



LEGACY

ENVIRONMENTAL  
MANAGEMENT  
CONSULTING

## OTMS HDPE SEAWATER PIPELINE ROUTE, SALDANHA

EXTERNAL ENVIRONMENTAL COMPLIANCE AUDIT REPORT

29 NOVEMBER 2018

REF NO: L180034-OTMS-GES-AUD

# PROJECT DETAILS

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<b>TITLE</b>	External Environmental Compliance Audit of the OTMS HDPE Seawater Pipeline Route, Saldanha (Construction Phase).
<b>COMPETENT AUTHORITY REF. NO.</b>	EA - 16/3/3/2/F4/17/3064/16 & EA Amendment - 16/3/3/5/F4/17/3019/18
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## Disclaimer

This report has been prepared for the exclusive use of Oiltanking MOGS Saldanha (RF) (Pty) Ltd (OTMS) and Advisian (part of the WorleyParsons Group), including its consulting team; and is subject to and issued in accordance with the agreement between WorleyParsons Group t/a Advisian and Legacy Environmental Management Consulting (Pty) Ltd (Legacy EMC).

The opinions expressed in this report have been based on the information supplied to Legacy EMC by the Client and the respective specialists appointed. Legacy EMC has exercised all due care in reviewing the supplied information, but conclusions from the review are reliant on the accuracy and completeness of the supplied data. Legacy EMC does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Legacy EMC accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party.

Opinions presented in this report apply to the site conditions and features as they existed at the time of Legacy EMC's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which Legacy EMC had no prior knowledge nor had the opportunity to evaluate.

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## Letter of Undertaking and Statement of Independence

The Author / Environmental Assessment Practitioner (EAP) herewith confirms the correctness of the information provided in this Report, including supporting documents and reports; the inclusion of inputs and recommendations from the specialist reports where relevant; and that the information provided by the EAP to IAPs and any responses by the EAP to comments and issues presented by IAPs are correctly reflected herein, if applicable.

Neither Legacy EMC nor any of the authors of this Report have any material present or contingent interest in the outcome of this Project, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of Legacy EMC.

Legacy EMC has no beneficial interest in the outcome of the audit which is capable of affecting its independence.



Kim Pontac

(Chief Executive Officer / Principle Environmental Assessment Practitioner)

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## Signature of the Environmental Assessment Practitioner

Legacy Environmental Management Consulting (Pty) Ltd

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## Name of the Company

29 November 2018

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## Date

## Executive Summary

Legacy Environmental Management Consulting (Pty) Ltd (Legacy EMC) has been appointed by WorleyParsons Group t/a Advisian on behalf of its client, Oil tanking MOGS Saldanha (RF) (Pty) Ltd (OTMS), as the independent consultants to undertake the External Environmental Compliance Audit (audit) as required in terms of the conditions of the environmental authorisation (EA) issued by the relevant Competent Authority, namely the Western Cape Department of Environmental Affairs and Development Planning (DEADP) Directorate: Development Management (Region 1).<sup>1</sup>

### Introduction and Background

The EA and EA Amendment was issued in respect to the proposed OTMS HDPE Seawater Pipeline Route, Saldanha, Western Cape.

OTMS received an EA for the construction of a crude oil blending and storage terminal on Portion 5 of Farm Os Fontein No. 194, Saldanha Bay, Western Cape on 6 February 2014 (EA Ref.: E12/2/4/2- F4/16- 3035/11). This EA includes a sub-surface crude oil pipeline from the OTMS Crude Oil Terminal to the Strategic Fuel Fund (SFF) Crude Oil Terminal pipeline servitude. Construction of the OTMS Crude Oil Terminal is currently underway.

OTMS was further granted an EA for the construction of a HDPE Seawater Pipeline and associated infrastructure from the OTMS Crude Oil Blending and Storage Terminal (OTMS Terminal) to the Seawater Pipeline Intake Pump Station located at the disuse Oyster Pond east of the Port of Saldanha, for the purposes of hydrostatic testing of the OTMS Terminal tanks. Thereafter the seawater pipeline will serve as a backup fire management system to the OTMS Terminal as well as the SFF Terminal. The pipeline will not exceed 8 km and will have an internal diameter of 400 mm. Environmental Authorisation for this pipeline was issued by the Department of Environmental Affairs and Development Planning (DEADP) on 31 August 2017 (DEADP Ref No.: 16/3/3/2/F4/17/3064/16).

Since the EA for the HDPE Seawater Pipeline and associated infrastructure was issued, ArcelorMittal South Africa (AMSA) received an EA for the construction of a brine discharge pipeline and a gas pipeline from Saldanha Steel to the bay, providing an alternative servitude. OTMS, with the support of AMSA, applied for an amendment of the EA for the HDPE Seawater Pipeline to reroute the pipeline to the AMSA servitude, and this EA was granted on 26 September 2018 (DEADP Ref. No.: 16/3/3/5/F4/17/3019/18).

The coordinates for the amended pipeline route are as follows:

-  Starting point:  
33° 0' 43.089" S 18° 3' 24.611" E
-  Middle point:  
33° 0' 7.206" S 18° 2' 6.421" E
-  End point:  
33° 0' 34.261" S 18° 0' 15.519" E

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<sup>1</sup> Viz. Condition 20 of Environmental Authorization (Ref. No.: 16/3/3/2/F4/17/3064/16), dated 31 August 2017 and amended 26 September 2018 (Ref No.: 16/3/3/5/F4/17/3019/18).

## External Audit Process

As per Condition 20 of the EA dated 31 August 2017 and subsequent amendment dated 26 September 2018, independent environmental audits must be undertaken to determine compliance with the conditions of the EA and the approved Environmental Management Programme (EMPr), in accordance with Appendix 7 of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014 (as amended). In addition, the Environmental Audit Reports must be submitted to the CA for consideration.

Legacy EMC's Scope of Work entails compliance of the Environmental Audit Report, however the submission to the CA and notification to Interested and Affected Parties (IAPs) of the availability of the Environmental Audit Report has not been included in Legacy's Scope of Work.

The conditions of the EA and the EMPr have been tabulated and are used throughout the audit to assess the compliance of the project in terms of the conditions.

The approved Pre-Construction, Construction and Operational EMPr for the OTMS HDPE Seawater Pipeline Route, Saldanha (August 2018) provides management guidelines for the construction methodology and construction works of the project, to ensure environmental impacts are monitored and minimised where possible. The EMPr sets out the proposed project, Environmental Objectives to reach the Goals, Targets and Management Actions.

The EMPr incorporates the recommendations of the Environmental Impact Reporting Process and its appended specialist and technical reports, in respect of the various mitigating measures to be implemented during the construction and operational phases. The EMPr covers pre-construction, construction and post-construction (operational) phases for the project.

This Environmental Compliance Audit Report assessed the current conditions on site against the mitigation measures and management actions included in the EMPr, as well as the application and adherence to the Conditions of Authorisation of the EA and amended EA (dated 31 August 2017 and 26 September 2018, respectively).

## Recommendations and Conclusion

There is no need to amend the approved EMPr, following the compliance audit conducted within the first three months of commencement of the construction phase. The next audit report will be conducted after completion of the development phase.

Legacy EMC is of the professional opinion that minor updates to the EMPr are necessary to address and mitigate any negative environmental and socio-environmental impacts that might arise during the current construction phase of the HDPE Seawater Pipeline, and that these amendments are needed for the EMPr to meet all the environmental objectives. No significant issues were noted during the compliance audit inspection, and the minor issues can be easily addressed.

Partial Compliances noted during the audit inspection included the presence of alien invasive species on the topsoil stockpiles, topsoils not shaded, trimming and shaping of servitude required, and excavations without demarcation / barricades.

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## Terminology

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The following abbreviations are used in this report:

Abbreviations	Description
DEADP	Western Cape Department of Environmental Affairs and Development Planning
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EO	Environmental Officer
EMPr	Environmental Management Programme
IAP	Interested and Affected Party
IEM	Integrated Environmental Management
HDPE	High Density Polyethylene
NEMA	National Environmental Management Act, (Act No 107 of 1998)
OTMS	Oil tanking MOGS Saldanha (RF) (Pty) Ltd
PPP	Public Participation Process

## Glossary

The following terms are used throughout this report, the meaning of which is presented below:

Terms	Description
Activity	An activity or operation carried out as part of the proposed excavation and removal plan
Biodiversity	Biodiversity includes the diversity or variety, of plants, animals including any other living organism, located in a particular area or region. It also includes diversity in respect of habitat, species and genetics.
Ecology	The study of the interrelationships of organisms with and within their environment.
Ecosystem	The interconnected collection of all species populations that occupy a given area and the physical environment with which they interact.
Environment	The external circumstances, conditions and objects that affect the existence and development of an individual, organism or group. These may include the biophysical, social, economic, historical and cultural aspects.
Environmental Audit Report	A report providing verifiable findings on the level of performance and compliance of a project with the provisions of the environmental authorisation or EMPr, as contemplated in Section 34 of the EIA Regulations (2014), as amended.
Environmental Authorisation (EA)	The authorisation granted by the competent authority in respect of a listed activity in terms of NEMA.
Environmental Management Programme (EMPr)	A description of the environmental specifications or mitigation measures proposed for achieving the required environmental objectives and/ or targets as required by the relevant competent authorities, during all phases of a proposed development.
Fauna	The collective animals of a region.
Flora	The collective plants growing in a geographic area.
Impact	A change to the existing environment, either positive or negative in nature, that is directly or indirectly due to the proposed development and its associated activities.
Mitigation Measures	Design or management measures that are proposed to avoid and/or minimise or enhance an impact, depending on the desired effect.
OTMS Terminal	OTMS Crude Oil Blending and Storage Terminal
Pipeline Servitude	The 15m wide OTMS pipeline servitude that runs on the outside border of the MR00559 road reserve from the OTMS Terminal entrance to where it meets up with the AMSA pipeline servitude.  The 25m wide AMSA pipeline servitude that runs from the MR00559 to the Bay and Port.

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# 1 PROJECT INTRODUCTION

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## 1.1 Introduction

Legacy Environmental Management Consulting (Pty) Ltd (Legacy EMC) has been appointed by the WorleyParsons Group t/a Advision on behalf of its client, Oil tanking MOGS Saldanha (RF) (Pty) Ltd (OTMS) as the independent consultants to undertake the External Environmental Compliance Audit (audit) as required in terms of the conditions of the environmental authorisation (EA) in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) issued by the relevant Competent Authority (CA), namely the Western Cape Department of Environmental Affairs and Development Planning (DEADP) Directorate Development Management (Region 1).<sup>2</sup>

The appointment was for the external audit in respect to the construction phase of the HDPE Seawater Pipeline, within three months of commencement of construction. The external compliance audit was conducted by Adri Meyer (external auditor) and Kim Pontac (peer review and approval) of Legacy EMC.

The audit report will include notes on compliance or non-compliances, with comments and may also include comments or suggestions for improvement. In addition, the report will contain the performance of the audited items and also indicate the overall performance score.

## 1.2 Project Description

The EA and EA Amendment was issued in respect to the proposed OTMS HDPE Seawater Pipeline Route, Saldanha, Western Cape.

OTMS received an EA for the construction of a crude oil blending and storage terminal on Portion 5 of Farm Os Fontein No. 194, Saldanha Bay, Western Cape on 6 February 2014 (EA Ref.: E12/2/4/2- F4/16- 3035/11). This EA includes a sub-surface crude oil pipeline from the OTMS Crude Oil Terminal to the Strategic Fuel Fund (SFF) Crude Oil Terminal pipeline servitude. Construction of the OTMS Crude Oil Terminal is currently underway.

OTMS was further granted an EA for the construction of a HDPE Seawater Pipeline and associated infrastructure from the OTMS Crude Oil Blending and Storage Terminal (OTMS Terminal) to the Seawater Pipeline Intake Pump Station located at the disuse Oyster Pond east of the port of Saldanha, for the purposes of hydrostatic testing of the OTMS Terminal tanks. Thereafter the seawater pipeline will serve as a backup fire management system to the OTMS Terminal as well as the SFF Terminal. The pipeline will not exceed 8 km and will have an internal diameter of 400 mm. Environmental Authorisation for this pipeline was issued by the DEADP on 31 August 2017 (DEADP Ref No.: 16/3/3/2/F4/17/3064/16).

Since the EA for the HDPE Seawater Pipeline and associated infrastructure was issued, ArcelorMittal South Africa (AMSA) received an EA for the construction of a brine discharge pipeline and a gas pipeline from Saldanha Steel to the bay, providing an alternative servitude. OTMS, with the support of AMSA, applied for an amendment of the EA for the HDPE Seawater Pipeline to reroute the pipeline to the AMSA servitude, and this EA was granted on 26 September 2018 (DEADP Ref. No.: 16/3/3/5/F4/17/3019/18).

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The coordinates for the amended pipeline route are as follows:

- 📍 Starting point:  
33° 0' 43.089" S 18o 3' 24.611" E;
- 📍 Middle point:  
33° 0' 7.206" S 18o 2' 6.421" E;
- 📍 End point:  
33° 0' 34.261" S 18o 0' 15.519" E.

Refer to Appendix A for the Locality Map of the project.

The project is currently in the construction phase. This phase entails the excavation of the pipeline trench, and the laying of the pipeline, as well as backfilling of the trench.

Advisian are appointed as the Environmental Control Officers (ECO) for the project. WBHO is the appointed contractor.

## 1.3 Project Team Details

### 1.3.1 Applicant Details

In the following section, the details of the applicant are listed. This is the entity who will be legally responsible for the commissioning of the aforementioned activities.

**Table 1-1: Applicant / Proponent Details**

Project Applicant	Oiltanking MOGS Saldanha (RF) Pty Ltd
Contact Person:	Mr Fraser Russell
Postal Address:	PO Box 55093, Northlands, Johannesburg, 2076
Telephone:	(011) 530 8062
Email:	<a href="mailto:fraser@mogs.co.za">fraser@mogs.co.za</a>

### 1.3.2 Environmental Control Officer

Advisian (WorleyParsons Group) are the appointed Environmental Control Officer for the proposed development.

**Table 1-2: ECO Details**

Project ECO	Advisian
Contact Person:	Ms Liezel Hattingh
Postal Address:	31 Allen Drive, Loevenstein, Bellville, 7530
Telephone:	(010) 593 3937
E-mail:	<a href="mailto:Liezel.hattingh@advisian.com">Liezel.hattingh@advisian.com</a>

### 1.3.3 External Environmental Compliance Auditor

Legacy Environmental Management Consulting (Pty) Ltd. (Legacy EMC) has been appointed as the external auditor for the proposed development (Construction Phase).

**Table 1-3: Details of EAP and the relevant representative**

Project External Auditor	Legacy EMC
Company Registration No.:	2017/213820/07
Contact Person:	Mrs Kim Pontac
Postal Address:	PO Box 4901, Tygervalley, 7536
Telephone:	(087) 822 1953
Fax:	(021) 914 0437
Email:	<a href="mailto:Kim@Legacyemc.co.za">Kim@Legacyemc.co.za</a> / <a href="mailto:Adri@legacyemc.co.za">Adri@legacyemc.co.za</a>

The following table summarises the expertise of the main team member(s).

**Table 1-4: Audit Team Members**

Adri Meyer	Lead Auditor
	<p>Adri Meyer is an EAP with experience in applying the Environmental Assessment Regulations to various development projects across the Western Cape and South Africa. She has experience in various sectors which include agriculture, residential developments, hazardous substances, renewable energy and water infrastructure. Her core experience includes EIAs/BAs, and Environmental Control Officer work for projects during construction, operation and decommissioning. Adri also has experience in Environmental Due Diligence Assessments, NEMA Section 24G applications, Pre-Compliance Notice Reporting and Compliance Auditing. Adri's academic background has equipped her with valuable knowledge in the field of Marine and Environmental Law, and conservation practices.</p> <p>Adri is an Environmental Assessment Practitioner at Legacy EMC. In addition, Adri holds a Master of Philosophy degree in Marine and Environmental Law from the University of Cape Town, and a Bachelor of Science degree in Conservation Ecology from the University of Stellenbosch.</p>
Relevant Experience	3 years
Qualifications	MPhil (Marine and Environmental Law) 2015, BSc (Agric) Conservation Ecology 2013.
Professional Registration Memberships	Member: International Association for Impact Assessment South Africa (5477)
Role in Project	Lead Auditor and author of Environmental Audit Report.

Kim Pontac	Project Manager & Reviewer
	<p>As the Managing Director of Legacy EMC and Principle Environmental Consultant, Kim has many years' experience in applying the principles of Integrated Environmental Management (IEM) and the Environmental Impact Assessment Regulations to a number of development projects and initiatives in southern Africa and abroad. She has worked in various sectors which include transport, utilities, social infrastructure and minerals, metals and chemicals, hydrocarbons and nuclear industries.</p> <p>Kim has co-ordinated and managed numerous environmental processes within the public and private sectors for national and international companies. As Principle Consultant, she has successfully conducted a variety of environmental investigations and evaluations for Green and Brown Field projects.</p> <p>Her core experience includes IEM and guiding projects through tendering, design, and construction, operational and decommissioning phases. Kim also has experience in environmental and social due diligence (in accordance with IFC Standards and Equator Principles), environmental compliance audits and environmental legal reviews, permitting and/ or licencing, facilitation and training, and environmental construction monitoring.</p>
<p><b>Relevant Experience</b></p>	<p>Years of 10 years</p>
<p><b>Qualifications</b></p>	<p>LLM (Environmental Law), University of Cape Town, 2017;                      BTech (Environmental Management), Cape Peninsula University of Technology, 2008;                      National Diploma (Oceanography), Cape Peninsula University of Technology, 2004.</p>
<p><b>Professional Registrations / Memberships</b></p>	<p>SACNASP Professional Natural Scientist (Environmental Science) (No: 117908);                      Institute of Waste Management of Southern Africa (IWMSA) Member No.: 30118035;                      International Association for Impact Assessment South Africa (2762) (04/10/2010) and the current Western Cape Branch Secretary.                      Member: Environmental Law Association.</p>
<p><b>Role in Project</b></p>	<p>Project Manager and reviewer.</p>

### 1.3.4 Competent Authority Details

In terms of the NEMA, the relevant competent authority responsible for the administration of this Act is the Western Cape Department of Environmental Affairs and Development Planning (DEADP).

The contact details of the CA are listed below (Table 1-5).

**Table 1-5: Details of the Competent Authority**

Department	Chief Directorate Compliance and Enforcement DEADP
<p><b>Contact Person:</b></p>	<p>Ms. M. Schippers</p>
<p><b>Physical Address:</b></p>	<p>7<sup>th</sup> Floor, Utilitas Building, 1 Dorp Street, Cape Town 8001</p>
<p><b>Postal Address</b></p>	<p>Private Bag X9086, Cape Town, 8000</p>
<p><b>Telephone:</b></p>	<p>(021) 483 8349</p>
<p><b>Fax:</b></p>	<p>(021) 483 4372</p>
<p><b>Email:</b></p>	<p><a href="mailto:Melanese.schippers@westerncape.gov.za">Melanese.schippers@westerncape.gov.za</a></p>

## 2 LEGAL FRAMEWORK

### 2.1 Environmental Authorisation in terms of the NEMA

Advisian submitted an environmental authorisation application on behalf of OTMS in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended), to amend the EA issued by DEADP on 31 August 2017 (Ref No. 16/3/3/2/F4/17/3064/16) for the proposed HDPE Seawater Pipeline Route, Saldanha (the project).

The EA amendment was issued by DEADP Directorate: Development Management (Region 1) on 26 September 2018, (authorisation reference no.: 16/3/3/5/F4/17/3019/18).

The conditions of the said EA considered relevant for the purposes of this audit are presented below:

EA dated 31 August 2017:

- 🌱 Condition 5: *The holder is responsible for ensuring compliance with the conditions by any person action on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.*
- 🌱 Condition 8: *The draft Environmental Management Programme (EMPr) submitted as part of the application for environmental authorisation is hereby approved and must be implemented.*
- 🌱 Condition 9: *A copy of the environmental authorisation and the EMPr must be kept at the site where the listed activities will be undertaken where after it must be kept at the offices of the applicant. Access to the site referred to in section C above must be granted and the environmental authorisation and EMPr must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The environmental authorisation and EMPr must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.*
- 🌱 Condition 11: *Non-compliance with a condition of this environmental authorisation or EMPr may result in suspension of this environmental authorisation and may render the holder liable for criminal prosecution.*
- 🌱 Condition 12: *An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where applicable, must be employed. Any solid waste must be disposed of at a landfill licenced in terms of the applicable legislation.*
- 🌱 Condition 14: *The holder must appoint a suitably experienced Environmental Control Officer (ECO), or site agent where appropriate to ensure compliance with the EMPr and the conditions contained therein.*
- 🌱 Condition 15: *Development areas and access routes must be clearly demarcated before development commences and any areas outside the development areas must be demarcated as 'no-go' areas.*
- 🌱 Condition 16: *The recommendations as outlined in the Botanical Impact Assessment Report (dated 09 February 2017 and compiled by Nick Helme Botanical Surveys) must be implemented.*
- 🌱 Condition 18: *All noise and sounds generated during the development phase must comply with the relevant SANS codes and standards.*

- 🌱 Condition 20: *In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit audit reports to the Competent Authority.*
- 🌱 Condition 20.1: *The audit reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).*
- 🌱 Condition 20.2: *An audit report must be submitted to the competent authority within three (3) months of the commencement of the development phase.*
- 🌱 Condition 20.3: *A final audit report must be submitted to the competent authority on completion of the development phase.*
- 🌱 Condition 20.4: *The audit reports must indicate compliance with the conditions of this environmental authorisation, EMPr and recommendations for improved environmental management.*
- 🌱 Condition 20.5: *The holder must, within 7 days of the submission of the report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request; and*
- 🌱 Condition 20.6: *If the audit reports are not submitted, the competent authority may give 30 days' written notice and may have such an audit undertaken at the expense of the applicant and may authorise any person to take such measures necessary for this purpose.*

EA Amendment dated 26 September 2018:

- 🌱 Condition 2: *All other requirements contained in the EA issued by this Department on 31 August 2017 (Ref. No. 16/3/3/2/F4/17/3064/16) remain unchanged and must be implemented.*

## 2.2 Objective of the Environmental Audit Report

The main objective of the Environmental Audit Report is to provide well-motivated recommendations for the need to amend the approved EMPr for the proposed project,<sup>3</sup> including to:

- 🌱 Report on the level of compliance to the conditions of the EA, including the approved EMPr;
- 🌱 Identify and assess any new impacts and risks as a result of undertaking the activity;
- 🌱 Evaluate the effectiveness and implementation of the approved EMPr;
- 🌱 Identify shortcomings in the approved EMPr; and
- 🌱 Identify the need for any changes to the management, avoidance and mitigation measures provided for in the approved EMPr.

The Environmental Audit Report is an independent, accurate and detailed assessment of environmental performance for the project, including a description of the project being audited, the environmental audit findings associated with the project, the audit process being followed, and the relevant environmental requirements that were used during the audit.

## 2.3 Scope of Work, Assumptions and Limitations

As per Condition 20 of the EA, independent environmental audits must be undertaken to determine compliance with the conditions of the EA and the EMPr, in accordance with Appendix 7 of the NEMA

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<sup>3</sup> In accordance with Appendix 7 of the EIA Regulations GN R982 of 2014, as amended 7 April 2017.

EIA Regulations, 2014 (as amended). In addition, the Environmental Audit Reports must be submitted to the CA for consideration.

Legacy EMC's Scope of Work entails the above, however, is limited to the audit inspection and compilation of the report, only.

In addition, the following assumptions and limitations apply to this report:

- 🌍 Where data/information supplied by EA Holder, ECO or other specialist consultants has been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Legacy EMC for incomplete or inaccurate data supplied by external parties;
- 🌍 It is Legacy EMC's professional opinion that the adopted methodology is sufficient to conduct the environmental compliance audit;
- 🌍 It is assumed that the Public Participation Process undertaken during EIA Approval process has identified all relevant concerns of stakeholders;
- 🌍 Where detailed information is not available, the precautionary principle has been adopted;
- 🌍 The audit is based on information supplied by the ECO and a site inspection on 9 November 2018;
- 🌍 The Applicant will in good faith implement the agreed mitigation measures identified in the EMP. In this regard it is assumed that the Applicant will commit sufficient resources and employ suitably qualified personnel.

Notwithstanding the above, Legacy EMC is confident that these assumptions and limitations do not compromise the overall findings of this report.

## 3 ENVIRONMENTAL AUDIT

### 3.1 Introduction

This Section provides an overview of the audit findings, including an analysis of any non-compliances, if applicable. This Section further describes the findings regarding the implementation of the approved EMPr and Conditions of Authorisation included in the EA dated 31 August 2017 and amended EA dated 26 September 2018, as well as the resolution or non-resolution of previous audit-findings, where applicable.

### 3.2 Audit Methodology

A thorough review of the statutory requirements were conducted, as well as a review of the available project information. A site inspection along with the ECO and WHBO Environmental Officer (Ms. Jamy-Lee Davis) was conducted on 9 November 2018 and a photographic record made of the current phase of works on the pipeline route (Refer to Appendix B).

The previous ECO reports (January 2018 – September 2018) were received from Advisian and reviewed against the requirements in the approved EMPr and EA conditions of authorisation. The reference documents therefore include:

- National Environmental Management Act (Act 107 of 1998), GN R982 Environmental Impact Assessment Regulations (2014), as amended – Appendix 7;
- Amendment of the Environmental Authorisation issued by DEADP (Ref No.: 16/3/3/5/F4/17/3019/18) on 26 September 2018 and the original Environmental Authorisation (Ref No. 16/3/3/2/F4/17/3064/16) dated 31 August 2017 (Refer to Appendix C);
- OTMS HDPE Seawater Pipeline – Environmental Management Programme (August 2018), Advisian; and
- OTMS Crude Oil Blending & Storage Terminal Environmental Compliance Monitoring – Construction Phase Reports (dated respectively: 24 January 2018; 7 February 2018; 22 February 2018; 8 & 22 March 2018; April 2018; 17 May 2018; 7 June 2018; 6 July 2018; 23 July 2018; 13 August 2018 and 10 September 2018), WorleyParsons Group t/a Advisian.

### 3.3 Compliance Indicators

This document provides a table (checklist) of the application of the EMPr complied by Advisian and the Conditions of Authorisation included in the EA and EA Amendment issued by the DEADP on 31 August 2017 and 26 September 2018, respectively. The checklist further provides information on the parties responsible for implementing the recommended measures to ensure compliance, and should be read in conjunction with the ECO Compliance Monitoring Reports for the project compiled by Advisian (January – September 2018), EMPr and the EA.

Compliance is measured as Non-Compliance (NC), Partially Compliant (PC) or Full Compliance (FC). The observations and actions required are included in the checklist.

Non-Compliance (NC)
Partially Compliance (PC)
Full Compliance (FC)

### 3.4 Compliance with Conditions of the EA, and EMPr

The conditions of the EA and the EMPr have been tabulated and are used throughout the audit to assess the compliance of the project in terms of the conditions. The Tables below provides the status of compliance of the construction phase audit (inspection conducted on 9 November 2018) which may be used in the subsequent final audit in order to ascertain whether improvements have been made between the respective audit cycles. Table 3 provides the performance of the audited items and also indicates the overall performance score.

Photographs are used to capture the events on the day and are presented in Appendix B of this report.

**Table 3-1: Compliance Table in respect to the EA**

Condition No.	Description	Responsible Party	Compliance Status	Comments
5	<i>The holder is responsible for ensuring compliance with the conditions by any person action on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.</i>	Holder of the EA	FC	Project health, safety and environmental meetings are held regularly on site. Refer to Appendix D for the summary of the meetings held, as provided by Advisian. These meetings are attended by the ECO, EO, Contractor and holder of the EA, as well as subcontractors. A list of Method Statements relating to the project is also attached in Appendix D.
8	<i>The draft EMPr submitted as part of the application for environmental authorisation is hereby approved and must be implemented.</i>	EO	FC	The EMPr is kept on site and is being implemented.
9	<i>A copy of the EA and the EMPr must be kept at the site where the listed activities will be undertaken where after it must be kept at the offices of the applicant. Access to the site referred to in section C above must be granted and the EA and EMPr must be produced to any authorised official representing the competent authority</i>	EO	FC	A copy of the EA and EMPr is kept on site by the Contractor's Environmental Officer.

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<i>who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The EA and EMPr must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.</i>			
11	<i>Non-compliance with a condition of this EA or EMPr may result in suspension of this EA and may render the holder liable for criminal prosecution.</i>	Holder of the EA	FC	No non-compliances were noted during the audit inspection, and no previous non-compliances were recorded by the ECO for the HDPE Pipeline route.
12	<i>An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where applicable, must be employed. Any solid waste must be disposed of at a landfill licenced in terms of the applicable legislation.</i>	Holder of the EA	FC	<p>Waste skips and waste separation occurs on site. No litter noted on site.</p> <p>A waste management plan is kept on site. Proof of all disposal slips/paperwork regarding waste management and disposal is available on site. WBHO keeps an extensive waste disposal register which is up to date.</p> <p>As noted in the ECO report, recycling of various waste types and separation of waste occurs on site.</p> <p>GreenBin has been appointed to manage waste disposal, and all records of this is kept on site and available for review.</p> <p>Waste is taken to the Vredenburg Municipal Waste Disposal Site, where WasteGro has a contract with the Municipality for recycling.</p>
14	<i>The holder must appoint a suitably experienced</i>	Holder of EA	FC	Liesel Hattingh of Advisian appointed as ECO. Liesel has 10 years' experience in performing

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<i>Environmental Control Officer (ECO), or site agent where appropriate to ensure compliance with the EMPr and the conditions contained therein.</i>			and supporting Basic Assessments; Environmental Impact Assessments; Environmental Compliance Monitoring and Auditing. Her experience includes compilation of Environmental Management Programmes as well as Waste Management and Water Use Licence Applications. The ECO visits the site twice a month for inspections.  Jamy-Lee Davis is appointed as the Environmental Officer for WBHO. She is permanently on site and thus constantly monitoring and managing the site, and addresses issues as they arise. The Contractor has two internal audits per month.
15	<i>Development areas and access routes must be clearly demarcated before development commences and any areas outside the development areas must be demarcated as 'no-go' areas.</i>	Contractor / Holder of EA / EO	FC	Access roads and development areas clearly demarcated.
16	<i>The recommendations as outlined in the Botanical Impact Assessment Report (dated 09 February 2017 and compiled by Nick Helme Botanical Surveys) must be implemented.</i>	Contractor / EO / ECO	FC	Recommendations incorporated into EMPr and implemented. See below for compliance with the recommendations of the Botanical Specialist as included in the Botanical Impact Assessment Report.
<i>Botanical IA recommendations:</i>	<i>The pipeline construction corridor in the area within and between the High, Medium and Medium-High sensitivity areas should be minimised and kept as narrow as</i>	Contractor / EO / ECO	FC	The pipeline construction corridor within the high and medium-high sensitivity areas remained within the authorised 15 m pipeline servitude and no no-go areas were impacted on.

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<i>possible and should ideally be less than 15m wide in this area (being the width of the servitude). The approved development footprint in this area must be surveyed and clearly demarcated with wire or coloured rope, and strung with warning signs, prior to any construction.</i>			
	<i>The ECO must ensure that no disturbance occurs outside the approved development footprint of the pipeline route during construction.</i>	ECO	FC	The ECO inspects the work site twice a month, and thus far in the construction phase disturbance has not extended beyond the approved development footprint.
	<i>Topsoil removed from the pipeline trench must be kept separate from other fill during the construction process, and must be replaced last, on the soil surface.</i>	Contractor / EO / ECO	FC	Separate topsoil stockpiles are stored on a disturbed area at Sunrise Energy. Topsoil and spoil are stored separately, adjacent to the current excavations south of the MRR559 road. Refer to the photo sheet (Appendix C) for photographic proof of the topsoil stockpiles.
	<i>Alien invasive species (such as ryegrass or oats) or straw containing any such species should not be used for temporary soil stabilisation of the pipeline corridor, as these will then rapidly dominate these areas, to the exclusion of indigenous species.</i>	Contractor / EO / ECO	FC	No invasive plants nor indigenous species are currently being used for soil stabilisation.
	<i>Plant Search and Rescue must be undertaken from the entire pipeline</i>	EO / Contractor / ECO	FC	VULA Environmental was appointed to conduct the search and rescue operations prior to

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<p><i>development corridor, with the exception of Low sensitivity areas, prior to any development. All translocatable plant species, but notably succulents and geophytes, must be bagged up and stored in a nursery for later use, once construction of the pipeline has been completed and rehabilitation required in this area south of the road. Replanting of these rescued specimens should be undertaken in the first autumn – winter (May – June) after construction has been completed, giving the plants maximum time to establish before the next summer dry period.</i></p>			<p>commencement of contraction activities.</p> <p>No replanting of these removed plants has occurred yet and will be done once rehabilitation commences, at the completion of the construction phase for the pipeline.</p>
	<p><i>Additional rehabilitation of the High and Medium-High sensitivity sections of the pipeline servitude should be undertaken using locally indigenous Strandveld species that are additional to those used in the Search and Rescue process. This work should be undertaken by an experienced horticultural contractor who has access to suitable locally grown species. Key elements suggested include</i></p>	<p>Contractor / EO / ECO</p>	<p>N/A</p>	<p>Rehabilitation of the pipeline route has not commenced yet, however VULA Environmental have been appointed to undertake the work to replant the rescued plant species.</p>

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<p><i>shrubs such as Othonna cylindrica, Limonium peregrinum, Calobota sericea, Thamnochortus spicigerus, Searsia laevigata, Searsia glauca, Lycium ferocissimum, Euclea racemose and Putterlickia pyracantha.</i></p>			
	<p><i>Ongoing alien invasive plant management must be undertaken on an annual or biannual basis within the full pipeline servitude. No spraying of herbicide should be undertaken in these areas as this kills numerous non-target species. The focus should be on removing (using CapeNature approved methodology) all alien invasive shrubs and large herbs (such as Echium species), although in some cases it may be possible and necessary to also remove invasive alien grasses such as kikuyu (Pennisetum clandestinum) or ryegrass (Lolium species).</i></p>	EO / Holder of the EA	N/A	<p>This condition only applies to the operational phase of the pipeline and does not apply to the construction phase.</p> <p>Invasive alien maintenance is however being done and overseen by the EO.</p>
18	<p><i>All noise and sounds generated during the development phase must comply with the relevant SANS codes and standards.</i></p>	Holder of the EA / Contractor	FC	<p>Construction site noise monitoring is addressed by the Occupational Health and Safety external auditor, and monitored across the entire site. Noise zones are established and managed accordingly.</p>

Condition No.	Description	Responsible Party	Compliance Status	Comments
				The acoustic equipment is SANAS calibrated. No noise complaints have been noted from surrounding establishments/persons.
20	<i>In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the EA and the EMPr and submit audit reports to the Competent Authority.</i>		FC	Legacy EMC appointed as independent external environmental auditor. The external audit was conducted on 9 November 2018.
20.1	<i>The audit reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).</i>	Holder of the EA / ECO / EO	FC	Please refer to Section 3.2 which describes the methodology adopted for the external audit. The methodology and the report content comply with Appendix 7 of the EIA Regulations (2014), as amended.
20.2	<i>An audit report must be submitted to the competent authority within three (3) months of the commencement of the development phase.</i>		FC	Commencement of the construction notice was submitted to DEADP on 26 January 2018 for commencement of activities on 2 February 2018.  As per the EA Condition 14, the Advisian ECO has been monitoring the site since commencement of construction. The DEADP Case Officer arranged for a compliance audit of the project on 22 March 2018, which concluded with no complications. After the submission of the site/project audit report to the Case Officer after 3 months, the ECO was notified via an official letter from the case officer (dated 10

Condition No.	Description	Responsible Party	Compliance Status	Comments
				September 2018) that a secondary external auditor must conduct the environmental audit for the relevant authorisation of the HDPE Seawater pipeline. Legacy was appointed to fulfil this role.  Therefore, an audit report was submitted by the ECO to the competent authority within 3 months of commencement of construction, however this was not an external audit report.
20.3	<i>A final audit report must be submitted to the competent authority on completion of the development phase.</i>		N/A	Submitting the External Audit Report to the Competent Authority falls outside of Legacy EMC's Scope of Work, however Legacy EMC will follow up with the ECO to ensure the report has been submitted.
20.4	<i>The audit reports must indicate compliance with the conditions of this EA, EMPr and recommendations for improved environmental management.</i>			Refer to Table 3-1 (this table) for the EA conditions and how the conditions were complied with, and Table 3-2 for the compliance of the project with respect to the EMPr.  Where relevant, recommendations are made for improved environmental management, refer to Section 3.6.
20.5	<i>The holder must, within 7 days of the submission of the report to the Competent Authority, notify all potential and registered I&amp;APs of the submission and make the report available to anyone on request; and</i>		N/A	Notification of all Interested and Affected Parties (I&APs) falls outside of Legacy EMC's Scope of Work, however Legacy EMC will follow up with the ECO to ensure I&APs have been informed.
20.6	<i>If the audit reports are not submitted, the competent authority may give 30 days' written notice and may</i>		FC	Condition is noted, and proponent and ECO informed of this condition.

Condition No.	Description	Responsible Party	Compliance Status	Comments
	<i>have such an audit undertaken at the expense of the applicant and may authorise any person to take such measures necessary for this purpose.</i>			

**NOTE:** Certain conditions of authorisation were omitted as it does not fall within the scope of the Environmental Compliance Audit Report.

**Table 3-2: Compliance Table in respect to the EMPr**

EMPr No.	Description	Responsible Party	Compliance Status	Comments
5.5.1	<i>Demarcation of the site</i>	Contractor	FC	The areas where the pipe has already been installed and backfilled are clearly demarcated with “Caution” signs. The contractors at the current work site is staying within the authorised servitude width, and the no-go areas have been cordoned off to prevent access.
5.5.2	<i>Protection of flora</i>	Contractor ECO / EO	FC	Search and Rescue of plants have been undertaken along the development footprint prior to commencement of construction activities, by VULA Environmental Services. Search and Rescue was conducted a week prior to commencement of construction. The rescue was deemed successful, and only transferable plants were removed. The removed plants are kept and cared for at the VULA nursery established at the West Coast National Fossil Park.

EMPr No.	Description	Responsible Party	Compliance Status	Comments
	Topsoil must be stored in a “dry and shaded” place.		PC	The large topsoil stockpiles at the Sunrise Energy site are currently exposed to the sun, although vegetation is starting to establish on the topsoil stockpile. The ECO must ensure the issue of shading the stockpile is discussed in the next ECO audit report to ensure compliance. Alternatively, the EMPr should be amended accordingly, if this is not possible due to the size of the stockpiles.
	Alien Invasive Plant management		PC	Alien Invasive Plant management must be conducted at the topsoil stockpiles at Sunrise Energy as there are currently invasive plants (ryegrass, oats, canola, thistle) growing on the topsoil. The EO has implemented a plan for the clearance of these plants during the site inspection.
5.5.3	<i>Protection of Fauna</i>	Contractor ECO / EO	FC	<p>The subject of fauna protection is covered during the toolbox talks.</p> <p>Areas are scouted for and cleared of fauna by relocating them away from the construction zone, into the adjacent veld. Trenches and working areas are checked daily for fauna. Any fauna found on site is reported to the Environmental and HSE Officer. HSE Officer is trained in snake capture and release.</p> <p>No incidents or snake bites have occurred thus far.</p>

EMPr No.	Description	Responsible Party	Compliance Status	Comments
5.5.4	<i>Vegetation clearance</i>	Contractor	FC	No dumping of cleared vegetation, and only vegetation within development footprint cleared.
	<i>5.5.5.1 Topsoil</i>	Contractor / EO	FC	Topsoil stored along pipeline servitude as well as laydown area.
5.5.5	<i>5.5.5.2 Spoil</i>	Contractor / EO	FC	Spoil stockpiled within servitude area and reused for backfilling of the pipeline excavations. Excess spoil not used for backfilling will be spread evenly over the disturbed area, prior to the application of the topsoil.
5.5.6	<i>Roads and access</i>	Contractor / Holder of EA	FC	<p>Authorised roads and access points used.</p> <p>Properties through which the pipeline route runs are fenced and access into these properties are controlled at the property gates.</p> <p>Access roads are temporary and located within the pipeline servitude.</p> <p>Along the pipeline route, the substrate is predominantly sandy and does not produce a large amount of dust.</p> <p>Access to the OTMS terminal is controlled via a sign-in register and a visit confirmation slip.</p>
5.5.7	<i>Gates and Fences</i>	Contractor	FC	All fences flattened to allow the construction vehicles to enter the work site to be re-erected expeditiously, once access no longer required.

EMPr No.	Description	Responsible Party	Compliance Status	Comments
5.5.8	<i>Structures</i>	Contractor / Holder of EA	FC	All buildings and structures located within OTMS Terminal construction camp, in accordance with the approved site plan. The site plan has been amended as the site grows.
5.5.9	<i>Ablution Facilities</i>	Contractor / EO	FC	Chemical toilet provided to employees at work site, on impermeable surface and secured. Toilets are serviced by Econoloo and a WBHO honeysucker, and proof of disposal is available on site. WBHO employed a dedicated staff member to clean the ablutions daily. There are 85 toilets provided on site, for the 2077 staff.
5.5.10	<i>Eating areas</i>	Contractor	FC	Designated, shaded eating area with benches at work site. Water is provided at the eating area. There is no kitchenette available.
5.5.11	<i>Drinking Water</i>	Contractor	FC	Fresh water is supplied to the employees, and there are refrigerated water containers on site.
5.5.12	<i>Contractors Construction Camp and Lay-Down Areas</i>	Contractor	FC	Construction camp at OTMS Terminal site camp. Site plan has been updated and approved as the site expands and changes.
5.5.13	<i>Batching Plants</i>	Contractor	FC	The batching plant is located at the OTMS Terminal and is in a neat state. The last incident recorded in the Incident Register was due to water from the settlement ponds overflowing (3 October 2018). The water pump

EMPr No.	Description	Responsible Party	Compliance Status	Comments
				was fixed, and the surrounding areas cleaned
5.5.14	<i>Workshop, Equipment Maintenance and Storage</i>	Contractor	FC	Workshop at the OTMS Terminal used for maintenance. Vehicles and equipment not leaking. Refer to Incidents Register attached as Appendix E for past incidents, and remedial actions.
5.5.15	<i>Vehicles and Equipment</i>	Contractor	FC	All vehicles maintained in good working order and silenced.
5.5.16	<i>Fuel Storage</i>	Contractor	FC	Self-bunded diesel storage tank located at OTMS Terminal Construction Camp. The self-bunded tank has a bund capacity of 110% of the tank, as well as a drip tray, to capture any spillages. A fire-extinguisher is located at the diesel storage tank.
5.5.17	<i>Hazardous Substances</i>	Contractor	FC	No hazardous substances at work site. Hazardous substances are stored at the OTMS Terminal in a roofed and bunded area, and hydrocarbon spill kits are kept on site.
5.5.18	<i>Nurseries</i>	Contractor	FC	The Primary Contractor is making use of VULA Environmental Services for the search and rescue of plants. The rescued plants are kept at the VULA nursery located at the West Coast National Park.
5.6.1	<i>Waste Rock / Spoil and Builders Rubble</i>	Contractor	FC	Spoil utilised as backfill for the pipeline route. Excess spoil not used for backfill is spread evenly over the disturbed area, prior to application of topsoil.
5.6.2	<i>Solid Waste</i>	Contractor / EO	FC	Dustbin with lid at work site. Waste separation

EMPr No.	Description	Responsible Party	Compliance Status	Comments
				occurs at OTMS Terminal. Waste disposal slips are available on site, and waste separation for recycling occurs on site. GreenBin manages waste disposals and all records are kept on site and available for review.
5.6.3	<i>Liquid Waste</i>	Contractor / EO	FC	Portable chemical toilet at work site secured.  Sewage is disposed of at the Langebaan Waste Water Treatment Works. Wash-water from the concrete batch plant goes through a settling tank system and is then re-used.
5.6.4	<i>Hazardous Waste</i>	Contractor / EO	FC	Hazardous waste stored at OTMS Terminal for disposal at the Vissershok Waste Disposal Facility. The hazardous waste storage area is bunded and roofed. This waste is kept in containers and removed by a service provider for disposal at the hazardous waste disposal facility. The Chemical Store Storeman has been trained in the handling and storage of hazardous substances. Spill kits present on site.
5.6.5	<i>Pollution Control</i>	Contractor / EO	FC	Cement batching occurs at batching plant. A Non-Conformance Report was issued for the Reclaimer Sump at the batching plant overflowing, however corrective action was verified on site on 13/08/2018 and the Non-Conformance Report was Closed Out.

EMPr No.	Description	Responsible Party	Compliance Status	Comments
				<p>Drip trays used on site.</p> <p>Hydrocarbon spill kits on site.</p> <p>Refer to Incidents Register attached as Appendix E for description of past incidents and remedial actions.</p>
5.6.7	<i>Marine Monitoring</i>	Contractor ECO / EO	FC	<p>The pipeline installation at the Bay has been completed and backfilled, and no residual impacts on the marine environment and coastal environment were noted.</p> <p>Water quality monitoring will be done in accordance with the CWDP before and during operation of the pipeline.</p>
5.6.8	<i>Air Quality</i>	Contractor	FC	<p>Dust suppression techniques used by spraying non-potable water on dust generation areas. No recent complaints regarding dust has been noted, with the last dust complaint dated 28 September 2017. A dust management plan has subsequently been drafted and implemented.</p>
5.6.9	<i>Noise Control</i>	Contractor	FC	<p>No loud music present on site. All machinery and vehicles appropriately silenced. No complaints noted regarding noise.</p>
5.6.10	<i>Fire Control</i>	Contractor / EO	FC	<p>No fires permitted on site. Firefighting equipment on site and clearly indicated.</p> <p>Firefighting equipment include fire-extinguishers and water trucks. The service dates of all fire extinguishers should be</p>

EMPr No.	Description	Responsible Party	Compliance Status	Comments
				<p>monitored, and the extinguishers expeditiously serviced.</p> <p>Designated smoking areas with cigarette butt receptacles available at the office area, construction site and work site.</p>
5.6.11	<i>Alien Plant (Weeds) Control</i>	EO	PC	<p>Alien Invasive Plant management must be conducted at the topsoil stockpiles at Sunrise Energy as there are currently invasive plants (ryegrass, oats, canola) growing on the topsoil. The EO has implemented a plan for the clearance of these plants.</p>
5.6.12	<i>Health and Safety</i>	EO	PC	<p>First aid/emergency facilities and procedures in place. Site inductions for everyone entering the site. Employees wear the required Personal Protective Equipment on site.</p> <p>During the inspection it was noted that the pipeline excavations that were left open overnight are not barricaded. Excavations in areas where people work must be barricaded and clearly marked, and any trenches left open overnight must be barricaded for the protection of both people and animals. It is however noted that these excavations are not easily accessible and is located behind the fences of the SFF transfer station. However in accordance with the EMPr, these open</p>

EMPr No.	Description	Responsible Party	Compliance Status	Comments
				excavations still pose a threat to animals.
5.6.13	<i>Earthworks (Excavation and Trenches)</i>	Contractor	FC	Heritage consultant appointed to check for fossils or artefacts. Excavations backfilled on a progressive basis.
5.6.16	<i>Lights</i>	Contractor	FC	There are no lights on site for the pipeline route as work is only done during the day.
5.6.17	<i>Shaping and trimming</i>	Contractor / ECO / EO	PC	Pipeline servitude areas along access road to the OTMS Terminal to be shaped and trimmed, as well as demarcated to prevent servitude being mistaken for a road.
5.6.18	<i>Surface Water Management</i>	Contractor	FC	No surface water used for the proposed project. Drip trays and spill kits are always on site with the HDPE pipeline construction activities.
5.6.19	<i>Erosion Protection</i>	Contractor / EO	FC	No soil erosion noted during inspection.
5.6.21	<i>Community Relations</i>	Contractor	FC	Information boards erected at entrance to OTMS Terminal. The surrounding landowners were notified of the commencement of construction works, and a complaints register is kept on site. Complaints are managed by the EO on site, in collaboration with the OTMS Site Manager.

**NOTE:** Certain management measures included in the EMPr were omitted as it does not fall within the scope of the Environmental Compliance Audit Report, e.g. measures relating to the appointed Archaeologist, or measures relating to rehabilitation after completion of the works, unless it is in terms of erosion protection.

### 3.5 Ability of the EMPr to provide avoidance, management and mitigation of environmental impacts

The approved Construction and Operational EMPr for the HDPE Seawater Pipeline Route, Saldanha, provides management guidelines for the construction methodology and construction works of the project, to ensure environmental impacts are monitored and minimised where possible. The EMPr sets out the Vision set by the Applicant, Goals for achieving the Vision, Environmental Objectives to reach the Goals, Targets and Management Actions.

The EMPr incorporates the recommendations of the Environmental Impact Reporting Process and its appended specialist and technical reports, in respect of the various mitigating measures to be implemented during the construction and operational phases. The EMPr covers pre-construction, construction and post-construction (operational) phases for the project, as well as rehabilitation.

This Environmental Compliance Audit Report assessed the ECO Environmental Compliance Reports (for the period January to September 2018) against the mitigation measures and management actions included in the EMPr, as well as the application and adherence to the Conditions of Authorisation of the EA and EA Amendment (dated 31 August 2017 and 26 September 2018, respectively).

The EMPr and associated Environmental Compliance Reports (Advisian, January – September 2018) addressed all Conditions of Authorisation and mitigation measures relevant to the current Phase of the project.

### 3.6 Recommendations with regards to need to amend EMPr

The approved EMPr does not contain any information and specifications on the control of traffic. This specification is important, as the road is currently closed and diverts traffic from the MR00559 to the OP 538 road. The road closure is however due to construction activities at the MR00559 road bridge crossing the railway lines. Traffic control officials from WBHO are used where the site access road intersects the MR00559, when equipment/plant crosses. Although traffic management measures are in place on site, specifications for the management of traffic needs to be included in the EMPr. An example of such a specification is as follows:

*In the even that activities cause a high volume of traffic to be generated or there is a need for vehicles which require warning signage either in terms of size or length, or any roads be closed for the construction vehicles, the contracting company responsible in conjunction with the local authority must ensure either the:*

-  *Local Authority traffic officials are timeously informed and requested to offer assistance; and/or*
-  *Provide flagman and traffic signs to be placed at strategic points to warn oncoming motorists.*

The movement of machinery and vehicles to and from the work site must be well coordinated, so as to cause the least disruption in the area during rush hour traffic. Large trucks and other machinery may not be left unattended in any of the access points. Appropriate signage must be erected at strategic locations, clearly observable by all road users by day and night.

Although a separate waste management plan has been approved for the OTMS Terminal, it is recommended that a Waste Management Plan be incorporated into the EMPr for the HDPE Seawater Pipeline. This plan should identify waste streams, volume generated (e.g. excess spoil material not used for backfill), hierarchy measures implanted, safe disposal certificates and manifest.

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## 4 STAKEHOLDER ENGAGEMENT

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All complaints and comments received from IAPs are recorded on site in a complaint register, which notes the IAP details, date of complaint, comment, feedback date to the IAP as well as actions taken to address the complaint.

The Environmental Compliance Audit Report (this report) will be submitted to the Competent Authority (DEADP), and IAPs will be notified within 7 days of the submission of the Report to DEADP.

Should any amendments to the EMPr be recommended in the future, the process will be subjected to a Public Participation Process to bring the amended EMPr to the attention to IAPs, including organs of state which have jurisdiction in respect of any aspect of the relevant activity. Any comments received will be incorporated, and the amended EMPr submitted to DEADP for approval.

Note: Submission of the report to the competent authority and notification to the IAPs of the availability of the External Audit Report is outside of Legacy EMC's scope of work, however Legacy EMC will follow up with the ECO for proof of submission and IAP notification.

### 4.1 COMMENTS AND RESPONSES

Any comments received on the Environmental Compliance Audit Report will be included in a Comments and Responses Table and sent to DEADP for consideration.

## 5 CONCLUSION

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Legacy EMC is of the professional opinion that the EMPr requires amendments as indicated in Section 3.6 above, to enable it to be appropriate to address and mitigate any negative environmental and socio-environmental impacts that might arise during the current construction phase of the HDPE Saltwater Pipeline for OTMS, Saldanha, and that the EMPr meets all the environmental objectives.

The only partial compliances noted were as follows:

- 🌿 Alien Invasive Plant Species management must be implemented at the topsoil stockpiles at Sunrise Energy as there are currently invasive plants growing on the stockpiles.
- 🌿 In accordance with the EMPr, stockpiles must be shaded. Although one of the stockpiles at Sunrise Energy is covered by vegetation, the eastern stockpile is not yet covered by vegetation and thus should be covered.
- 🌿 Pipeline excavations that are left open overnight, or are located in areas where people are working, must be barricaded and demarcated to prevent harm to humans and/or animals.
- 🌿 Pipeline servitude areas along the access road to the OTMS Terminal should be shaped and trimmed, as well as demarcated to prevent the servitude from being mistaken for a road.

No non-compliances have been recorded, and the partial compliances are minor issues which have been discussed with the Environmental Officer on site.

## 6 DECLARATION OF INDEPENDENCE

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I, **Adri Meyer** declare that:

- 🌱 I act as the independent environmental auditor for this project;
- 🌱 I will perform the work relating to the project in an objective manner, even if this results in views and findings that are not favourable to the holder of the EA;
- 🌱 There are no circumstances that may compromise my objectivity in performing such work;
- 🌱 I have expertise in conducting environmental compliance audits;
- 🌱 I have the relevant knowledge of NEMA, the EIA Regulations and any guidelines that have relevance to the project;
- 🌱 I will comply with NEMA and the EIA Regulations, and all other applicable legislation;
- 🌱 I have no, and will not engage in, conflicting interests in the undertaking of the works;
- 🌱 I undertake to disclose to the applicant, ECO and competent authority all material information that reasonably has or may have the potential of influencing the objectivity of any report, plan or document prepared by myself for submission to the competent authority;
- 🌱 I will ensure that information containing all relative facts in respect of the project and proposed amendments to the EMPr is made available to IAPs, and that public participation is undertaken in such a way that all IAPs will be provided with opportunity to submit comments on any documents produced;
- 🌱 I will ensure that any comments received from IAPs are considered and recorded, and submitted to the competent authority;
- 🌱 I will provide the competent authority with access to all information at my disposal regarding my scope of work, whether such information is favourable to the holder of the EA or not;
- 🌱 I will perform all other obligations as are expected from an environmental auditor in terms of the EIA Regulations;
- 🌱 I realise that a false declaration is a punishable offence under Section 13 and 14 of the EIA Regulations.



29-11-2018

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Signed

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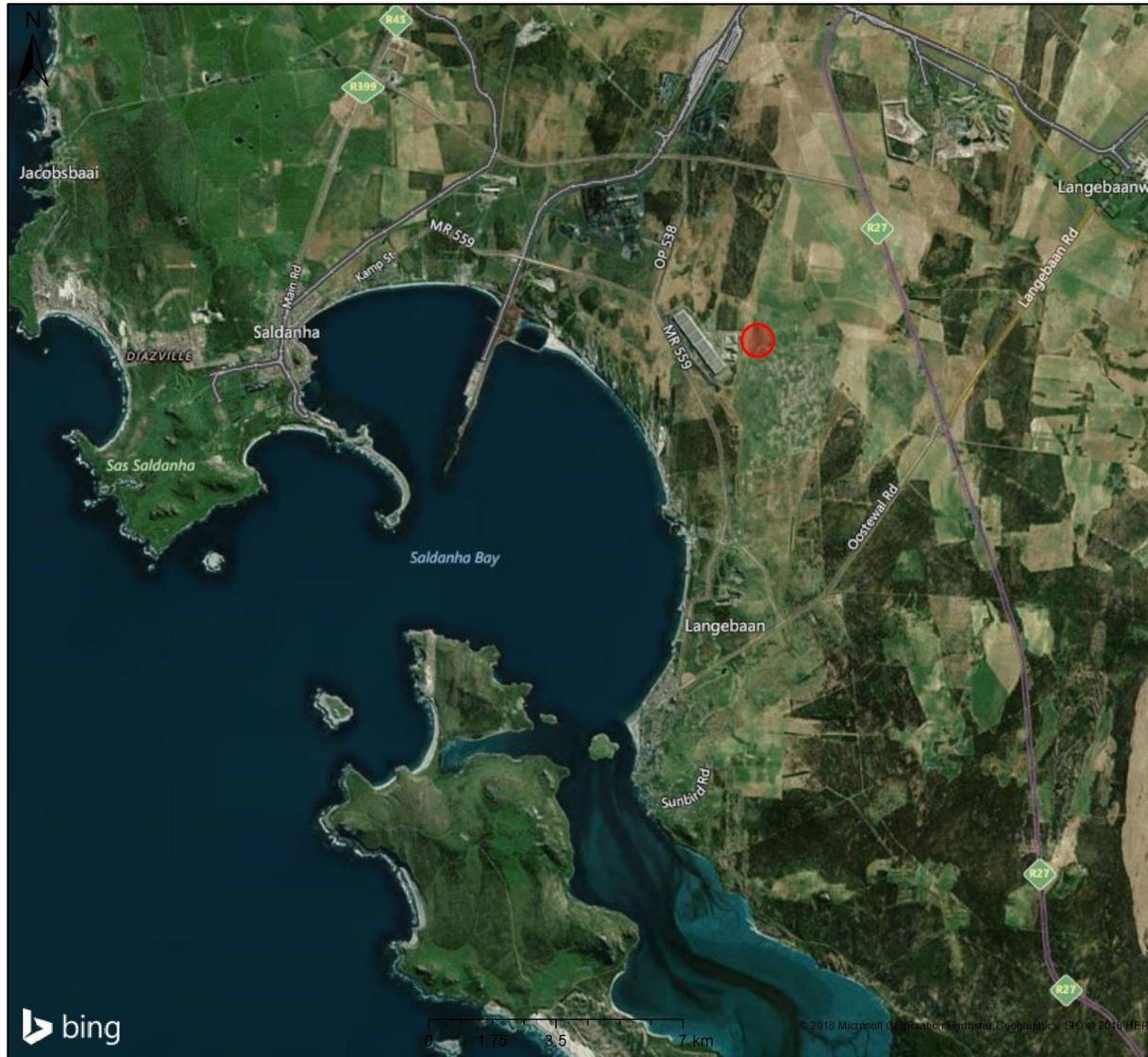
Date

## *Appendix A: Locality Map*



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**Locality Map of OTMS,  
Saldanha**

Scale: 1:144 448  
Date created: November 12, 2018



## *Appendix B: Pipeline Route*



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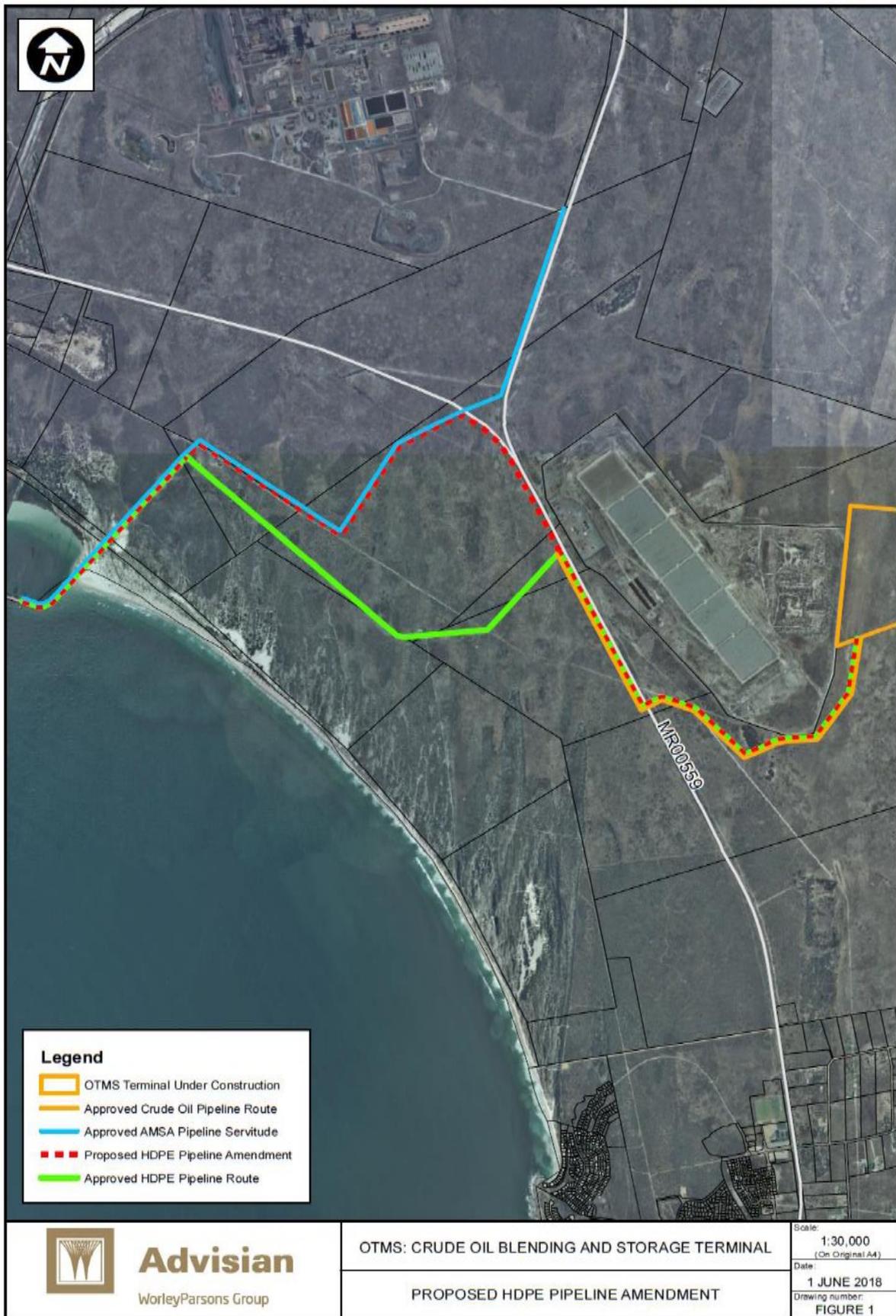


Figure 1 - New amended and approved pipeline route indicated in dotted red line

*Appendix C: Photo Sheet (9 November 2018)*



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*Appendix D: List of Environmental Meetings and Method Statements (taken from Advisian ECO Report September 2018)*



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## *Appendix E: Incidents Register*



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