

## 1. INTRODUCTION

This chapter describes the purpose of this report, provides a brief description of the project background, summarises the legislative authorisation requirements, and describes the structure of the report and the opportunity for comment.

### 1.1 PURPOSE OF THIS REPORT AND OPPORTUNITY TO COMMENT

This Final Environmental Impact Report (EIR) has been compiled as part of the Scoping and Environmental Impact Assessment (hereafter referred to as “EIA”) process being undertaken for Shell South Africa Upstream B.V.’s (hereafter referred to as “Shell”) proposed exploration drilling in the Orange Basin Deep Water Licence Area off the West Coast of South Africa.

This report summarises the EIA process undertaken and provides a description of the proposed project and affected environment. It also presents the findings of the specialist studies and provides an assessment of the impacts of the proposed project. The compilation of this report has been informed by comments received on the Draft EIR. It should be noted that all significant changes to the original Draft EIR are underlined and in a different font (Times New Roman) to the rest of the text.

Interested and Affected Parties (I&APs) are asked to comment on this Final EIR (see Section 1.6). All comments received will be submitted to the Department of Environmental Affairs (DEA), together with the Final EIR, for consideration and decision-making.

### 1.2 PROJECT BACKGROUND

In February 2012 Shell, a subsidiary of Royal Dutch Shell plc, obtained an exploration right for the Orange Basin Deep Water Licence Area in terms of the Mineral and Petroleum Resources Development Act, 2002 (No. 28 of 2002) (MPRDA), as amended. The licence area is approximately 37 290 km<sup>2</sup> in extent. The eastern border of the licence area is located between approximately 150 km and 300 km off the West Coast of South Africa roughly between Saldanha Bay (33°S) and Kleinzee (30°S), with water depths ranging from 500 m to 3 500 m (see Figure 1.1).

As part of the process of applying for the exploration right, an Environmental Management Programme (EMPr) was compiled and approved for the undertaking of seismic surveys and exploration drilling within the licence area. Shell subsequently undertook a 3D seismic survey in an 8 000 km<sup>2</sup> portion of the licence area, which was completed on 22 February 2013.

Based on analysis of the seismic data, Shell proposes to drill one or possibly two exploration wells in the northern portion of the licence area (see Figure 1.1) in order to determine whether identified geological structures or “prospects” contain oil or gas in potentially commercial extractable amounts.

### 1.3 AUTHORISATION REQUIREMENTS

The proposed exploration drilling programme requires authorisation in terms of both the MPRDA and the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA), as amended. These two regulatory processes are summarised below and presented in more detail in Chapter 2.

In terms of Section 102 of the MPRDA, Shell is required to compile an EMPr Addendum to take account of any changes in the project scope on which the current approved exploration right work programme is based, and submit it to the Petroleum Agency of South Africa (PASA) for consideration and approval by the Minister of Mineral Resources (or the delegated authority).

The Environmental Impact Assessment (EIA) Regulations 2010<sup>1</sup>, promulgated in terms of Chapter 5 of NEMA, require that environmental authorisation is obtained from the competent authority (namely DEA) to carry out the proposed exploration drilling programme. In order for DEA to consider the application for authorisation an EIA process must be undertaken.

CCA Environmental (Pty) Ltd (CCA), in association with NMA Effective Social Strategists (Pty) Ltd (NMA), has been appointed by Shell to compile the EMPr Addendum and to undertake the EIA process. CCA is responsible for managing and undertaking the EMPr Addendum and EIA processes, while NMA is responsible for managing the associated public participation process.

In order to avoid duplication, where possible, the NEMA and MPRDA processes have been combined and undertaken in parallel.

## 1.4 TERMS OF REFERENCE

The terms of reference for the proposed project are as follows:

1. To compile an EMPr Addendum in order to meet the requirements of Section 39 and Regulation 52 of the MPRDA;
2. To undertake the EIA for the proposed exploration drilling in the Orange Basin Deep Water Licence Area in accordance with the EIA Regulations 2010 promulgated in terms of Sections 24(5), 24M and 44 of NEMA; and
3. To combine the NEMA and MPRDA processes, where possible, in order to avoid duplication but meet the legal requirements of both Acts.

## 1.5 STRUCTURE OF THIS REPORT

This report consists of eight chapters and four appendices, the contents of which are outlined below.

Section	Contents
Executive Summary	Provides a summary of the Final EIR.
Chapter 1	<b>Introduction</b> Describes the purpose of this report, provides a brief description of the project background, summarises the legislative authorisation requirements, presents the terms of reference of the study, and describes the structure of the report and the opportunity for comment.
Chapter 2	<b>Legislative requirements and study process</b> Outlines the key legislative requirements applicable to the proposed exploration drilling programme and outlines the EIA methodology and I&AP consultation process followed in the study.
Chapter 3	<b>Project description</b> Describes the need and desirability for the proposed project, provides general project information, an overview of the proposed exploration drilling programme and a description of the project alternatives.

<sup>1</sup> Note: The EIA Regulations 2010 have subsequently been replaced by the EIA Regulations 2014. The EIA Regulations 2014, however, make provision for transitional arrangements in order to accommodate applications submitted in terms of the previous regulations. Further details of the transitional arrangements are presented in Section 2.1.3.

Section	Contents
Chapter 4	<b>Description of the affected environment</b> Describes the existing biophysical and social environment that could potentially be affected by the proposed project.
Chapter 5	<b>Impact description and assessment</b> Describes and assesses the potential impacts of the proposed project on the affected environment. It also presents mitigation or optimisation measures that could be used to reduce the significance of any negative impacts or enhance any benefits, respectively.
Chapter 6	<b>Conclusion and recommendations</b> Provides conclusions to the EIA and summarises the recommendations for the proposed project.
Chapter 7	<b>Environmental Management Programme for well drilling</b> Provides an Environmental Management Programme for the proposed exploration drilling activities.
Chapter 8	<b>References</b> Provides a list of the references used in compiling this report.
Appendices	<p>Appendix 1: DEA's acceptance of the FSR</p> <p>Appendix 2: Public Participation Process:</p> <p>Appendix 2.1: I&amp;AP database</p> <p>Appendix 2.2: Written comments received on the FSR</p> <p><u>Appendix 2.3: Notification letters</u></p> <p><u>Appendix 2.4: Advertisements</u></p> <p><u>Appendix 2.5: Notices</u></p> <p><u>Appendix 2.6: Notes of authority meetings</u></p> <p><u>Appendix 2.7: Public Open Day photographs and posters</u></p> <p><u>Appendix 2.8: Notes of Information-feedback meetings</u></p> <p><u>Appendix 2.9: Written comments received on the Draft EIR</u></p> <p><u>Appendix 2.10: Issues and Responses Report</u></p> <p>Appendix 3: Specialist studies</p> <p>Appendix 3.1: Convention for assigning significance ratings to impacts</p> <p>Appendix 3.2: Cuttings and oil spill modelling</p> <p>Appendix 3.3: Fishing Industry Assessment</p> <p>Appendix 3.4: Marine Faunal Assessment</p> <p>Appendix 4: Undertaking by the applicant</p>

## 1.6 OPPORTUNITY TO COMMENT

This Final EIR has been distributed for a 30-day comment period from from **12 June to 13 July 2015** (which makes provision for the public holiday on 16 June) in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the EIA process. Copies of the full report have been made available on the CCA website ([www.ccaenvironmental.co.za](http://www.ccaenvironmental.co.za)) and at the following locations:

<u>Location</u>	<u>Name of Facility</u>	<u>Physical Address</u>
<u>Cape Town</u>	<u>Cape Town Central Library</u>	<u>Drill Hall, Darling Street, Cape Town</u>
<u>Vredenburg</u>	<u>Vredenburg Library</u>	<u>2 Akademie Street, Louwville, Vredenburg</u>
<u>Saldanha Bay</u>	<u>Saldanha Library</u>	<u>Berg Street, Saldanha</u>
<u>Lamberts Bay</u>	<u>Lamberts Bay Library</u>	<u>Church Street, Lamberts Bay</u>
<u>Kleinsee</u>	<u>Kleinsee Tourism Information Centre</u>	<u>1-3rd Street, Kleinsee</u>
<u>Springbok</u>	<u>Matjieskloof Library</u>	<u>Brisson Street, Matjieskloof, Springbok</u>
<u>Springbok</u>	<u>Moberg Library</u>	<u>Tempel Street, Bergsig, Springbok</u>
<u>Springbok</u>	<u>Springbok Library</u>	<u>Namakwa Street, Springbok</u>
<u>Port Nolloth</u>	<u>AJ Bekeur Library</u>	<u>Robson Street, Port Nolloth</u>

Any comments on the Final EIR should be forwarded directly to DEA and copied to NMA by **no later than 13 July 2014**. Contact details of both DEA and NMA are presented below.

Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Private Bag X447

PRETORIA, 0001

Tel: (012) 399 9399

E-mail: vchauke@environment.gov.za

Attention: Mr Vincent Chauke

DEA Reference: 14/12/16/3/3/2/704

NMA Effective Social Strategists (Pty) Ltd

PO BOX 32097

BRAAMFONTEIN, 2107

Tel: (011) 447 9737

Fax: 086 601 0381

E-mail: nomim@nma.org.za

Attention: Nomi Muthialu

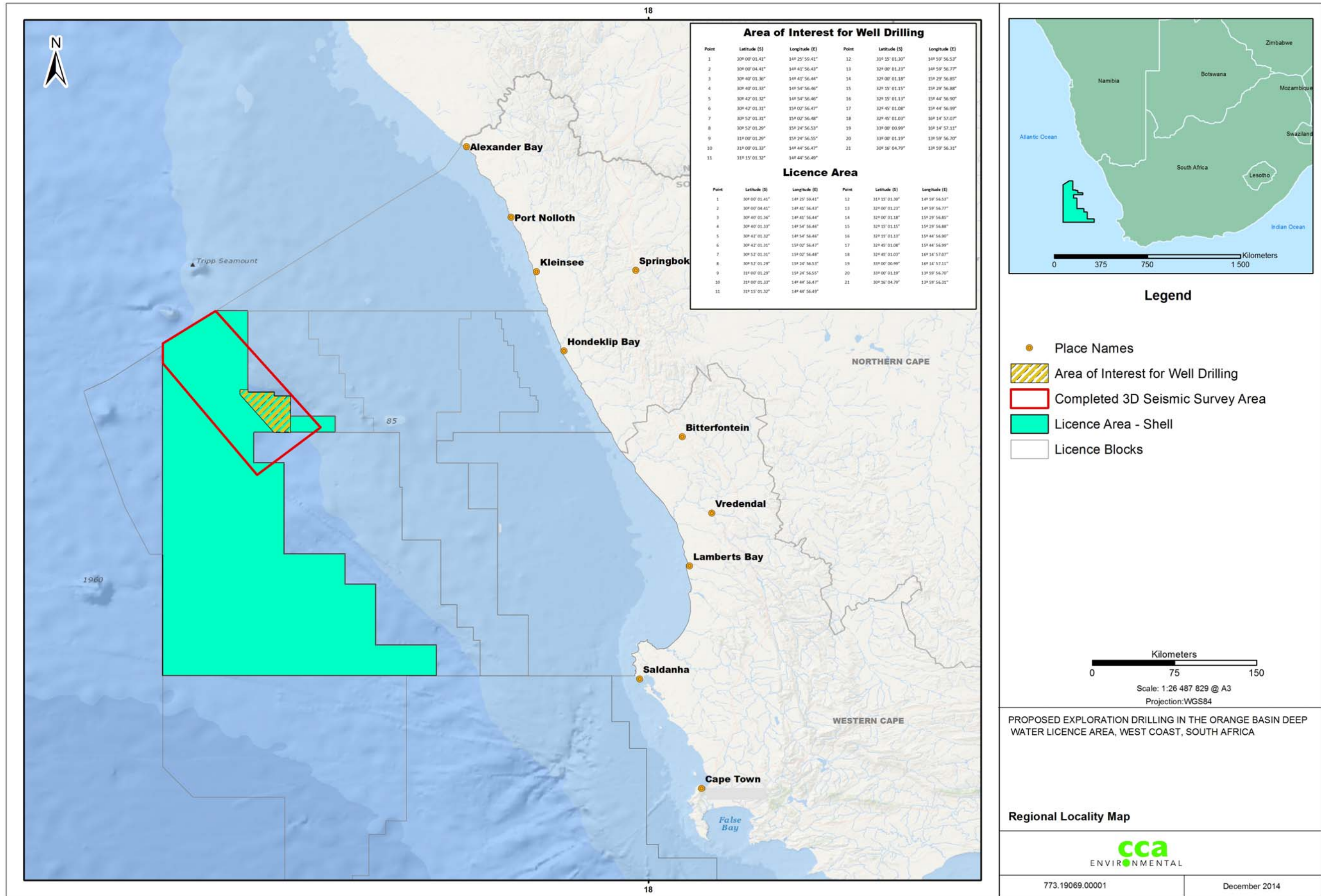


Figure 1.1: Regional locality map of the Orange Basin Deep Water Licence Area off the West Coast of South Africa. The 2012/2013 seismic survey area and proposed area of interest for well drilling are also shown.

## **2. LEGISLATIVE REQUIREMENTS AND EIA PROCESS**

This chapter outlines the key legislative requirements applicable to the proposed well drilling programme and outlines the methodology and I&AP consultation process followed in the EIA.

### **2.1 LEGISLATIVE REQUIREMENTS**

#### **2.1.1 OVERVIEW OF THE “ONE ENVIRONMENTAL SYSTEM”**

In 2007 / 2008, DEA and the Department of Mineral Resources (DMR) agreed that environmental regulation would be removed from the scope of the MPRDA and would be regulated under NEMA, which will give rise to a “One Environmental System” for the country relating to mining and related activities. The implementation of this was given effect by the National Environmental Management Amendment Act, 2008 (No. 62 of 2008) (NEMAA) and the Mineral and Petroleum Resources Development Amendment Act, 2008 (No. 49 of 2008) (MPRDAA) (Webber Wentzel 2014).

In terms of Section 14(2) of the NEMAA, any provision relating to prospecting, mining, exploration and production would only come into operation on a date 18 months after the date of commencement of Section 2 of NEMAA or the MPRDAA, whichever is the later. As the MPRDAA was the later enactment coming into effect on 7 June 2013, any provision relating to prospecting, mining, exploration and production and related activities would come into effect on 8 December 2014. This meant that the requirement for both an EMPr under the MPRDA and an environmental authorisation under NEMA for triggered listed activities were to remain in place until 8 December 2014.

The 18 month period was, however, deleted by the promulgation of the National Environmental Management Laws Amendment Act, 2014 (No. 25 of 2014) (NEMLA 3) on 2 September 2014. Thus any provision relating to prospecting, mining, exploration and production and related activities in NEMAA also effectively came into effect on this date. However, as the effective implementation of the “One Environmental System” was dependent on various related regulations being in place, DEA issued a media statement on 3 September 2014 in which it stated that the South African Government had taken a decision to only implement the “One Environmental System” from 8 December 2014, when the whole suite of legislation and subordinate legislation necessary for the implementation of the “One Environmental System” is in effect.

The “One Environmental System” is now in place. Notwithstanding this, both NEMAA and NEMLA 3 make provision for transitional arrangements in order to accommodate applications submitted to the competent authority before 8 December 2014. These provisions are as follows:

- In terms of Section 12(2) of NEMAA, an application for authorisation that is submitted in terms of Chapter 5 of NEMA and that is pending when NEMAA comes into effect must, despite the amendment of NEMA, be dispensed with in terms of Chapter 5 of NEMA as if Chapter 5 had not been amended; and
- In terms of Section 26 of NEMLA 3, an application for an Exploration Right in terms of the MPRDA that is pending when MPRDAA comes into effect must be dispensed with as if MPRDA had not been amended.

Thus, applications for an exploration right under the MPRDA and environmental authorisation under NEMA will continue as previously undertaken.

### 2.1.2 MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002

In terms of the MPRDA, an exploration right must be approved prior to the commencement of an exploration activity. A requirement of obtaining an exploration right is that an EMP<sup>2</sup> must be compiled in terms of Section 39 of the MPRDA and submitted to PASA for consideration and approval by the Minister of Mineral Resources (or the delegated authority). As noted earlier, an exploration right was issued for the Orange Basin Deep Water Licence Area in February 2012 and an EMP has been approved for the undertaking of seismic surveys and exploration drilling within the licence area.

Since the approved EMP provided a generic description of exploration drilling and an area of interest within the licence Area had not been identified, PASA requested that that the existing approved EMP be amended to take account of any changes in the project scope on which the current approved exploration right work programme is based. In terms of Section 102 of the MPRDA, an EMP may be amended with the written consent of the Minister (or the delegated authority). Thus an EMP Addendum is required for the proposed exploration drilling programme in terms of Section 102 of the MPRDA in order to meet the requirements of Section 39 and Regulation 52 of the said Act.

In terms of Section 39(3)<sup>3</sup> of the MPRDA an EMP must:

- (a) Establish baseline information concerning the affected environment to determine protection, remedial measures and environmental management objectives;
- (b) Investigate, assess and evaluate the impact of the proposed project on:
  - (i) The environment; and
  - (iii) Any national estate referred to in Section 3(2) of the National Heritage Resources Act, 1999 (No. 25 of 1999), with the exception of the national estate contemplated in Section 3(2)(i)(vi) and (vii) of that Act.
- (d) Describe the manner in which the Applicant intends to:
  - (i) Modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;
  - (ii) Contain or remedy the cause of pollution or degradation and migration of pollutants; and
  - (iii) Comply with any prescribed waste standard or management or practices.

In terms of Regulation 52(2) of the MPRDA an EMP must include the following:

- (a) A description of the environment likely to be affected by the proposed exploration;
- (b) An assessment of the potential impacts of the proposed exploration on the environment, socio-economic conditions and cultural heritage, if any;
- (c) A summary of the assessment of the significance of the potential impacts, and the proposed mitigation and management measures to minimise adverse impacts and benefits;
- (d) Financial provision;
- (e) Planned monitoring and performance assessment of the EMP;
- (f) Closure and environmental objectives;
- (g) A record of the public participation process undertaken and the results thereof; and
- (h) An undertaking by the Applicant regarding the execution of the EMP.

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<sup>2</sup> In terms of Section 79(4)(b) of the MPRDA an Environmental Management Programme is a requirement for an Exploration Right. However, in terms of Section 69(2)(vii) "prospecting rights must be construed as reference to exploration rights" and a prospecting right requires an Environmental Management Plan in terms of Section 16(4)(a). Although the EMP will be referred to as a Programme, it will include the contents of a Plan.

<sup>3</sup> Section 39(7) states that "the provisions of subsection (3)(b)(ii) and subsection (3)(c) do not apply to the applications for reconnaissance permissions, prospecting rights or mining permits." Since "prospecting rights must be construed as reference to exploration rights" (in terms of Section 69(2)(vii)), these sections are not applicable to the amendment application.

### 2.1.3 NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998

Section 2 of NEMA sets out a range of environmental principles that are to be applied by all organs of state when taking decisions that significantly affect the environment. Included amongst the key principles is that all development must be socially, economically and environmentally sustainable and that environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. NEMA also provides for the participation of I&APs and stipulates that decisions must take into account the interests, needs and values of all I&APs.

Chapter 5 of NEMA outlines the general objectives and implementation of Integrated Environmental Management (IEM), which provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals. Section 24 provides a framework for granting of environmental authorisations. In order to give effect to the general objectives of IEM, the potential impacts on the environment of listed activities must be considered, investigated, assessed and reported on to the competent authority. Section 24(4) provides the minimum requirements for procedures for the investigation, assessment and communication of the potential impact of activities.

The EIA Regulations 2010 promulgated in terms of Chapter 5 of NEMA, and published in Government Notice (GN) No. R543, provides for the control of certain listed activities. These activities are listed in GN No. R544 (Listing Notice 1), R545 (Listing Notice 2) and R546 (Listing Notice 3) of 18 June 2010, and are prohibited until environmental authorisation has been obtained from the competent authority, in this case DEA<sup>4</sup>. Such environmental authorisation, which may be granted subject to conditions, will only be considered once there has been compliance with GN No. R543.

GN No. R543 sets out the procedures and documentation that need to be complied with when applying for environmental authorisation. A *Basic Assessment* process must be applied to an application if the authorisation applied for is in respect of an activity(ies) listed in GN No. R544 and / or R546 and an *EIA* process must be applied to an application if the authorisation applied for is in respect of an activity(ies) listed in GN No. R545. The proposed project includes activities contained in both Listing Notice 1 and 2 (see Table 2.1), thus a full EIA process must be undertaken in order for DEA to consider the application in terms of NEMA.

It should be noted that subsequent to the commencement of the EIA in terms of the EIA Regulations 2010, the regulations have been replaced by the EIA Regulations 2014, which were published on 4 December 2014 and came into effect on 8 December 2014. The EIA Regulations 2014, however, make provision for transitional arrangements in order to accommodate applications submitted in terms of the previous regulations and which are pending when the EIA Regulations 2014 took effect, despite the repeal of the previous regulations. Such applications must in terms of Regulation 53(1), be dispensed with in terms of the EIA Regulations 2010, as if these regulations had not been repealed. In addition, in terms of Regulation 53(3) where an application is pending and new activities are now applicable under the EIA Regulations 2014, these must be dispensed with in terms of the previous regulations on condition that all impacts associated with the newly identified activities have also been considered and adequately assessed.

Listed activities in terms of the EIA Regulations 2014 applicable to the proposed exploration drilling programme are presented in Table 2.2. All the potential impacts associated with the newly listed activities have been considered and adequately assessed in this EIA.

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<sup>4</sup> DEA is the competent authority since the proposed project occurs offshore within the State-controlled Exclusive Economic Zone (EEZ) and the offshore EEZ does not fall within the borders of any province of South Africa, as set out in the Constitution.



In terms of Regulation 26(d)(i) an environmental authorisation can be issued for a period of up to 10 years. Since drilling would potentially only occur in Shell's second (2017 - 2018) or third (2019 – 2020) exploration right renewal period, Shell is requesting that environmental authorisation (should it be granted) be issued and remain valid for a period of five years or more.

**Table 2.1: List of applicable activities in terms of Listing Notice 1 and 2.**

Activity No.	Activity Description	Description of activity in relation to the proposed project
<b>GN No. R544: Listing Notice 1</b>		
13	<i>The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 m<sup>3</sup> but not exceeding 500 m<sup>3</sup>.</i>	The proposed drilling operation would make use of infrastructure which would handle and potentially store oil, gas and/or fuel (diesel). Information on the anticipated storage capacity for these substances is currently not available; thus this activity is included to provide for a situation where storage capacity exceeds 80 m <sup>3</sup> but falls below 500 m <sup>3</sup> .  Refer to Section 3.3 for a detailed description of the proposed exploration drilling programme including, <i>inter alia</i> , drilling unit options, drilling equipment and procedure and onshore support infrastructure.
16	<i>Construction or earth moving activities in the sea, ... in respect of:</i> <i>(iv) ... stabilising structures including stabilising walls; ...</i> [Note: Activity 16(vi) is not considered applicable as the wellheads and associated guide bases would not have a footprint of 50 m <sup>2</sup> or more].	Components of drilling infrastructure (particularly the pipes / casings inside the wellbore) may be viewed as stabilising structures.  Refer to Section 3.3.3.3 for a description of the proposed well drilling procedure, including the installation of pipe casings in the wellbore.
18	<i>The infilling or depositing of any material of more than 5 m<sup>3</sup> into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 m<sup>3</sup> from:</i> <i>(ii) the sea; ...</i>	The proposed exploration well drilling and appraisal programme would result in various forms of disturbance to the seafloor that would result in more than 5 m <sup>3</sup> of sediment being disturbed. Disturbance would be from: <ul style="list-style-type: none"> <li>• Placement of equipment on the seafloor;</li> <li>• Drilling the well and removal of rock cuttings, sediment and drill core; and</li> <li>• Disposal of drill cuttings.</li> </ul> Refer to Section 3.3.3.6 for the anticipated well design and cuttings volumes and Section 3.3.9.2 for drilling cuttings discharge to sea.
<b>GN No. R545: Listing Notice 2</b>		
3	<i>The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 m<sup>3</sup>.</i>	The proposed drilling operation would make use of infrastructure which would handle and potentially store oil, gas and/or fuel (diesel). Information on the anticipated storage capacity for these substances is currently not available; thus this activity is included to provide for a situation where storage capacity exceeds 500 m <sup>3</sup> .  Refer to Section 3.3.2 for a description of the proposed drilling unit options and Section 3.3.3.3 for a description of the proposed pipe casings, which would effectively store or handle hydrocarbons.

Activity No.	Activity Description	Description of activity in relation to the proposed project
4	<i>The construction of facilities or infrastructure for the refining, extraction or processing of gas, oil or petroleum products with an installed capacity of 50 m<sup>3</sup> or more per day, ...</i>	The proposed project would result in the extraction of rock particles (termed "cuttings") which may contain traces of hydrocarbons. Furthermore, if hydrocarbons are encountered during the drilling operation, the well would be flow-tested. The infrastructure that would be established for these activities would have a design throughput exceeding 50 m <sup>3</sup> per day. Refer to Section 3.3.3.3 for a description of the proposed drilling procedure, including the extraction of cuttings and Section 3.3.6 for a description of well (flow) testing.
6	<i>The construction of facilities or infrastructure for the bulk transportation of dangerous goods: (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity more than 50 m<sup>3</sup> per day;</i>	The proposed project would make use of drilling infrastructure (e.g. pipes, casings, etc.) which would extract oil and/or gas for testing on the drilling unit. Due to the anticipated depth of the proposed wells, this infrastructure would exceed 1 000 m in length. The designed throughput capacity of this infrastructure could exceed the thresholds specified in the listed activity. Refer to Section 3.3.3.3 for a description of the proposed pipe casings, which would effectively transport hydrocarbons to the drilling unit.
14	<i>The construction of an ..., anchored platform or any other permanent structure on or along the seabed,...</i>	The proposed drilling operations would result in the placement of equipment (i.e. a wellhead) on the seabed. During well abandonment the wellhead(s) may either remain on or be removed from the seafloor. The preferred option would be to decommission the wellhead(s) and leave them on the seafloor. Refer to Section 3.3.3.3 for a description of well drilling procedure, including the installation of wellheads, which may be abandoned on the seafloor, and pipe casings, which would be abandoned in the wellbore.
Note: Prior to 8 December 2014, Activity 21 in GN No. R545 (Listing Notice 2) relating to "any activity which requires an Exploration Right or renewal thereof" in terms of the MPRDA had not come into force (see Section 2.1.1). Since GN No. R545 has been repealed by the promulgation of the EIA Regulations 2014, this activity is no longer applicable.		

Table 2.2: List of applicable activities in terms of the EIA Regulations 2014.

Activity No.	Activity Description	Description of activity in relation to the proposed project
<b>Listing Notice 1 (GN No. R983)</b>		
14	<i>The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 m<sup>3</sup> or more but not exceeding 500 m<sup>3</sup>.</i>	This activity is similar to Activity 13 in GN No. R544 (see Table 2.1).
22	<i>The decommissioning of any activity requiring: (i) a closure certificate in terms of Section 43 of the MPRDA; or (ii) a ... exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure.</i>	In terms of Section 43(3) of the MPRDA, a closure certificate must be applied for upon, <i>inter alia</i> : <ul style="list-style-type: none"> <li>the lapsing of an Exploration Right; or</li> <li>the relinquishment of any portion of the licence area.</li> </ul> Based on the results of the exploration drilling programme, a decision would be made as to whether to suspend or abandon the wells. The possible abandonment of wells may result in a decision by Shell to relinquish the licence area or a portion thereof. Refer to Section 3.3.7 for a description of well suspension and abandonment.

Activity No.	Activity Description	Description of activity in relation to the proposed project
<b>Listing Notice 2 (GN No. R984)</b>		
4	<i>The development of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 m<sup>3</sup>.</i>	This activity is similar to Activity 3 in GN No. R545 (see Table 2.1).
7	<i>The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods:</i> <i>(i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity more than 700 tons per day;</i> <i>(ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity more than 50 m<sup>3</sup> per day; ..</i>	This activity is similar to Activity 6 in GN No. R545 (see Table 2.1)
14	<i>The development and related operation of:</i> <i>(ii) anchored platform; or</i> <i>(iii) any other permanent structure on or along the sea bed...</i>	This activity is similar to Activity 14 in GN No. R545 (see Table 2.1)
18	<i>Any activity including the operation of that activity which requires an exploration right as contemplated in Section 79 of the MPRDA, including associated infrastructure, structures and earthworks.</i>	The proposed exploration well drilling programme requires an Exploration Right. Refer to Section 3.3 for a detailed description of the proposed exploration drilling programme including, <i>inter alia</i> , drilling unit options, drilling equipment and procedure and onshore support infrastructure.
22	<i>Any activity including the operation of that activity associated with the primary processing of a petroleum resource including winning, extraction, classifying, concentrating, water removal, but excluding the refining of gas, oil or petroleum products in which case activity 5 in this Notice applies.</i> [Note: No hydrocarbon products would be refined, thus Activity 5 is not applicable].	This activity is similar to Activity 4 in GN No. R545 (see Table 2.1). The proposed project would result in the extraction of rock particles (termed "cuttings") which may contain traces of oil and gas. Furthermore, if hydrocarbons are encountered during the drilling operation, the well would be flow-tested. Refer to Section 3.3.3.3 for a description of the proposed drilling procedure, including the extraction of cuttings, and Section 3.3.6 for a description of well (flow) testing.

#### 2.1.4 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008

The National Environmental Management: Waste Act, 2008 (No. 59 of 2008) (NEM:WA) regulates all aspects of waste management and has an emphasis on waste avoidance and minimisation. NEM:WA creates a system for listing and licensing waste management activities. Listed waste management activities above certain thresholds are subject to a process of impact assessment and licensing. Activities listed in Category A require a Basic Assessment, while activities listed in Category B require an EIA.

DEA has indicated that NEM:WA is not applicable to offshore oil and gas operations. The proposed onshore activities at the logistics base would not trigger the need for a Waste Management Licence.

### 2.1.5 NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004

The National Environmental Management: Air Quality Act, 2004 (No. 39 of 2004) (NEM:AQA) regulates all aspects of air quality, including prevention of pollution, providing for national norms and standards and including a requirement for an Atmospheric Emissions Licence for listed activities, which result in atmospheric emissions and have or may have a significant detrimental effect on the environment. Activities that require an Atmospheric Emission Licence are listed in GN No. 893 (22 November 2013), published in terms of Section 21(1)(b) of the NEM:AQA. In terms of Section 22 of NEM:AQA no person may conduct a listed activity without an Atmospheric Emission Licence.

Although DEA: Air Quality Management Services has indicated that the offshore incineration of waste is a listed activity (Category 8.1) and requires an Atmospheric Emission Licence, Shell has indicated that they would bring all waste to shore for disposal. Thus no offshore incineration of waste would be undertaken as part of the proposed project.

### 2.1.6 OTHER RELEVANT LEGISLATION

In addition to the foregoing, Shell must also comply with the provisions of other relevant conventions and legislation, which includes, amongst other, the following:

#### International Marine Pollution Conventions

- International Convention for the Prevention of Pollution from Ships, 1973/1978 (MARPOL);
- Amendment of the International Convention for the Prevention of Pollution from Ships, 1973/1978 (MARPOL) (Bulletin 567 – 2/08);
- International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention);
- United Nations Convention on Law of the Sea, 1982 (UNCLOS);
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (the London Convention) and the 1996 Protocol (the Protocol);
- International Convention relating to Intervention on the High Seas in case of Oil Pollution Casualties (1969) and Protocol on the Intervention on the High Seas in Cases of Marine Pollution by substances other than oil (1973);
- Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal (1989); and
- Convention on Biological Diversity (1992).

#### Other International Legislation

- International Commission on Radiological Protection (ICRC);
- International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material, 1984;

#### Other South African legislation

- Carriage of Goods by Sea Act, 1986 (No. 1 of 1986);
- Dumping at Sea Control Act, 1980(No. 73 of 1980);
- Hazardous Substances Act, 1983 and Regulations (No. 85 of 1983);
- Marine Living Resources Act, 1998 (No. 18 of 1998);
- Marine Traffic Act, 1981 (No. 2 of 1981);
- Marine Pollution (Control and Civil Liability) Act, 1981 (No. 6 of 1981);
- Marine Pollution (Prevention of Pollution from Ships) Act, 1986 (No. 2 of 1986);
- Marine Pollution (Intervention) Act, 1987 (No. 65 of 1987);
- Maritime Safety Authority Act, 1998 (No. 5 of 1998);

- Maritime Safety Authority Levies Act, 1998 (No. 6 of 1998);
- Maritime Zones Act 1994 (No. 15 of 1994);
- Merchant Shipping Act, 1951 (No. 57 of 1951);
- Mine Health and Safety Act, 1996 (No. 29 of 1996);
- National Environmental Management: Biodiversity Act, 2004 (No. 10 of 2004);
- National Environmental Management: Integrated Coastal Management Act, 2008 (No. 24 of 2008);
- National Heritage Resources Act, 1999 (No. 25 of 1999);
- National Nuclear Energy Regulator Act, 1999 (No. 47 of 1999);
- National Ports Act, 2005 (No. 12 of 2005);
- National Water Act, 1998 (No. 36 of 1998);
- Nuclear Energy Act, 1999 (No. 46 of 1999);
- Occupational Health and Safety Act, 1993 (No. 85 of 1993) and Major Hazard Installation Regulations;
- Sea-Shore Act, 1935 (No. 21 of 1935);
- Sea Birds and Seals Protection Act, 1973 (No. 46 of 1973);
- Ship Registration Act, 1998 (No. 58 of 1998);
- South African Maritime Safety Authority Act, 1998 (No. 5 of 1998);
- South African Maritime Safety Authority Levies Act, 1998 (No. 6 of 1998); and
- Wreck and Salvage Act, 1995 (No. 94 of 1995).

### 2.1.7 GUIDELINES AND POLICIES

The guidelines and policies listed in Table 2.3 were taken into account during the EIA.

**Table 2.3: Guidelines and policies relevant to the proposed project.**

Guideline	Governing body	Applicability
IEM Guideline Series (Guideline 5): Companion to the EIA Regulations 2010 (October 2012)	DEA	This guideline was consulted to inform the applicability of listed activities to the proposed project.
Scoping, Integrated Environmental Management, Information Series 2 (2002)	DEA	This guideline was consulted to obtain guidance on how to implement scoping.
IEM Guideline Series (Guideline 9): Draft guideline on need and desirability in terms of the EIA Regulations 2010 (October 2012)	DEA	This guideline was consulted to inform the need and desirability of the proposed project.
Stakeholder Engagement, Integrated Environmental Management, Information Series 3 (2002)	DEA	The public participation guidelines were consulted to ensure that an adequate public participation process is undertaken.
IEM Guideline Series (Guideline 7): Public participation in the EIA process (October 2012)		
Guidelines – Consultation with I&APs (December 2011)	PASA	
Specialist Studies, Integrated Environmental Management, Information Series 4 (2002)	DEA	This guideline was consulted to ensure adequate development of terms of reference for specialist studies.
Impact significance, Integrated Environmental Management, Information Series 5 (2002)	DEA	This guideline was consulted to inform the assessment of significance of impacts of the proposed project.
Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7 (2004)	DEA	This guideline was consulted to inform the consideration of potential cumulative effects of the proposed project.
Criteria for determining Alternatives in EIA, Integrated Environmental Management, Information Series 11 (2004)	DEA	This guideline was consulted to inform the consideration of alternatives.

<b>Guideline</b>	<b>Governing body</b>	<b>Applicability</b>
Environmental Management Plans, Integrated Environmental Management, Information Series 12 (2004)	DEA	This guideline was consulted to ensure that the Environmental Management Programme has been adequately compiled.
Environmental Impact Reporting, Integrated Environmental Management, Information Series 15 (2004)	DEA	This guideline was consulted to inform the approach to impact reporting.

## **2.2 EIA PROCESS**

### **2.2.1 EIA OBJECTIVES**

The EIA process has the following important objectives:

- To dovetail the processes required in terms of NEMA and MPRDA;
- To provide a reasonable opportunity for I&APs to be involved in the study;
- To ensure that all potential key environmental issues and impacts that would result from the proposed project are identified;
- To identify feasible alternatives related to the project proposal;
- To assess potential impacts of the proposed project alternatives during the different phases of project development;
- To present appropriate mitigation or optimisation measures to minimise potential impacts or enhance potential benefits, respectively; and
- Through the above, to ensure informed, transparent and accountable decision-making by the relevant authorities.

The EIA process consists of a series of steps to ensure compliance with these objectives and the EIA Regulations 2010 as set out in GN No. R543. The process involves an open, participatory approach to ensure that all impacts are identified and assessed, and that decision-making takes place in an informed, transparent and accountable manner.

### **2.2.2 ASSUMPTIONS AND LIMITATIONS**

The EIA assumptions and limitations are listed below:

- The EIA assumes that CCA has been provided with all relevant project information and that it was correct and valid at the time it was provided;
- Specialists have been provided with all the relevant project information in order to produce accurate and unbiased assessments;
- There will be no significant changes to the project description or surrounding environment between the completion of the Final EIR and implementation of the proposed project that could substantially influence findings, recommendations with respect to mitigation and management, etc.; and
- Certain details regarding the proposed well drilling programme were not available at the time of report writing, e.g. the actual specific locations of the wells, drilling unit / vessels to be used, exact timing of well drilling, etc.).

These assumptions and limitations, however, are not considered to have any negative implications in terms of the credibility of the results of the EIA or the required management actions included in this report.

### **2.2.3 EIA PROCESS**

A flowchart indicating the EIA process (including EMPr addendum process) is presented in Figure 2.1.

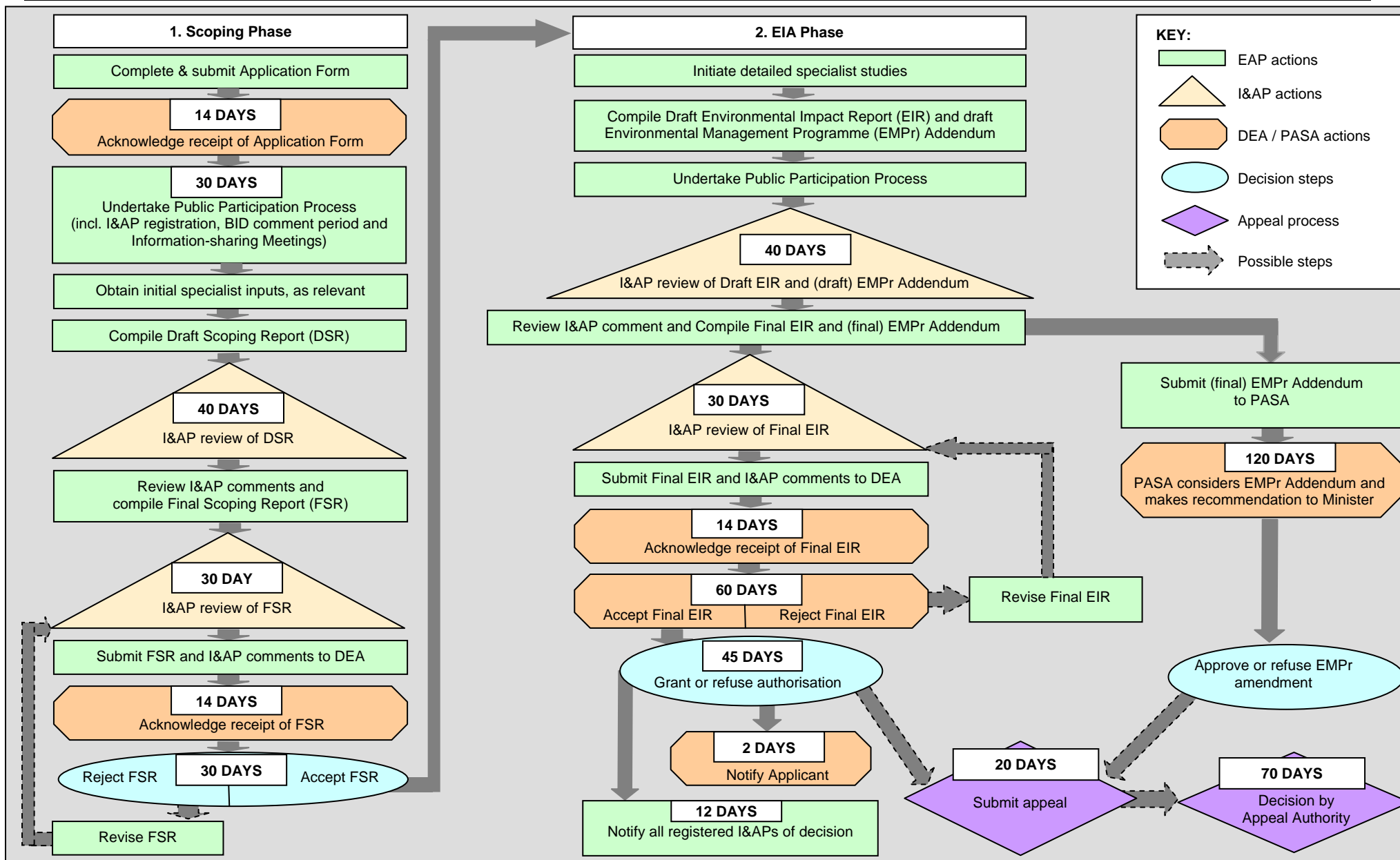


Figure 2.1: Flow diagram showing the EIA process (including EMPr addendum process).

### 2.2.3.1 Scoping Phase

The Scoping Phase undertaken complied with the requirements of NEMA and the EIA Regulations 2010, as set out in GN No. R543. This involved a process of notifying I&APs of the proposed project and EIA process in order to ensure that all potential key environmental impacts, including those requiring further investigation, were identified. Steps undertaken during this phase are summarised in Box 2.1.

The key issues and concerns identified by the project team, with I&AP input, during the Scoping Phase are summarised in Figure 2.2. This information provided the basis on which the specialist studies and associated terms of references were determined.

The Final Scoping Report (FSR), which was prepared in compliance with Section 28(1) of the EIA Regulations 2010, was accepted by DEA on 23 January 2015 (see Appendix 1). The DEA acceptance stated that the next phase of the EIA may proceed in accordance with the tasks outlined in the Plan of Study for EIA, which was included in the FSR.

#### **Box 2.1: Tasks undertaken during the Scoping Phase.**

##### **1. Project registration**

An initial application was submitted to and accepted by DEA in October 2013. The process initially commenced with a Basic Assessment. However, in March 2014 a decision was taken in conjunction with DEA that a full EIA process should be undertaken. The initial application was subsequently withdrawn and an amended application form was submitted to DEA on 11 April 2014. DEA accepted the amended application on 28 May 2014.

##### **2. Initial public participation process**

The initial public participation process involved the following:

- Identification of I&APs: A preliminary I&AP database was compiled using Shell's existing database for the Orange Basin Deep Water Licence Area, as well as other databases of previous studies undertaken in the area. Additional I&APs have been added to the database during the Scoping and EIA phases. To date 368 I&APs have been registered on the project database (see Appendix 2.1).
- Distribution of Background Information Document (BID): A notification letter and BID were distributed for a 30-day registration and comment period from 31 October to 2 December 2013. The purpose of the letter and BID was to convey information on the proposed exploration drilling programme and to invite I&APs to register on the project database and provide initial comment.
- Advertisements and notices: Advertisements were placed in national (Sunday Times and Rapport), regional (Cape Times and Die Burger) and local (Weslander and Ons Kontrei) newspapers. Notices were erected in Saldanha, Vredenburg, Lamberts Bay, Kleinzee, Port Nolloth and Springbok.
- Authority meetings: Authority meetings were held with PASA, DEA, Department of Agriculture, Forestry and Fisheries (DAFF), Namakwa District Municipality, Nama-Khoi Local Municipality, Richtersveld Local Municipality and the Northern Cape Provincial Coastal Committee.
- Public Open Days and Information-sharing Meetings: Two Public Open Days and Information-sharing Meetings were held during the BID comment period, one in Cape Town and the other in Saldanha.

##### **3. Compilation and review of Draft Scoping Report (DSR)**

The preparation of the DSR was informed by comments received during the initial public participation process. A total of 26 written submissions were received. All comments received were collated, and responded to, into an initial Issues and Responses Trail, which was appended to the DSR.

The DSR was distributed for a 40-day review and comment period from 28 July to 8 September 2014. Tasks undertaken included:

- DSR availability: Copies of the DSR were made available on the CCA website and at various venues in Cape Town, Vredenburg, Saldanha, Lamberts Bay, Kleinzee, Springbok and Port Nolloth). Copies of the DSR were also sent directly to key authorities and key stakeholders.
- I&AP notification: A notification letter was sent to all I&APs registered on the project database.



- Advertisements and notices: Advertisements and notices announcing the availability of the DSR comment period were placed in the same newspapers and venues as indicated above. In addition, adverts were placed in two additional local newspapers, namely Die Plattelander and Die Namakwalander.
- Authority meeting: A meeting was held with DEA: Air Quality Management Services.

#### 4. Compilation and review of FSR

The preparation of the FSR was informed by comments received during the DSR comment period. A total of 21 written submissions were received during this period, all of which were collated and responded to into an updated Issues and Responses Trail, which was appended to the FSR.

The FSR was distributed for a 30-day review and comment period from 29 September to 29 October 2014. Notification and distribution of the FSR was as per that undertaken for the DSR, except no advertising was undertaken.

#### 5. Submission of FSR and associated comments to DEA

A total of eight written submissions were received during the FSR review and comment period (see Appendix 2.2). The FSR, together with all comments received on the FSR, was submitted to DEA on 31 October 2014 for consideration and acceptance.

All comments received on the FSR have been collated, and responded to, in an Issues and Responses Report (see Appendix 2.10).

### 2.2.3.2 EIA Phase

#### Specialist studies

Three specialist studies were undertaken to address the key issues that required further investigation and detailed assessment, namely: (1) cuttings and oil spill modelling, (2) the impact on fishing, and (3) the impact on marine fauna. A list of the specialists and their details are provided in Table 2.4.

Cuttings and oil spill modelling used the metocean data available for the area of interest in order to model the extent and concentration of various discharge scenarios (including drilling cuttings and hydrocarbon spills). The other two specialist studies involved the gathering of data relevant (including the results of the modelling study) to identifying and assessing environmental impacts that may occur as a result of the proposed project. These impacts were then assessed according to pre-defined rating scales (see Appendix 3.1). Specialists also recommended appropriate mitigation or optimisation measures to minimise potential impacts or enhance potential benefits, respectively.

**Table 2.4: List of specialist studies and specialists.**

No.	Specialist study	Specialist/s	Qualifications	Company	Appendix
1	Drill cuttings and oil spill modelling	Mr Stephen Luger	MSc (Engineering), University of Cape Town	Prestedge Retief Dresner Wijnberg (PRDW)	3.2
2	Fishing	Mr Dave Japp	MSc (Ichthyology and Fisheries Science), Rhodes University	CapFish SA (Pty) Ltd	3.3
		Ms Sarah Wilkinson	BSc (Hons) (Botany), University of Cape Town		
3	Marine fauna	Dr Andrea Pulfrich	PhD (Fisheries Biology), Christian-Albrechts University, Kiel, Germany	Pisces Environmental Services (Pty) Ltd	3.4

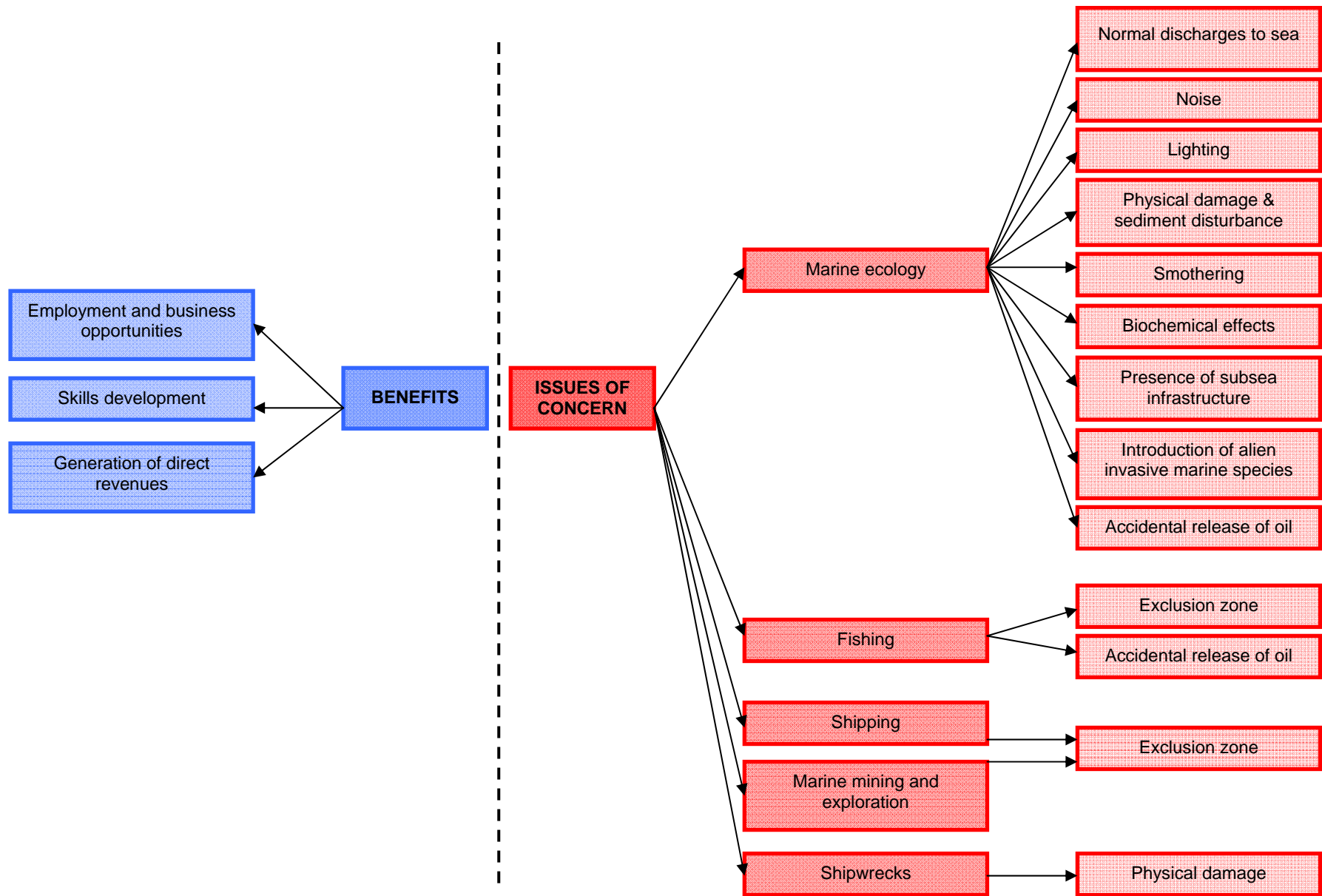


Figure 2.2: Key issues identified by the project team, with I&APs input, during the Scoping Phase.

### **Compilation and review of Draft EIR**

The Draft EIR was prepared in compliance with Section 31(2) of the EIA Regulations 2010. The specialist studies and other relevant information / assessments were integrated into this report. This report was also informed by DEA's acceptance of the FSR (see Appendix 1) and I&AP comments received during the FSR comment period (see Appendix 2.2).

The Draft EIR was distributed for a 40-day comment period from 2 March to 15 April 2015 (which made provision for the public holidays on 21 March, 3 April and 6 April) in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the EIA process. Public participation tasks undertaken during this phase are summarised in Box 2.2 and all supporting information is presented in appendices to this report.

A total of 18 written submissions were received during the Draft EIR review and comment period (see Appendix 2.9), nine of which were acknowledgment of receipts. Although there were no objections to the project, a number of issues were raised relating to employment opportunities, overlapping prospecting rights, onshore logistics base in Saldanha, oil spills and associated modelling, and heritage resources. Written submissions were received from the following I&APs:

<b>Authorities</b>	<b>Organisations</b>
<ul style="list-style-type: none"> <li>• <u>City of Cape Town (Yogini Jivanji)</u></li> <li>• <u>Department of Environment Affairs (Sabelo Malaza &amp; Herman Alberts)</u></li> <li>• <u>Department of Environment Affairs: Integrated Coastal Management (Andre Share)</u></li> <li>• <u>Namibian Ministry of Works and Transport (Patrick Silishebo)</u></li> <li>• <u>Namibian Ministry of Works and Transport (Pinehas Auene)</u></li> <li>• <u>Northern Cape Government: Department of Environment &amp; Nature Conservation (Bryan Fisher)</u></li> <li>• <u>Northern Cape Government: Department of Environment &amp; Nature Conservation (Beanca Botes)</u></li> <li>• <u>Petroleum Agency of South Africa (Phumla Ngesi)</u></li> <li>• <u>Saldanha Bay Municipality (Nazeema Duarte)</u></li> <li>• <u>South African Heritage Resources Agency (John Gribble &amp; Tara van Niekerk)</u></li> <li>• <u>Swartland Municipality</u></li> <li>• <u>West Coast District Municipality (Doretha Kotze)</u></li> </ul>	<p><u>Business</u></p> <ul style="list-style-type: none"> <li>• <u>International Environmental and Marine Services (Richard Byrnes)</u></li> </ul> <p><u>Environmental / Conservation</u></p> <ul style="list-style-type: none"> <li>• <u>Namaqua National Park (Bernard van Lente)</u></li> </ul> <p><u>Mining</u></p> <ul style="list-style-type: none"> <li>• <u>Greenflash Trading 251 / Steyn Kinnear (Wynand Venter &amp; Dadu Oberman)</u></li> </ul>

All comments received (including written correspondence and those raised at the authority- / information-feedback meetings) on the Draft EIR have been collated, and responded to, in an updated Issues and Responses Trail (see Appendix 2.10).

### **Compilation and review of Final EIR**

This Final EIR has also been prepared in compliance with Section 31(2) of the EIA Regulations 2010 (see Table 2.5) and has been informed by comments received on the Draft EIR (see Appendix 2.9).

This report aims to present all information in a clear and understandable format, suitable for easy interpretation by I&APs and authorities, and to provide a further opportunity to comment on the proposed project and findings of the EIA process (see Section 1.6 for details of the comment period).

Comments on the Final EIR copied to NMA will be submitted to DEA, together with the Final EIR, for consideration and decision-making.

### **Completion of the EIA Phase**

The following steps are envisaged for the remainder of the EIA process (see Figure 2.1):

- After DEA has reached a decision, all I&APs on the project database will be notified of the outcome of the application and the reasons for the decision; and
- A statutory appeal period in terms of the National Appeal Regulations (GN No. R993) will follow the issuing of the decision.

**Box 2.2: Tasks undertaken during the Draft EIR review and comment period.****1. Draft EIR availability**

Copies of the Draft EIR were made available on the CCA website ([www.ccaenvironmental.co.za](http://www.ccaenvironmental.co.za)) and at the following locations for the duration of the review and comment period (2 March to 15 April 2015):

- [Cape Town Central Library;](#)
- [Vredenburg Library;](#)
- [Saldanha Library;](#)
- [Lamberts Bay Library;](#)
- [Kleinsee Tourism Information Centre;](#)
- [Matjieskloof Library \(Springbok\);](#)
- [Moberg Library \(Springbok\);](#)
- [Springbok Library; and](#)
- [AJ Bekeur Library \(Port Nolloth\).](#)

Copies of the Draft EIR Executive Summary (in English, Afrikaans and isiXhosa) were made available at all the above venues, except Cape Town Central Library.

**2. I&AP notification**

A notification letter was sent to all I&APs registered on the project database. The letter informed them of the release of the Draft EIR and where the report could be reviewed (see Appendix 2.3 for letter and proof of distribution). To facilitate the commenting process, a copy of the Draft EIR Executive Summary and a Comment Form were enclosed with each letter. The letter and Comment Form were available in English, Afrikaans and isiXhosa.

Copies of the Draft EIR were also sent directly to the following key authorities and key stakeholders (see Appendix 2.3 for letters and proof of distribution):

<u>No.</u>	<u>Organisation</u>	<u>Contact person</u>
1	<a href="#">Department of Agriculture, Forestry and Fisheries</a>	<a href="#">Deon Durholtz</a>
2	<a href="#">Department of Environmental Affairs: Integrated Environmental Authorisations</a>	<a href="#">Vincent Chauke</a>
3	<a href="#">Department of Environmental Affairs: Coastal Conservation Strategies</a>	<a href="#">Lindelani Mudau</a>
4	<a href="#">Department of Environmental Affairs: Air Quality Management Services</a>	<a href="#">Vumile Senene</a>
5	<a href="#">Department of Environmental Affairs: Resource Management</a>	<a href="#">Andre Share</a>
6	<a href="#">Kamiesberg Local Municipality</a>	<a href="#">Joseph Cloete</a>
7	<a href="#">Matzikama Local Municipality</a>	<a href="#">Mark Bolton</a>
8	<a href="#">Nama Khoi Local Municipality</a>	<a href="#">Russell Hartley<sup>5</sup></a>
9	<a href="#">Namakwa District Municipality</a>	<a href="#">Chris Fortuin</a>
10	<a href="#">Northern Cape Government: Department of Environment Affairs &amp; Nature Conservation</a>	<a href="#">Wilna Oppel</a>
11	<a href="#">Northern Cape Government: Department of Environmental Affairs &amp; Nature Conservation: Environmental Management</a>	<a href="#">Bryan Fisher</a>
12	<a href="#">Northern Cape Government: Department of Environmental Affairs &amp; Nature Conservation: Scientific Investigation</a>	<a href="#">Elsabe Swart</a>
13	<a href="#">Northern Cape Government: Department of Environmental Affairs &amp; Nature Conservation: Scientific Investigation</a>	<a href="#">Onwabile Ndzumo</a>
14	<a href="#">Petroleum Agency of South Africa</a>	<a href="#">Phumla Ngesi</a>
15	<a href="#">Richtersveld Local Municipality</a>	<a href="#">Dalene Farmer</a>
16	<a href="#">Saldanha Bay Local Municipality</a>	<a href="#">Louis Scheepers</a>
17	<a href="#">South African Deep Sea Trawling Industry Association</a>	<a href="#">Johan Augustyn</a>
18	<a href="#">South African Heritage Resources Agency</a>	<a href="#">Tara van Niekerk</a>
19	<a href="#">South African Maritime Safety Authority</a>	<a href="#">Ian Culvert</a>
20	<a href="#">Western Cape Government: Department of Environmental Affairs &amp; Development Planning</a>	<a href="#">Zaahir Toefy</a>
21	<a href="#">West Coast District Municipality</a>	<a href="#">Henry Prins</a>

<sup>5</sup> Russell Hartley replaced Bafedile Lenkoe at the Nama Khoi Local Municipality.

**Box: 2.2 (cont.)****3. Advertisements and notices**

Advertisements announcing the release of the Draft EIR for the 40-day comment and review period were placed in the following national, regional and local newspapers in three languages (English, Afrikaans and isiXhosa) (see Appendix 2.4):

- National newspapers:
  - > 1 March 2015: Sunday Times (English and isiXhosa);
  - > 1 March 2015: Rapport (Afrikaans);
- Regional newspapers:
  - > 25 February 2015: Cape Times (English and isiXhosa);
  - > 25 February 2015: Die Burger (Afrikaans);
- Local newspapers:
  - > 26 February 2015: Weslander (English, Afrikaans and isiXhosa);
  - > 27 February 2015: Ons Kontrei (English, Afrikaans and isiXhosa);
  - > 27 February 2015: Die Plattelander (English, Afrikaans and isiXhosa); and
  - > 27 February 2015: Die Namakwalander (English, Afrikaans and isiXhosa).

In addition, notices (in English, Afrikaans and isiXhosa) announcing the release of the Draft EIR were erected at the venues (except Cape Town and Kleinzee) where the report was made available for review (see Appendix 2.5):

**4. Authority meetings**

Authority meetings were held with:

- Namakwa District Municipality, Nama-Khoi Municipality and Richtersveld Municipality on 25 February 2015; and
- Northern Cape Provincial Coastal Committee on 26 February 2015.

At these meetings Shell and CCA provided an overview of the project proposal and the findings of the EIA / EMPr Addendum process, respectively, and provided stakeholders the opportunity to raise any issues or concerns regarding the proposed project. Minutes of these meetings (including attendance registers) are presented in Appendix 2.6.

**5. Public Open Days and Information-feedback Meetings**

Two Public Open Days and Information-feedback Meetings were held during the Draft EIR comment period. The details of these are listed below.

<b><u>Date:</u></b>	<u>Wednesday 11 March 2015</u>	<u>Thursday 12 March 2015</u>
<b><u>Location:</u></b>	<u>Table Bay Hotel, Cape Town</u>	<u>Protea Hotel, Saldanha Bay</u>
<b><u>Time:</u></b>	<u>Public Open Day: 16h00 - 17h30</u> <u>Formal presentation: Commenced at 17h30</u>	
<b><u>No. of attendees:</u></b>	<u>15</u>	<u>12</u>

The Public Open Days included posters (in English) summarising the proposed project, study process and key findings (see Appendix 2.7).

At the meetings Shell and CCA provided a basic overview of the project proposal and the findings of the EIA / EMPr Addendum process, respectively, and provided stakeholders the opportunity to raise any issues or concerns regarding the proposed project. The meetings were held in English, but Afrikaans and isiXhosa translators were available to translate where necessary. Copies of the Draft EIR Executive Summary and Comment Form were available for attendees to record in writing any issues or concerns relating to the proposed development. Minutes of these meetings (including presentation and attendance register) are presented in Appendix 2.8.

**Table 2.5: Requirements of an Environmental Impact Report in terms of the EIA Regulations 2010.**

Section 31(2)	Content of Environmental Impact Report	Completed (Y/N or N/A)	Location in Draft EIR
(a)	(i & ii) Details and expertise of EAP who prepared the report.	Y	page ii
(b)	Detailed description of the proposed activity.	Y	Chapter 3
(c)	A description of the property on which the activity is to be undertaken and the location of the activity on the property, or if it is:	N/A	Section 3.2.2
	(i) a linear activity, a description of the route of the activity; or	N/A	
	(ii) An ocean-based activity, the co-ordinates where the activity is to be undertaken.	Y	
(d)	A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.	Y	Chapter 4
(e)	Details of the public participation process conducted in terms of sub-regulation 1, including:		
	(i) Steps undertaken in accordance with the plan of study;	Y	Sections 1.6 & 2.2.3.2
	(ii) A list of all persons or organisations and organs of state that were registered as interested and affected parties;	Y	Appendix 2.1
	(iii) A summary of comments received from and a summary of issues raised by registered I&APs, the date of receipt of these comments and the response of the EAP to those comments; and	N	<u>Appendices 2.10</u>
	(iv) Copies of any representations and comments received from registered I&APs.	N	<u>Appendices 2.2 &amp; 2.9</u>
(f)	A description of the need and desirability of the proposed activity.	Y	Section 3.1
(g)	A description of identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity.	Y	Section 3.3 & 3.3.10
(h)	An indication of the methodology used in determining the significance of potential environmental impacts.	Y	Appendix 3.1
(i)	A description and comparative assessment of all alternatives identified during the EIA process.	Y	Chapter 5 & Section 6.1.3
(j)	A summary of the findings and recommendations of any specialist report or report on a specialised process.	Y	Chapter 5 & 6
(k)	A description of all environmental issues that were identified during the EIA process, an assessment of the significance of each issue and an indication of the extent to which the issues could be addressed by the adoption of mitigation measures.	Y	Figure 2.2 & Chapter 5
(l)	An assessment of each identified potentially significant impact, including:	Y	Chapter 5
	(i) Cumulative impacts;		
	(ii) The nature of the impact;		
	(iii) The extent and duration of the impact;		
	(iv) The probability of the impact occurring;		
	(v) The degree to which the impact can be reversed;		
	(vi) The degree to which the impact may cause irreplaceable loss of resources; and		
	(vii) The degree to which the impact can be mitigated.		

(m)	A description of any assumptions, uncertainties and gaps in knowledge.	Y	Section 2.2.2
(n)	A reasoned opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	Y	Sections 6.1.4 & 6.2
(o)	An environmental impact statement which contains: (i) A summary of the key findings of the EIA; and (ii) A comparative assessment of the positive and negative implications of the proposed activity and identified alternatives.	Y	Sections 6.1.1 to 6.1.3
(p)	A draft environmental management programme containing the aspects contemplated in Regulation 33.	Y	Chapter 7
(q)	Copies of specialist reports and reports on specialised processes complying with Regulation 32.	Y	Appendices 3.2 to 3.4
(r)	Any specific information that may be required by the competent authority. DEA's acceptance of the FSR (see Appendix 1) requested the following: <ul style="list-style-type: none"> <li>Obtain comments from various government departments and other key stakeholders;</li> <li>Provide proof of correspondence in the Final EIR;</li> <li>Ensure compliance with Regulations 56, 57 and 67 relating to public participation;</li> <li>Include an A3 regional map in the Final EIR; and</li> <li>Provide two hardcopies and two electronic copies of the Final EIR to DEA.</li> </ul>	Y	<u>Section 2.2.3.2;</u> <u>Appendices 2.2,</u> <u>2.3 &amp; 2.9; and</u> <u>Figure 1.1</u>
(s)	Any other matters required in terms of Sections 24(4)(a) and (b) of the Act. (This refers to Environmental Authorisations and procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment that the authority needs to consider when reviewing an Application).	Y	-