetroSA Rehabilitation financial statements and reports were provided including assets and liabilities. An additional environmental compliance budget was received relating to the other overall environmental compliance obligations in the EMPr, however it does not appear that this budget covers all environmental requirements and obligations within the EMPr (for example subsea inspections).
EMPr	2007_1.3	Comply with PetroSA's existing emergency plans: • Integrated management system for Safety, Health, Environmental Management and Quality Control (see all PetroSA's procedures in Appendix 2); • F-A Platform Emergency Procedure (PR/EOP/OPS/000/001); • General Onshore Plan for Offshore emergency (EP/SHE/PR/006); • Company Oil Spill Contingency and Response Plan (EP/SHE/PR/001); • Logistics Helicopter Operating Procedure	Y	4	PetroSA does have various standard operating procedures, including a FA Platform Emergency Procedure (PRD/PR/FAP/086) Flight Operations Manual (Indwe; 2021), Helicopter Operations Emergency Call Out and Response Procedure (PetroSA; 2025). PetroSA also responds to liquid spills and leaks according to their Oil Spill Contingency Plan. A review of random incident reports confirmed that the defined procedures are being implemented. Environmental awareness training and toolbox talks are reported in the monthly SHEQ reports. Proof of the required insurance was provided.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		(EP/SHE/PR/002 & PR/EOP/LOG/000/003); and • Environmental Management Plan (EP/SHE/PO/001). Comply with the requirements of the Offshore Installations Permit for the FA Platform. Ensure that equipment will be in place and personnel trained to deal with all emergencies. Adequate protection and indemnity insurance cover for oil pollution incidents.			
EMPr	2007_1.4	Ensure that DEAT and PASA has approved the EMP document. Ensure that any alterations or modifications are submitted to PASA and DEAT for approval.	Y	4	An RoD was issued by DEA in 2006. An updated EMPr was prepared and submitted in May 2011 for approval by PASA however it does not appear that any approvals were received for this EMPr and that the 2007 EMPr is still considered the most recent approved EMPr.
EMPr	2007_1.5	Establish an Environmental Monitoring Committee (EMC). The EMC shall be comprised of government authorities (local, provincial and national), Non-governmental Organisations, Community-based Organisations, Civil Society and Private Sector. The EMC's role shall be: • Regular and participative monitoring and review of PetroSA's adherence to the ROD, monitoring reports / data during the operation and decommissioning phases, and EIR mitigation measures; • Informing DEAT and other relevant authorities of non-compliance with the ROD; • Promoting participation of key stakeholders; • Providing a forum for discussing issues related to the South Coast Gas project and monitoring / review; • Supervision and management of Environmental Control Officer (ECO); and Providing a forum for establishing a fund, as a trade-off, together with the fishing industry.	N	0	No proof was provided that an EMC was set up and no records of EMC meetings were made available to the auditor related to the operational phase of SCG or any of PetroS's other operational areas.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_1.5	Report EMC findings to DEAT	N/A	N/A	No proof was provided that an EMC was set up and as such no records of EMC meetings could be made available to the auditor related to the operational phase of SCG in order to verify this condition.
EMPr	2007_1.6	Appoint an ECO to ensure compliance with ROD conditions, Environmental Impact Report (PSA04SCG/FEIR, dated Aug 06) recommendations and Environmental Management Programme.	N	0	No proof of appointment of an ECO to manage gas field operational compliance was provided.
EMPr	2007_1.7	Notify DEAT of the commencement of construction activities on FA platform	N/A	N/A	This condition relates specifically to construction activities on the FA platform, none of which took place during the audit period.
EMPr	2007_1.8	Establish a fund, jointly administered by the operator and fishing industry representatives, which could contribute to various initiatives in which the fishing industry would normally be expected to play a role (e.g. research efforts).	N	0	No proof of a jointly administered fund was provided.
2. ESTABLISHMENT PHASE					
EMPr	2007_2.1	Ensure that a copy of the approved EMP report is on board the FA platform during the operation. Ensure procedures and systems for compliance are in place. • Appropriately inform the F-A Platform's personnel of the purpose and requirements of the EMP. • Ensure correct equipment and personnel are available to meet the requirements of the EMP. • Ensure responsibilities are allocated to personnel in formal environmental responsibility matrix for all aspects of operation.	Y	4	The EMPr would be accessible and available to personnel on the FA platform. Equipment and personnel are available to meet the EMPr requirements. An organogram depicting the onshore and offshore management structure as it relates to environmental matters was provided.
EMPr	2007_2.2	Implement an effective pipeline integrity management system	N	2	The EMPr requires that inspection schedules should ensure ongoing inspections during establishment and operational phases. The auditee noted that inspections on the subsea

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
					infrastructure are undertaken at certain intervals determined using a risk based programme. According to the risk based programme the SCG subsea inspections are overdue. It is noted in the 2015 ROV Survey for FA Satellites and SCG infield infrastructure (MDC; 2015), that certain aspects required attention. No evidence was provided that these repairs or maintenance tasks were subsequently addressed.
3. OPERATIONAL PHASE					
EMPr	2007_3.1	•Comply fully with the EMP (compliance would mean that all activities were undertaken successfully and details recorded and included in the Close-out Report). • Subscribe to the principles of an internationally acceptable Environmental Management System onboard the F-A Platform and support vessels. This includes environmental awareness training, waste management, environmental monitoring, record keeping and continuous improvement. • Comply with the requirements of the Offshore Installations Permit for the FA Platform.	N	2	Not all operations were carried out in accordance to the EMPr conditions. Close out reports were provided for relevant activities. Proof of environmental awareness training was provided and the management systems and procedures in place on the FA platform generally subscribe to the principals of an internationally acceptable Environmental Management System. Record keeping and continuous improvement are included as key requirements in the majority of the management systems and procedures reviewed.
EMPr	2007_3.1	A copy of the EMP must be supplied to all Contractors.	N	2	PetroSA provided feedback that confirmed that the requirement to comply with the conditions of the EMPr were not expressly incorporated into the contracts for the vessels and helicopters service providers. No signed service agreement/purchase order/contract that contains an EMPr compliance clause referencing the specific EMPr(s) applicable to the scope was provided. PetroSA confirmed that the requirement for service providers to comply with all relevant legislation was included in both the vessel and helicopter service providers contracts.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.2	Use effective communication channels (see section 2.2 above) to inform all other potential users about the location, priority of passage and size of safety and exclusion and safety zones.	Y	4	There are no specific surface facilities associated with SCG. Watch procedures for the platform and safety zones are implemented. Evidence was provided of the radio operation logbook which records all iterations with vessels in proximity to the platform and associated zones. The SCG field and associated safety zones are also included on in the notice to mariners.
EMPr	2007_3.2	Take steps to share information and co-operate with other marine users and resource managers in the marine environment generally, to mutual benefit.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate mostly to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable.
EMPr	2007_3.2	Ensure the following systems/procedures are in place on the F-A Platform for prevention, detection, alarm, response and effectively handle emergencies: • Onboard equipment maintenance and certification; • Shutdown systems; and • Hazard identification and risk management.	Y	4	PetroSA does have various standard operating procedures, including a FA Platform Emergency Procedure (PRD/PR/FAP/086). This procedure covers the required aspects relating to emergencies. Various systems are in place relating to onboard equipment maintenance and certification.
EMPr	2007_3.3	Routine surveys of subsea equipment, structures and pipelines for detection of changes to the physical condition. Survey programme to comprise of regular external pipeline surveys for potential problems such as scour, unsupported pipe sections, any anchor damage and debris collection. Handle any leaks detected according to existing standard procedures.	N	2	The auditee noted that inspections on the subsea infrastructure are undertaken at certain intervals determined using a risk based programme . The Risk Based Sub-sea Inspection Record lists SCG sub-sea infrastructure as requiring inspection with an ROV every 5 years and as such are overdue. Procedures are in place to handle leaks, however no leaks were identified for SCG infrastructure pipelines during due audit period.
EMPr	2007_3.3	Monitor corrosion on the pipelines for the integrity of the pipes walls.	N	2	The auditee noted that inspections on the subsea infrastructure are undertaken at certain intervals determined using a risk based programme . The Risk Based Sub-sea Inspection Record lists SCG sub-sea infrastructure as requiring inspection with an ROV every 5 years and as such are overdue.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.3	Ensure personnel are trained, prepared and designated in a formal structure to prevent, respond to and effectively handle emergencies. See Section 1.3 for PetroSA's existing emergency plans.	Y	4	Environmental awareness training and toolbox talks are reported in the monthly SHEQ reports. Training on waste management aspects are recorded in various monthly reports provided.
EMPr	2007_3.3	Structure must make provision for pollution watch and adequate methods for transfer of fuel and other hazardous materials, according to written approved procedures	Y	4	The FA Platform SHEQ monthly reports include a subsection on waste management. The quarterly environmental reports do include copies of the Waste Transfer Notes for relevant waste streams.
EMPr	2007_3.3	Implement and maintain a sound procedure for prevention of collisions of the support vessel/s.	Y	4	There are no surface facilities associated with SCG. Watch procedures and safety zones are implemented. Evidence was provided of the radio operation logbook which records all interactions with vessels in proximity to the platform and associated zones.
EMPr	2007_3.4	In the event of an oil spill immediately implement: • Company Emergency Response Plan; and • Company Oil Spill Contingency and Response Plan. • Ensure that full record is kept of the incident until recovery • Adhere to obligations regarding other vessels in distress. • Implement PetroSA's integrated management system for Safety, Health, Environmental Management and Quality Control (see all PetroSA's procedures in Appendix 2) and associated health and safety procedures (see emergency plans in Section 1.3). • Notify SAMSA about wrecked vessels (safety and pollution) and the Department of Finance (salvage, customs, royalties). Give location details to SAN Hydrographer.	N/A	N/A	There have been no reported incidents of spills or leaks relating to subsea infrastructure within the audit period relating specifically to SCG infrastructure. The leak involving the export pipeline (11 November 2022) where the condensate/ water mixture was being conveyed from the FA Platform to the GTL Refinery was recorded as a land-based leak as it occurred at the insulating joint manhole on the 8" export pipeline at Nautilus Bay Onshore on land approximately 85.6km from the FA Platform. The incident dealt with accordingly and is excluded from this audit. Oil spills at the FA-platform were also recorded during the audit period, however these spill are not of specific relevance to SCG infrastructure and are dealt with separately for the FA-platform, which has a separate EMPr and separate audit and reporting requirements.
EMPr	2007_3.5	The following shall be undertaken and/or in place in order to minimise environmental risk: • An environmental hazard identification and risk assessment document;	N	2	No separate environmental hazard and identification risk assessment document or safety design manuals could be provided, however these aspects are generally covered under the EMP and various procedures in place for the platform and

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		• Apply relevant national codes and standards in accordance with good gas field practice; • Operate in accordance with procedures laid down in the FA Platform's Operation Manuals (see Appendix 2); • Operate in accordance with Safety Design Manual (Safety Case); • Anchor system design and construction certification; and • The offshore installation shall be maintained allowing a Certificate of Fitness to be in place throughout the project. • Comply with PetroSA's operating manual for oily / produced water treatment (EP/OPS/PR/034). • Maintain oil in water discharges below 40 ppm (monthly average)			associated infrastructure. Anchor system design certification could not be provided for the FA platform. No Certificate of fitness was available for the FA platform. In general the operations comply with the operating manual for oil / produced water. The platform produced water management system was equipped with an automatic online analyser. Whenever the content exceeds 40ppm, the system diverts automatically to the interceptor tank, for further cleaning.
EMPr	2007_3.6	• Comply with PetroSA's operating manual for oily / produced water treatment (EP/OPS/PR/034). • Maintain oil in water discharges below 40 ppm (monthly average).	N	2	Daily produced water discharge records were provided. During the audit period discharge volumes peaked in July 2015 and gradually tapered off towards February 2024. No produced water has been generated or consequently discharged from the FA Platform since the platform shut down in February 2024. Following a review of available monitoring results and incident registers during the audit period a few incidents were noted where produced water was discharged above the thresholds - Incident 4773- 1st December 2017, Incident 7685-10 November 2019.
EMPr	2007_3.6	Report monthly average >40 ppm to PASA, DME, DOT (SAMSA) and DEAT.	N	2	The produced water discharge records indicate that produced water was last discharged in February 2024. No record of the monitoring results were included in the February or March 2024 Monthly reports.
EMPr	2007_3.7	Implement the PetroSA waste management procedure (EP/SHE/PO/001). Comply with legal requirements for waste management and pollution control (for air and water	N/A	N/A	The SCG well field has no surface infrastructure, platforms, or vessels and consequently no waste is generated, stored, or disposed of. The SCG Field is connected via subsea pipelines to

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		quality levels at sea) and employ "good housekeeping" and monitoring practices. • General waste: Initiate a waste minimisation system. No disposal overboard. • Galley (food) waste: Dispose overboard after macerating according to MARPOL standard (less than 25 mm size) – prohibited if distance to nearest land is < 3 nautical miles. • Medical waste: Seal in aseptic containers for appropriate disposal ashore. • Neon lights: Crush discarded tubes and send to shore in designated, marked containers. • Metal: Send to shore for recycling or disposal. • Other waste: Send remaining waste to a licensed waste site. Ensure waste disposal is carried out in accordance with appropriate laws and ordinances. • Waste oil: Return used oil to a port with a registered facility for processing or disposal. • Empty oil drums: Not to be filled with chemicals. Send to shore for disposal / recycling. • Empty chemical containers: Mark and seal appropriately and send to shore for disposal / recycling. • CFCs: Limit CFC based fire-fighting or refrigeration equipment. • Wastewater: Comply with MARPOL. • Minor oil spill: Use oil absorbent. • Emissions to the atmosphere: Properly tune and maintain all engines, motors, generators and all auxiliary power to contain the minimum of soot and unburned diesel. • Deck drainage: Ensure that weather decks are kept free of spillage. Mop up any spills immediately with biodegradable low toxicity detergents.			the FA Platform. The FA Platform has its own approved EMPr that must be complied with.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		• Machinery space drainage: Drilling unit and supply vessels must comply with international agreed standards regulated under MARPOL. • Sewage - use approved treatment plants to the MARPOL standard. Record types and volumes of chemical and hazardous substances brought on board (e.g. radioactive devices/materials, neon lights, toner cartridges, etc.) and destination of wastes. Ensure that waste returned to port is disposed of by a licensed waste disposal contractor using an approved landfill site.			
EMPr	2007_3.8	Co-operate with other legitimate users of the sea to minimise disruption to other marine activities and marine life.	N/A	N/A	No proof of sharing or cooperation with other marine users was provided, however this would relate to restrictions on fishing and other marine users, which are not of relevance during the operational phase of the project and would relate specifically to drilling / construction. As no well drilling or construction activities took place during the audit period this condition is deemed not applicable
EMPr	2007_3.8	Use effective communication channels (see section 2.2 above) to inform all other potential users about the location, timing, priority of passage and size of safety and exclusion and safety zones.	Y	4	Watch procedures and safety zones are implemented. Evidence was provided of the radio operation logbook which records all interactions with vessels in proximity to the platform and associated zones. There are no surface facilities associated with SCG.
EMPr	2007_3.8	Report trespassing to SAMSA supplying information on vessel and incident (time, etc.).	N/A	N/A	Watch procedures and safety zones are implemented. Evidence was provided of the radio operation logbook which records all interactions with vessels in proximity to the platform and associated zones. There are no surface facilities associated with SCG.
EMPr	2007_3.8	Report incidents of collision warnings to marine traffic to the SA Navy's Institute of Marine Technology.	Y	4	The SCG field consists only of subsea infrastructure and consequently there is an inherently low risk for collision with marine traffic and offshore structures. Further the SCG wells (suspended and abandoned) are reflected in the latest Notice to Mariners.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EMPr	2007_3.9	Keep a record of all items lost overboard and of lost equipment. Items that may be detrimental to environment or other users of the sea must be retrieved within a time period corresponding to the risk it presents.	N/A	N/A	PetroSA provided the 'PetroSA INCIDENT MANAGEMENT SYSTEM - Group Procedure (PetroSA; 2018). This procedure specifically includes the loss of property as an incident. Incidents are recorded via a computer based system. The list of recorded incidents spanning the audit period was provided. No incidents related to dropped objects or objects lost overboard were recorded in the incident register and therefore this condition is not applicable to the current audit period.
EMPr	2007_3.9	Complete a standard form, which records the date and cause of loss, details of equipment type, vessel Sea Control location, sea state and weather, and the nature of the seabed, when any items that constitute a seafloor or navigational hazard are lost on the seabed, or in the sea.	N/A	N/A	Incidents are recorded via a computer based system. The list of recorded incidents spanning the audit period was provided. No incidents related to dropped objects or objects lost overboard were recorded in the incident register.
EMPr	2007_3.9	Pass information to PASA, SAMSA and DME. Notify SAN Hydrographer, relevant mining companies and fishing associations. SAN Hydrographer will send out Notice to Mariners with this information.	N/A	N/A	No incidents related to dropped objects or objects lost overboard were recorded in the incident register.
EMPr	2007_3.10	No discharge of any oil whatsoever is permitted within 50 nautical miles of the coast.	N	2	The SCG Field is connected via subsea pipelines to the FA Platform, which is situated within 50 nautical miles from the coast. All produced water generated by the FO wellfield therefore is directed to the FA Platform for treatment and discharge. The platform produced water management system was equipped with an automatic online analyser. Whenever the content exceeds 40ppm, the system diverts automatically to the interceptor tank, for further cleaning. It is noted that the online analysers stopped functioning in November 2019. Alternative means were implemented to avoid uncontrolled discharge, including diverting produced water to shore for further testing and treating via the export pipelines. This process ceased in November 2022. Since November 2022 until the platform ceased generating produced water in 2024 the produced water was directed through the onboard water treatment systems and discharged without pre-emptive

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
					testing for oil content. Ad hoc samples were however collected and sent to the onshore testing facilities for retrospective confirmation of oil content.
EMPr	2007_3.11	Establish, with pilots, flight paths that do not over-pass Ramsar sites, islands, coastal reserves, bird and seal breeding colonies or bird breeding colonies / sanctuaries on the coast (minimum altitudes of 2000 feet above ground level over nature conservation areas). Extensive coastal flights (parallel to the coast within 1 nautical mile of the shore) are limited on the south coast between the months of June and November to avoid southern right whale nursery areas. Aircraft may not approach to within 300 m of whales. Deviations from set flight plans must be reported.	Y	4	Flight path received did not appear to cross any observable Ramsar sites, islands, seabird or seal colonies or nature conservation areas. No flight logs were provided to confirm if any deviations from set flight paths occurred, so this specific condition could not be verified.
4. DECOMISSIONING AND CLOSURE PHASE					
EMPr	2007_4.1	Prepare procedure for safe decommissioning. Shut down system and decommission F-A Platform as per PetroSA's existing approved EMPR. Flush, clean and seal pipelines and umbilicals.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were closed 31st December 2020. ES-7 was shut-in in June 2016. E-AO2 was never active. The current pipelines have not been flushed and currently pose a release risk.
EMPr	2007_4.2	Seal South Coast Gas development wells by inserting industry acceptable barriers in the well bore at various levels according to good practice and test for integrity. Remove Xmas trees and wellhead structures. Casing to be cut-off below the level of the seafloor. Record volume of any cement displaced to seafloor.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were shut-in on 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active but was drilled and plugged.
EMPr	2007_4.3	Remove all equipment other than infrastructure to be abandoned (i.e. pipeline, umbilicals, concrete	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		mattresses / blocks less than 0.5 m high and other overtrawlable structures).			AA3 were shut-in on 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active but was drilled and plugged.
EMPr	2007_4.4	Inform the SAN Hydrographic Office regarding the positions of all abandoned infrastructure. Notify fishing operators and vessels through recognised fishing associations. Notify PASA, SAMSA and DEAT.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were shut-in on 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active but was drilled and plugged.
EMPr	2007_4.5	Dispose of all waste retained onboard at a licensed landfill site using an approved waste disposal contractor.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were shut-in on 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active but was drilled and plugged.
5. MONITORING, COMPLIANCE AUDITING AND THE SUBMISSION OF INFORMATION PHASE					
EMPr	2007_5.1	Comply with the existing schedule of monitoring operating parameters and the frequency and method of monitoring (see EMP EP/SHE/PO/001). Document all activities and results for internal and external auditing. Ensure compliance with PetroSA Environmental Management System (ISO 14001). Encourage monitoring/observation of marine animals including: • Marine mammals, penguins and turtles sighted from the F-A Platform; • Record any unusual bird sightings; and • Interaction with other vessels.	Y	4	Monitoring results for all fields connected to the FA Platform are reported on in consolidated monthly and quarterly reports. The monthly report includes numerous indicators, and specifically: waste generated, produced water, drainage water, incidents, training, vessel interactions and marine observations.
EMPr	2007_5.1	Monitor the section of pipeline within the Blues fishing ground to obtain an understanding of burial rates, spanning, pipeline deterioration and any damage caused by accidental trawl board impacts.	N	2	The auditee noted that inspections on the subsea infrastructure are undertaken at certain intervals determined using a risk based programme . The Risk Based Sub-sea Inspection Record lists SCG sub-sea infrastructure as requiring inspection with an ROV every 5 years and as such are overdue. Procedures are in place to handle leaks, however no leaks were

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
					identified for SCG infrastructure pipelines during due audit period.
EMPr	2007_5.1	Undertake periodic monitoring of the pipeline (in the Blues fishing grounds) for a period after decommissioning until a closure certificate has been obtained from PASA or DME in order to determine long-term pipeline integrity. If monitoring reveals that the pipeline is posing a threat to fishing activities, investigate a more permanent solution and solutions and implement.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were closed 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active.
EMPr	2007_5.2	Investigate options for increasing the rate of breakdown of the pipeline (e.g. not filling the pipeline with a corrosion inhibitor but rather filling with seawater) in order to speed up the rate of deterioration and thereby reduce the duration of the impact the pipeline (within the Blues fishing ground) could have on the fishing industry.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were closed 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active. PetroSA should ensure that this option in considered in their Final Rehabilitation and Closure Plan.
EMPr	2007_5.3	• Provide information / records as indicated in the Close-out Report column of the EMP and the model Close-out Report within 90 days of the decommissioning. • Close–out Report is to be based on requirements of the monitoring and EMP Performance Assessment. • Provide copy of report to the relevant regional office of the DME and to PASA. • Provide a copy of any video footage that was shot during the course of operations to the PASA and final seabed survey after closure. • A covering letter must formally apply for the issuance of a closure certificate from DME.	N/A	N/A	Site has not been demobilized yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were closed 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active.

The compliance evaluation of the EA is provided in Table 2. The conditions were rated according to the compliance evaluation criteria described in 6.2.

Table 2: Compliance evaluation of the relevant RoD conditions.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EA Specific Conditions					
EA	2006_7.2.1	7.2.1 The applicant must ensure that: a) The positioning of the wells, pipelines and associated infrastructure avoid any known cultural, historic and/or archaeological material. b) All operations at: the F-A platform are managed In accordance with PetroSA's integrated management system for Safety, Health, Environmental Management and Quality Control (SHEQ). c) All impacts at the F-A platform are managed and monitored according to methodologies set out in PetroSAs SHEQ environmental management programme for exploration and production activities. d) Monitoring and management measures are implemented to assist in the detection of uncontrolled releases of gas into the water column and the atmosphere,	N	2	The positioning of wells is a establishment phase requirement which falls outside the scope of this audit. Impacts at the F-A platform are managed through the separate FA EMPr. Although PetroSA has systems in place relating to SHEQ requirements no data was provided relating to certain aspects such as monitoring and management measures related to detection of uncontrolled gases - e.g. no monitoring of well head pressure or leaks at the wellbores, no monitoring of the pressures in the pipelines or integrity of the pipelines which could pose a release risk.
EA	2006_7.2.2	The applicant is responsible for monitoring of the pipelines and related infrastructure during the operational phase, especially that section of the pipeline and infrastructure located within the Blues Fishing Grounds,	N	0	The auditee noted that inspections on the subsea infrastructure are undertaken at certain intervals determined using a risk based programme . The Risk Based Sub-sea Inspection Record lists SCG sub-sea infrastructure as requiring inspection with an ROV every 5 years and as such are overdue.
EA	2006_7.2.3	On completion of the economic life of the SCG project and decommissioning of the facilities, the applicant is responsible for the removal of all "Xmas trees" and wellheads installed as part of this project,	N/A	N/A	SCG has not reached the end of its economic life and has not been decommissioned. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were shut-in 31st December 2020. ES-7 was closed in June 2016. E-AO2 was never active.
EA	2006_7.2.4	The applicant must undertake periodic monitoring (the specifics of which to be determined collectively by the Environmental Monitoring Committee) of the pipeline within the Blues Fishing Grounds after	N/A	N/A	SCG has not been demobilized / decommissioned yet. Wells have been shut-in but not decommissioned. Wells E-BA4, E-CE5, E-BB3, E-CA2 and E-AA3 were shut-

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		decommissioning the project, and take the necessary actions to mitigate adverse environmental impacts.			in 31st December 2020. ES-7 was shut-in in June 2016. E-AO2 was never active.
EA	2006_7.2.5	The mitigation measures as proposed and documented in the Environmental Impact Report, dated August 2006 prepared by CCA Environmental must be adhered to. These mitigation measures are henceforth construed as an extension of the conditions of this authorisation	N	2	While certain measures were complied with, various mitigation measures provided in the CCA EIR were not adhered to or alternatively no proof could be provided to verify adherence to these conditions in the EIR. A detailed audit of all conditions contained within the CCA EIR falls outside the scope of this audit.
EA	2006_7.2.6	Environmental Monitoring Committee (EMC) a) An EMC must be established prior to the commencement of the activity as specified and described in Section 1 of this record of decision. b) The EMC must appoint an environmental control officer (ECO) whose functions shall be to ensure compliance with: i) the condition of this Record of Decision ii) the mitigation measures recommended as part of the Environmental Impact Report dated August 2006, prepared by CCA Environmental iii) the various Environmental Management Plans and Programs applicable to the activity. c) The key functions of the EMC shall be: i) Regular and : participative monitoring and reviewing of the applicants, adherence to the conditions specified in this record of decision, ii, Regular and participative monitoring and reviewing of the relevant monitoring reports and/or data during the operation and decommissioning phases of the project. iii) Regular participative monitoring and reviewing of the applicant's performance and implementation of the mitigation measures as recommended in the Environmental Impact Report dated August 2006 prepared by CCA	N	0	No proof of EMC establishment or meetings were provided.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		Environmental. iv) Consideration of any modifications or additions to the recommended mitigation measures referred to in sub-clause (c) (iii) above. v) Informing the Department and other relevant authorities of non-compliance by the applicant with the conditions of this record of decision. vi) Promoting the participation of key stakeholders. vii) Providing a forum for discussing issues related to the South Coast Gas Project, related operations and other planned developments, and for raising, addressing and resolving concerns viii) Providing a forum for the participative monitoring and reviewing of the applicant's adherence to other relevant permits and authorisations ix) Supervision and management of the ECO. x) Reviewing the ECO's audit and inspection reports xi) Providing a forum for initiating/establishing a fund together with the fishing industry. d) The EMC must constitute (but not be limited to) the following key stakeholders; Local, provincial and national government authorities; the applicant, Non-governmental organisation, Community organisations, Representatives of civil society and Representatives from the private sector e) The EMC shall operate within a terms of reference (TOR). The EMC must compile the TOR. The TOR shall include(but is not limited to): chairmanship and/or membership duties and responsibilities frequency of meetings and reports reviewing and audit requirements frequency of providing feedback to			

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		authorities and interested and affected parties termination of the EMC			
EA	2006_7.2.7	The EMC must report to the Director-General of the Department of Environmental Affairs and Tourism on a quarter}y basis and the report must include, at the very least, the matters as described in clause 7.2.6.	N	0	No proof of EMC establishment or meetings were provided.
EA	2006_7.2.8	Environmental Management Plan (EMP) for construction phase a) The applicant is responsible for the preparation of the construction phase EMP, and submission to this Department for; approval, b) The construction phase EMP must address the relevant mitigation measures as recommended in the Environmental Impact Report, dated August 2006, prepared by CCA Environmental, and must incorporate all conditions in this environmental authorisation relevant to the construction phase. c) Compliance with the approved construction phase EMP must form part of the project documentation of all contractors working on the and must be clearly indicated on all contractors contracts, d) Any alterations or modifications to the construction phase EMP must be submitted to the Department of Environmental Affairs and Tourism (DEAT) for approval	N/A	N/A	This is a construction phase requirement and falls outside the scope of this audit.
EA	2006_7.2.9	Environmental Management Plan (EMP) for operational phase a) The applicant is responsible for the preparation of the operational phase EMP and submission to this Department for approval, prior to the operational phase. b) The operational phase EMP must address the relevant mitigation measures as recommended in the Environmental impact Report dated August 2006,	N/A	N/A	No separate operational phase EMP was provided to the auditors and there is no proof that a separate operational phase EMP was completed and submitted to the department. That said Part C of the current EMP is considered an operational phase EMP as it deals explicitly with the operational phase of the project (Gar Production Phase). The submission requirements also falls outside the audit period, so this condition is deemed Not Applicable to the current audit.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		prepared by CCA Environmental and must incorporate all conditions in this environmental authorization relevant to the operational phase, c) Compliance with the approved operational phase EMP must form part of the project documentation Of all contractors working on the project, and must be clearly indicated on all contractor's contracts, d) Any alterations or modifications to the operational phase EMP must be submitted to the DEAT for approval			
EA	2006_7.2.10	Compliance with other legislation a) Archaeological remains, artificial features and structures older than 60 years are protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any cultural, historical and/or archaeological remains be uncovered during excavation and/or during the course of developmental activities, all work must cease immediately and the applicant must notify the South African Heritage Resource Agency accordingly. Their recommendations in this regard must be adhered to by the applicant. b) The applicant is responsible for adherence to provisions of the Mine Health and Safety Act, 29 (Act No. 29 of 1996, relating to offshore operations, and any other applicable legislation.	N/A	N/A	No construction activities are applicable to or took place during the audit period
EA General Conditions					
EA	2006_7.3.1	This authorisation is granted only in terms of section 22 of the Environment Conservation Act, 73 of 1989} and does not exempt the holder thereof from compliance with any other legislation including any legislation administered by the relevant local authorities.	N/A	N/A	A detailed legal review of compliance with other applicable legislation falls outside the scope of this audit

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EA	2006_7.3.2	This authorisation refers only to the activity as specified and described in Section 1 of this record of decision, Any other activity listed under sections 24 and 24D of the National Environmental Management Act, 1998 (Act No. 107 of 1998), which is not specified above, is not covered by this authorisation, and must therefore comply with the requirements of the National Environmental Management Act, 1998 (Act No, 107 of 1998), Government Notice No. R. 385 of 21 April 2006	N/A	N/A	This is not an auditable condition. No activities beyond what is described in the ROD were undertaken.
EA	2006_7.3.3	The applicant is responsible for compliance with the provisions for Duty of Care and Remediation of Damage in accordance with Section 28 of the National Environmental Management Act, Act 107 of 1998.	Noted	Noted	A detailed legal review of compliance with other applicable legislation falls outside the scope of this audit
EA	2006_7.3.4	The applicant must, within 7 (seven) calendar days of receipt of this record of decision inform all interested and affected parties of the following: i) That an authorisation with conditions has been issued to the applicant to proceed with the construction and operation of the activity, ii) That any appeals against the Issuing of the authorisation must be lodged: with the minister of Environmental Affairs and Tourism within 30 (thirty) days from the date on which this ROD has been issued to the applicant at the address stipulated in this ROD, iii) That an appeal questionnaire may be used in the lodging of an appeal. (t is obtainable from the Departments offices at tel. (012) 310 3590 or email: cveedzeatgov.za, iv) That an appeal must include the date on which the ROD was issued to the applicant in terms of regulation 10(1) and the date by which appeals must reach the Minister.	N/A	N/A	This conditions falls outside the audit period. No construction activities are applicable to the current audit period.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EA	2006_7.3.5	Failure to inform interested and affected parties within the stipulated time period will be regarded as a breach of the ROD conditions and will be dealt with in accordance with all applicable regal mechanisms	N/A	N/A	This conditions falls outside the audit period. No construction activities are applicable to the current audit period.
EA	2006_7.3.6	One week's written notice must be given to this Department before commencement of construction activities. Such notice shall make clear reference to the site location details and reference number given above,	N/A	N/A	No construction activities are applicable to or took place during the audit period
EA	2006_7.3.7	The applicant shall be responsible for ensuring compliance with the conditions contained in this ROD by any person acting on his behalf, including but not limited to, an agent, servant or employee or any person rendering a service to the applicant in respect of the activity, including" but not limited to, contractors and consultants.	Noted	Noted	Noted by the applicant
EA	2006_7.3.8	The applicant must notify the Department in writing, within 24 (twenty four) hours if any condition of this authorisation cannot} is not, adhered to. The notification must be supplemented with reasons for noncompliance	N	0	No proof of notifications to the department within the stipulated 24-hours regarding non-compliances to the EA were provided to the auditors.
EA	2006_7.3.9	The applicant must ensure that the conditions of this authorisation are brought to the attention of the developer(s), contractor(s), subcontractors, operators and/or other relevant management or implementing body or agency.	N	2	The current operators are aware of the conditions of the EA. The only applicable subcontractor work undertaken during the audit period of specific reference to SCG would relate to the subsea ROV inspections undertaken by MDC, however no contracts with MDC were provided.
EA	2006_7.3.10	Notwithstanding clause 7.3.9 above, a copy of the authorisation, ROD and the EMP shall be available on site during construction; and all staff, contractors and subcontractors shall be familiar with, or be made aware of, the contents of this authorisation, ROD and the EMP	N/A	N/A	No construction activities are applicable to or took place during the audit period

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
EA	2006_7.3.11	Compliance/no-compliance records must be kept and shall be made available on request from the authorities within five days of receipt of the request.	Y	4	Compliance records are kept on file.
EA	2006_7.3.12	Any changes to, or deviations from, the project description set out in this letter must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations.	N/A	N/A	The project description as set out in the EA / RoD is still considered valid.
EA	2006_7.3.13	The Department may on own initiative amend this authorisation where necessary or desirable, in terms of Chapter 4, Part 2 of Government Notice No. 385 of 21 April 2006.	N/A	N/A	This is not an auditable condition.
EA	2006_7.3.14	In the event of any dispute concerning the significance of a particular impact, the opinion of the Department of Environmental Affairs and Tourism (DEAT) in respect of its significance will prevail.	N/A	N/A	This is not an auditable condition.
EA	2006_7.3.15	The applicant may at any time apply to the Department for the amendment of this authorisation in terms of Chapter 4, Part 1 of Government Notice No. R385 of 21 April 2006	N/A	N/A	This is not an auditable condition.
EA	2006_7.3.16	Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department within 10 days from when the new details become known to the applicant.	N	0	The contact persons details contained in the EA/ RoD are no longer valid and the department has not been notified of the new contact person.
EA	2006_7.3.17	National government, provincial government, local authorities or committees appointed in terms of the conditions of this application or any other public authority or authorisation shall not be held	Noted	Noted	This is not an auditable condition.

Type	Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
		responsible for any damages or losses suffered by the applicant or his successor In title In'. any Instance where construction, or operation subsequent to construction, Is temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of authorisation, as set out in this document or any Other subsequent document emanating from these conditions of authorisation.			
EA	2006_7.3.18	If any condition imposed in terms of this authorisation is not complied with, the authorisation may be withdrawn in terms of Chapter 4, Part 3 of Government Notice No. 385 of 21 April 2006.	Noted	Noted	This is not an auditable condition.
EA	2006_7.3.19	The applicant shall be responsible for all necessary costs incurred as a result of compliance with these conditions, unless otherwise specified.	Noted	Noted	This is not an auditable condition.
EA	2006_7.3.20	Any complaint from the public during construction must be acknowledged within 48 hours and action must be taken to address the complaint to the satisfaction of the parties concerned. A complaints register must be kept Lip to date and should be produced upon request.	N/A	N/A	No construction activities are applicable to or took place during the audit period.
EA	2006_7.3.21	Departmental officials shall be given access to the construction areas for the purpose of assessing and/or monitoring compliance with the conditions contained in this document at all times	N/A	N/A	No construction activities are applicable to or took place during the audit period.
EA	2006_7.3.22	All outdoor advertising associated with this activity, whether on or off the property concerned) must comply with the South African Manual for Outdoor Advertising Control (SAMOAC) available from this Department	N/A	N/A	No outdoor advertising is applicable to the project.

7.2 FINDINGS OF THE AUDIT

The key findings of the audit are presented in .

Table 3: Key audit findings.

Finding Ref #	RoD / EMPR Ref #'s	Findings	Recommendations
1	**Environmental Compliance Budget**		
	2007_1.2	It does not appear that the environmental compliance budget covers all environmental requirements and obligations within the EMPr (for example subsea inspections).	The environmental compliance budget should cover all environmental obligations in the RoD and EMP.
2	**Environmental Monitoring Committee**		
	2007_1.5 2007_5.1 2006_7.2.6 2006_7.2.7	No proof was provided that an EMC was set up and no records of EMC meetings were made available to the auditor related to the operational phase of SCG or any of PetroS's other operational areas.	An EMC for PetroSA's operational areas should be set up.
3	**ECO Appointment**		
	2007_1.6	No proof of appointment of an ECO to manage gas field operational compliance was provided.	An ECO should be appointed to manage gas field operational compliance.
4	**Jointly administered fund**		
	2007_1.8	No proof of a jointly administered fund was provided.	PetroSA should establish a fund, jointly administered by the operator and fishing industry representatives, which could contribute to various initiatives in which the fishing industry would normally be expected to play a role (e.g. research efforts).
5	**Subsea inspections**		
	2007_2.2 2007_3.3 2006_7.2.2	The RoD and EMPr require that inspection schedules should ensure ongoing inspections during establishment and operational phases. The auditee noted that inspections on the subsea infrastructure are undertaken at certain intervals determined using a risk based programme. According to the risk based programme the SCG subsea inspections are overdue. It is noted in the 2015 ROV Survey for FA Satellites and SCG infield infrastructure (MDC; 2015), that certain aspects required	Subsea inspections should be undertaken at the intervals determined in the risk based report. Where maintenance is required this should be undertaken and records kept to confirm this.

Finding Ref #	RoD / EMPR Ref #'s	Findings	Recommendations
		attention. No evidence was provided that these repairs or maintenance tasks were subsequently addressed.	
6	**Contracts with Service Provides**		
	2007_3.1 2006_7.3.9	PetroSA provided feedback that confirmed that the requirement to comply with the conditions of the EMPr were not expressly incorporated into the contracts for the vessels and helicopters service providers.	All contracts with service provides should include a requirement to adhere to the EMPr conditions.
7	**FA Platform Certifications**		
	2007_3.5	Anchor system design certification could not be provided for the FA platform. No Certificate of fitness was available for the FA platform.	Anchor chain certification and a Certificate of Fitness for the FA platform should be obtained.
8	**Produced Water Monitoring**		
	2007_3.6 2007_3.10	Following a review of available monitoring results and incident registers during the audit period a few incidents were noted where produced water was discharged above the thresholds - Incident 4773- 1st December 2017, Incident 7685-10 November 2019. No record of the produced water monitoring results were included in the February or March 2024 Monthly reports.	Produced water should be within stipulated limits and monitoring results should be included in the relevant monthly reports,
9	**Pipeline monitoring**		
	2006_7.2.1	Although PetroSA has systems in place relating to SHEQ requirements no data was provided relating to certain aspects such as monitoring and management measures related to detection of uncontrolled gases - e.g. no monitoring of well head pressure or leaks at the wellbores, no monitoring of the pressures in the pipelines or integrity of the pipelines which could pose a release risk.	Pipelines should be monitored for detection of uncontrolled gases or leaks and integrity of the pipelines should also be monitored.
10	**Notifications to Department**		
	2006_7.3.8	No proof of notifications to the department within the stipulated 24-hours regarding non-compliances to the RoD were provided to the auditors.	All non-compliances should be reported to the department within the stipulated 24 hour period.

Finding Ref #	RoD / EMPR Ref #'s	Findings	Recommendations
	2006_7.3.16	The contact persons details contained in the EA/ RoD are no longer valid and the department has not been notified of the new contact person.	The department should be notified of the current contact person.

Where applicable, recommendations presented in Table 3 above to address the key findings have been included in the recommended amendments and changes to the EMPr in Section 7.3.2.

7.3 CONTINUED ADEQUACY OF THE EMPR

The latest approved EMPr provided by PetroSA was evaluated (CCA, 2007). 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.

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 to confirm that all relevant impacts have been identified and adequately assessed, and that relevant impact management outcomes and actions are adequate.
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 4 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 4: NEMA EIA Regulations Appendix 4 Evaluation.

Requirement		Evaluation	Recommendations
NEMA Regulation 982 (2014) Appendix 4			
Appendix 4(1)(1)(a):	Details of – i. The EAP who prepared the EMPr; and ii. The expertise of that EAP to prepare an EMPr, including a curriculum vitae;	Only the EAP and company name appear in the EMPr but no expertise of the EAP is included.	The EMPr should include the expertise of the EAP, including a CV.
Appendix 4(1)(1)(b):	A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;	Included in Section 1.4.	None
Appendix 4(1)(1)(c):	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;	Layout map Included in Figure 2 however no sensitivities are included.	It is suggested that a map be provided of regional marine protected areas, and critical habitats as defined in the National Marine Spatial Biodiversity Plan.
Appendix 4(1)(1)(d):	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 though the environmental impact assessment process for all phases of the development including – i. Planning and design; ii. Pre-construction activities; iii. Construction activities; iv. Rehabilitation of the environment after construction and where applicable post closure; and v. Where relevant, operation activities;	Included in Section 2 of the EMPr.	None

Requirement		Evaluation	Recommendations
Appendix 4(1)(1)(f):	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 – i. Avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation; ii. Comply with any prescribed environmental management standards or practices; iii. Comply with any applicable provisions of the act regarding closure, where applicable; ands iv. Comply with any provisions of the Act regarding financial provisions for rehabilitation, where applicable.	Included in Section 2 of the EMPr.	None
Appendix 4(1)(1)(g):	The method of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Methods for monitoring are included in Section 2 (subsection 5) of the EMPr.	The auditing requirements in the EMPr should be amended to reflect the NEMA Regulation 34 requirements and associated transitional provisions as well as the relevant amendments to the MPRDA. Since the implementation of the one-environmental-system, there is no longer a Performance Assessment obligation under the MPRDA.
Appendix 4(1)(1)(h):	The frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Frequencies for monitoring are included in Section 2 (subsection 5) of the EMPr.	None
Appendix 4(1)(1)(i):	An indication of the persons who will be responsible for the implementation of the impact management actions.	Responsibilities for implementation are included in Section 1.3 and other relevant sections of the EMPr.	None

Requirement		Evaluation	Recommendations
Appendix 4(1)(1)(j):	The time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	Time periods are provided for the relevant management actions.	None
Appendix 4(1)(1)(k):	The mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	Monitoring mechanisms are provided for the relevant management actions.	The auditing requirements in the EMPr should be amended to reflect the NEMA Regulation 34 requirements and associated transitional provisions as well as the relevant amendments to the MPRDA. Since the implementation of the one-environmental-system, there is no longer a Performance Assessment obligation under the MPRDA.
Appendix 4(1)(1)(l):	A program for reporting on compliance, taking into account the requirements as prescribed by the Regulations;	Included in Section 5 of the EMPr.	None
Appendix 4(1)(1)(m):	An environmental awareness plan describing the manner in which – i. The applicant intends to inform his or her employees of any environmental risk which may result from their work; and ii. Risks must be dealt with in order to avoid pollution or the degradation of the environment; and	Included in Section 5 of the EMPr.	None
Appendix 4(1)(1)(n):	Any specific information that may be required by the competent authority.	It is noted that the conditions of the RoD are not explicitly captured in the EMPr. These are however audited independently and therefore do not need to be included in the EMPr.	None

7.3.1.2 AUDIT FINDINGS AND RECOMMENDATIONS

The audit findings are presented in Section 7.2. The following are specifically noted in relation to the EMPr:

- A review of the legislative references in the EMPr need to be undertaken to update the EMPr to align with current legal requirements;
- A review of the reporting requirements of the EMPr should be undertaken to align with the current operational procedures (including reporting scope and frequency).
- Where compliance with the EMPr is not reasonable or practical based on current operations, these requirements should be amended to align. Care must be undertaken to ensure that defined impact management outcomes and objectives are still achieved.

7.3.1.3 ADEQUACY OF IMPACT MANAGEMENT

This section aims to present the findings of an evaluation of the current EMPrs and the ability of the measures contained in the EMPr's 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).

It is the opinion of the auditor that in general, the EMPr is relevant and appliable to the activities and the associated impacts and risks. It is however the auditors opinion that certain activities and associated impacts are not sufficiently provided for and should be supplemented. These are detailed in Table 5. The holder must consider these shortcomings when submitting recommendations to amend the EMPr.

Table 5: Identified shortcomings.

EMPr Section	Comments	Recommendations
1.3 **3.4**	Conditions 1.3 and 3.4 of the EMPr requires implementation of an Oil spill contingency Plan (OSCP) to be implemented in the event of spills. The OSCP provided is in draft form and is outdated. This plan also relies on the oil spill drift modelling that was done for the E-BK wellfield. The E-BK wellfield is located further offshore than the FA Platform, and in the opinion of the auditor is not representative for the prediction of oil fate and relevant environmental impacts for a number of spill simulations (including worst-case scenario, such as blowout from an oil well). Consideration should be given to reviewing the risk assessment component of the OSCP and if necessary providing and more relevant Oil Spill drift model to inform the risk assessment and associated response strategies. Further the EMPr currently doesn't require approval of the OSCP.	It is suggested that a condition is added to the EMPR which requires that the OSCP aligns with South Africa's National Contingency Plan, as well as other relevant legal requirements; that risk assessment and response strategies are informed by a representative oil spill drift model; and that such is approved by the relevant authorities.
2C	The current EMPr does not address the release of Greenhouse Gases from the FA Platform and associated sub-sea infrastructure and well fields. Greenhouse Gases have been declared as priority pollutants (GN710, 2017). The National greenhouse Gas Reporting Regulations identify persons who are required to report on GHG emissions. Fugitive emissions from oil and natural gas installations are identified as data provider and need to report on these emissions.	Address the monitoring, control and reporting of GHG emissions from the FA Platform and associated infrastructure. Reference should be made to the legal GHG reporting obligations, as well as identifying opportunities for reduction of GHG emission. Such measures could include: avoiding continuous venting or flaring, use of high efficiency flares, and implementing a leak detection and repair system.
2C	It is noted that the current SCG wellfield is not in operation. Whilst the current EMPr does provide impact management outcomes or actions pertaining to well drilling and completion, the risks associated with operational phase workovers or well interventions are not specifically identified. Key risks and considerations for well workovers or intervention could include:	In the event that interventions / well workovers are likely to be undertaken in the SCG field, it is suggested that explicit provision and control for these activities be addressed in the EMPr. This could involve amending the EMPr to cater for these activities and where applicable link these activities to

EMPr Section	Comments	Recommendations
	• Well barrier verification and acceptance criteria for specific subsea interventions, to avoid unintended releases; • Management of workover/completion fluids, flowback and returns to prevent or minimize discharges to sea; and • Workover or intervention-specific monitoring, reporting and per-well environmental close-out.	existing controls contained in the EMPr (e.g. in the drilling and completion EMPr). Specific consideration should be given to the following: • Scope and activities: define intervention or workover types and update EMPr activity descriptions. • Barrier management: pre-emptive verification of existing barrier integrity. • Fluids/returns: mechanisms to manage and dispose of fluids. • Well control- including blowouts and necessary infrastructures and controls (e.g. BOP's). • Seabed integrity: pre-/post-job ROV surveys. • Navigational warnings and notices. • Monitoring and reporting.
2C	The EMPr and ROD do not include any details regarding the frequency of external audits or Performance Assessments. It is the opinion of the auditor, that there is a current obligation on PetroSA to undertake a NEMA Regulation 34 Audit (independent) on an annual basis, aligned with the stipulated performance assessment cycle.	The competent authority should be engaged to confirm the required frequency of NEMA Regulation 34 Audits for the SCG production right 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 EMPr. The EMPR provides clear mechanisms for reporting and auditing, including annual internal and external audits. It is however noted that some of the reporting requirements in the EMPr need to be reviewed/ rephrased as they still refer to 'performance assessments' and reporting to the DEA.

7.3.2 EMPR SHORTCOMINGS AND RECOMMENDATIONS

It is the auditors opinion that the 2010 EMPr does, in large part, sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. However, certain shortcomings have been identified in the preceding sections of this audit report which should be amended. It is the auditors suggestion that the holder should consider the findings of this audit and prepare recommendations for amendment to the EMPr, as provided for in Regulation 34 (4) of the EIA Regulations. Such recommendations must be subjected to a public participation process together with the amended EMPr. Recommended amendments to the EMPr are presented in Section 7.3.1.3 above.

8 CONCLUSION

EIMS was appointed to undertake the Environmental Audit to assess compliance with the conditions of the 2006 RoD and associated updated EMPr completed by CCA in 2007.

A total of 118 conditions (commitments) were identified in the EMPr. 92 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 12 were regarded as being fully compliant, 3 non-compliant and the remaining 11 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **46,15%** was obtained for the EMPr and a **weighted compliance** score of **67,31%.**

A total of 32 conditions (commitments) were identified in the RoD. 23 of these conditions were considered not applicable to the current phase of the project. Of the applicable conditions 1 was regarded as being fully compliant, 5 non-compliant and the remaining 3 as partially complaint. Utilising this scoring system, a total **straight compliance** score of **11,11%** was obtained for the RoD and a **weighted compliance** score of **27,78%.**

The Auditor also undertook an evaluation of the adequacy of the EMPr to determine the ability of the EMPr's, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. It is the auditors opinion that the 2010 EMPr does, in large part, sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis. However, certain shortcomings have been identified in the preceding sections of this audit report which should be amended. It is the auditors suggestion that the holder should consider the findings of this audit and prepare recommendations for amendment to the EMPr, as provided for in Regulation 34 (4) of the EIA Regulations. Such recommendations must be subjected to a public participation process together with the amended EMPr.

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 covers a 10-year period, which limits the feasibility of a fully comprehensive review of all activities and records. Findings are based on documentation provided by the facility, assessed on a sampled basis. The site inspection was conducted recently, and any observations informing this audit reflect current conditions only and may not represent historical site circumstances. All conclusions should therefore be interpreted in light of these constraints.
- The audit was limited to the approved 2006 RoD and associated approved 2010 EMPr for production in the SCG production area. The audit only considered compliance and EMPr adequacy in respect of current activities (i.e. care and maintenance/ operations).
- A comprehensive legal compliance audit is beyond the scope of this audit.

10 REFERENCE LIST

CCA Environmental (Pty) Ltd. (2007, January). Environmental Management Programme for the SCG Production Area.