



SASOL SATELLITE OPERATIONS

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# ENVIRONMENTAL AUTHORISATION AND ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE AUDIT

12/12/20/1035 - SNI Liquid Pipeline





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12/12/20/1035 - SNI Liquid Pipeline

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## ***APPENDICES***

### **APPENDIX A**

**ENVIRONMENTAL AUTHORISATION (REFERENCE NO: 12/12/20/1035)**

# 1 INTRODUCTION

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## 1.1 TERMS OF REFERENCE

Sasol Satellite Operations (Sasol) appointed WSP Environmental (Pty) Ltd (WSP) to conduct a compliance audit of its Environmental Authorisation (EA), reference number 12/12/20/1035 and corresponding Environmental Management Programme (EMPr) for a pipeline that runs from Secunda to Sasolburg dated 12 October 2009. The pipeline is an underground pipeline that carries either jet fuel, diesel or petrol from the tank farms in Secunda to the Sasol One Complex in Sasolburg. The fuel is first distilled to separate any different products before they are stored. The desired product is pumped to Sasolburg when required and the pipe cleaned before the next product is pumped through.

The external audit was undertaken in accordance with the Environmental Impact Assessment (EIA) Regulations, 2014 published in terms of the National Environmental Management Act 107 of 1998 (NEMA). This audit report considers the period July 2020 to May 2024.

## 1.2 SASOL OIL LIQUID PRODUCT PIPELINE (EA REFERENCE NUMBER: 12/12/20/1035)

The pipeline's starting point is at Sasol Synfuels site in Secunda where it is loaded with liquid product before it goes underground until it reaches the Sasol One Complex in Sasolburg to feed the relevant plant. The pipeline traverses 15 river crossings and 40 wetland crossings that are authorised by the EA from the Department of Environmental Affairs (DEA), now the Department of Forestry and Fisheries and the Environment (DFFE) and a Water Use Licence from the Department of Water and Sanitation (DWS, formerly the Department of Water Affairs). The EA was issued by the DEA on 12 October 2009 and authorised the following listed activities as per the National Environmental Management Act:

- GNR 387 Activity 1; and
- GNR 386 Activities 1, 4, 7 12 and 15.

The pipeline is now in the operational phase, Maintenance operations have been assessed using construction conditions for the EA, however, assessment as per the EMPr was within the operational conditions. The locality of the map is indicated in **Figure 1-1** below.

### 1.2.1 OBSERVED OPERATIONS

The GNP gas pipeline runs in parallel to the SNI liquid pipeline and share the same servitude. Due to the nature of the gas product in the GNP pipeline, there is lesser risk of potential theft incidents as compared to the SNI pipeline.

Four incidents were recorded over the audit period in the incident register. The auditor was informed that the incidents were managed in accordance with the authorised protocols, however, the proof of notification of the Department was not available.



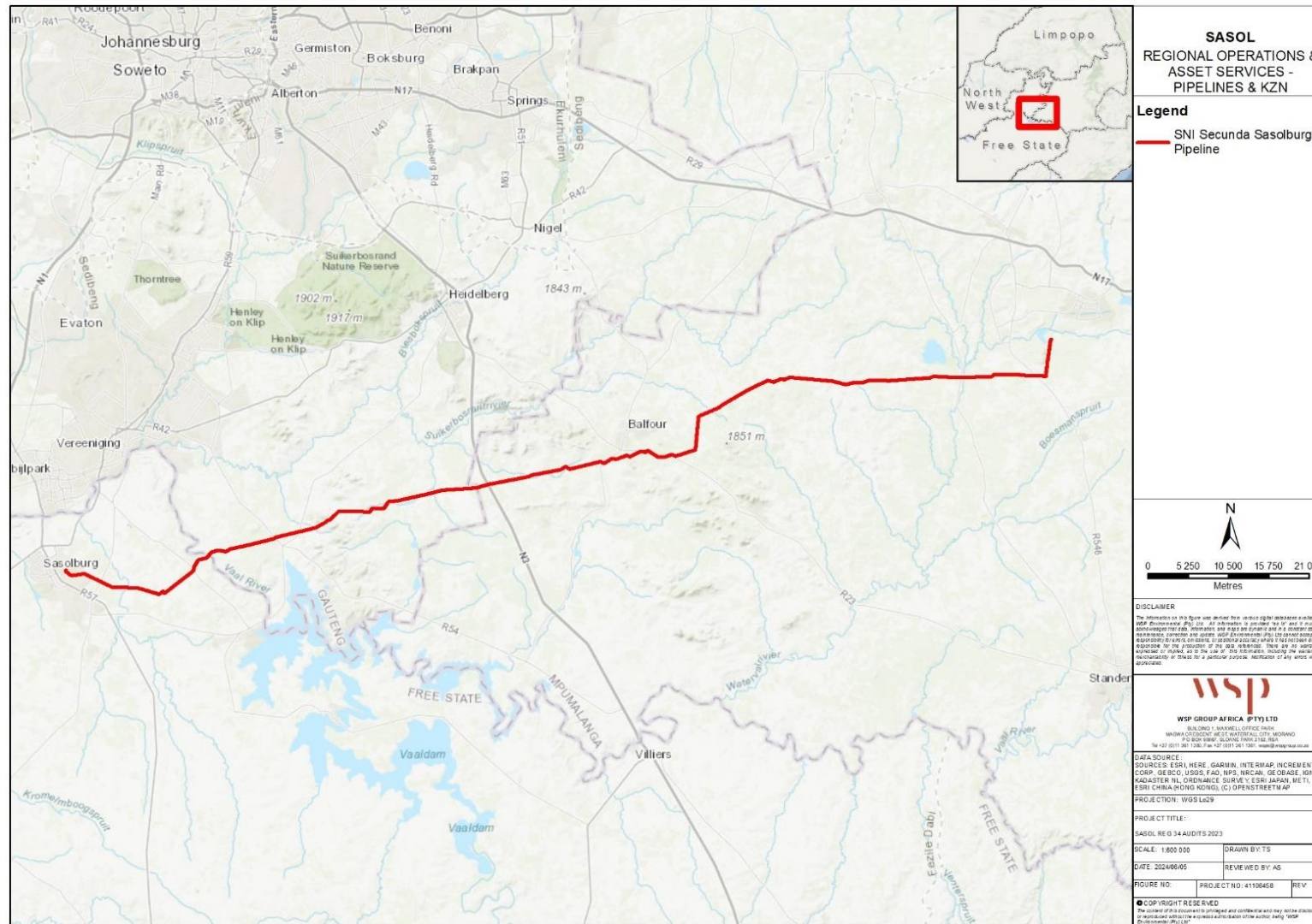


Figure 1-1: SNI Pipeline Locality Map

## 2 AUDIT SCOPE

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The 7 April 2017 amendment to the Environmental Impact Assessment (EIA) regulations introduced the requirement for the auditing of all EAs and EMPs in effect on 8 December 2014 and submission of the audit reports to the Department of Forestry, Fisheries and the Environment (DFFE) every five years. This audit is designed to meet the requirements of Regulation 34 of the EIA Regulations, 2014, as amended.

The audit period runs from July 2020 to May 2024, therefore any construction related conditions are considered outside audit period and therefore not applicable

The objective of the audit was to:

- Assess the level of compliance against the conditions and commitments outlined in the EA and EMP;
- Make recommendations in order to achieve compliance in terms of the EA and EMP;
  - Ensure the commitment contained in condition 1.2 of the EA is completed which states:
  - “The holder of this authorisation shall be responsible for ensuring compliance with the conditions of this authorisation by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.”

## 3 AUDIT METHODOLOGY

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The compliance audit was conducted in a systematic and independent manner that was documented and objectively evaluated to determine compliance to the EA and EMP conditions and commitments.

The audit process comprised the following:

- Compilation of the audit checklist;
- Site inspection (23 and 24 April 2024);
- Request and collection of information;
- Review of documentation relevant to the conditions of the license; and
- Compilation of an audit report.

### 3.1 AUDIT CHECKLIST

WSP compiled an audit checklist to assist with the EA and EMP compliance audit (Section 4).

### 3.2 SITE INSPECTION

WSP Auditor, Jashmika Maharaj conducted the site inspection on 23 and 24 April 2024. The findings and observations of the site visit are recorded and summarised in Section 4 with photographic evidence included in Table 4-1 for the EA and Table 4-2 for the EMP.

Key personnel interviewed included:

- Willem Burger (SHE: Environmental Risk & Compliance Senior Specialist); and
- Aaron Langa (Inland Operations Foreman).

### 3.3 DOCUMENTATION CONSIDERED

The following documentation were provided or considered:

- Incident register\_FY24
- Pipeline Safety Awareness Presentation eMalahleni 15.11.2023
- ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 15.11.2023
- Pipeline Safety Awareness Presentation eMalahleni 19.10.2023
- ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 19.10.2023
- 41102457\_20200813\_Sasol Gas GNP Pipeline\_WUL Audit Report\_Final\_Signed
- 41102457\_20200813\_Sasol Gas GNP Pipeline\_EA & EMP Audit Report\_Final\_Signed
- SNI & GNP REPORT
- ROAS\_ISO14001\_BSI Ecertificate\_Exp20241227
- Sasol South Africa Ltd Secunda Commencement notification
- (18)1.16-ROD\_2009 secunda-sasolburg\_GNP
- Eskom Tx 1 - Sign-off of Sasol Gas and Oil Pipeline crossings.pdf
- Sastech Secunda Sasolburg 3 Projects Updated Schedule 12 Feb 08.doc
- Sastech 3 EIA Road Map 5 Nov 07.doc
- Pipeline information - pp.ppt
- Summary Slides - 3 pipelines.bin
- Works Information rev00 - SH&E comments.doc
- EIA capacity for pipelines.ppt
- Pipeline capacity - EIA purpose.ppt
- SNI BEP - SH&E comments.doc
- SNI Tanks - Control Engineering SOW Jacques dT.doc
- EIA capacity for pipelines.bin
- SNI Legal Register.pdf
- Pipeline information - pp.ppt
- EA\_Activity\_Roadmap\_SNI Portion.xls
- SNI - Environmental Management Plan - section 13 of EIA Report.pdf
- SNI - Amended Environmental Authorisation.pdf
- SNI - Environmental Authorisation.pdf
- Telecommunicator - Method Statement Rev1tp.pdf
- SNI -V002&3-LOCALITY.pdf
- SNI-V004&5-LOCALITY.pdf
- SNI-V010&11-LOCALITY.pdf
- SNI- V012&13-LOCALITY.pdf
- AT-1N11001-Rev2.pdf
- LSH-1N10001A-Rev2.pdf
- LSH-1N11001A-Rev2.pdf
- RDF-256-000331-003.pdf
- SEK-0N2-000041-001 - Block Valve Station HAC.pdf
- 10-13 DE - OBL RTU Rev 0 annex.pdf
- AT-1N10001-Rev2.pdf
- GNR SNI Julius Pistorius Heritage Report 31 Jul 08.pdf
- GNE SNI Specialist Study MHI 18 Feb 09.pdf
- GNE SNI Nat Sci Services Rivers Hi-Flow Report 18 Feb 09.pdf

- GNE SNI Specialist Study Meteorological Tendencies 18 Feb 09.pdf
- GNE SNI Specialist Study Land Use 18 Feb 09.pdf
- GNE SNI Geohydrology Report SRK 18 Aug 08.pdf
- GNE SNI Gas Pipeline Geotechnical Study 17 Jul 08.doc
- GNE SNI Flora Study Summary 16 Feb 09.doc
- GNE SNI Flora Maps 16 Feb 09.jpg
- GNE SNI Fauna Study Summary 16 Feb C9.doc
- GNE SNI Fauna Report 3 Mar 09.pdf
- GNE SNI Ecotone Rivers Report Hi-Flow 15 Feb 09.pdf
- GNE SNI Bruce Rubidge Updates Report 25 Aug 08.pdf
- Acrobat Document4.pdf
- RDF-056-000052-008-RiskContingencyPlan.pdf
- Acrobat Document3.pdf
- Acrobat Document1.pdf
- Acrobat Document2.pdf
- Draft\_Scoping\_Report\_Sastech\_Gas\_Pipeline\_Sec\_to\_Sas.pdf.pdf
- SNI\_QRA\_attachment\_8.doc
- GNR\_SNI\_Archaeology\_Report\_31\_Jul\_08.pdf
- SOW Secunda to Sasolburg Pipeline.doc
- First\_Draft\_Scoping\_Report\_Sastech\_Liquid\_Pipelines\_11\_Dec.pdf
- List of service servitude owners and weyleaveconditions\_SNI.xlsx
- Secunda-Sasolbarg Background Information Document – draft.doc
- GNE SNI Gas Pipeline Geotechnical Study 17 Jul 08.doc
- SEK-0N2-000041-001 - Block Valve Station HAC.pdf
- Site photos

### 3.4 AUDIT COMPLIANCE ASSESSMENT

WSP utilised a pre-prepared audit checklist to assist with the audit execution (Table 4-1 and **Table 4-2**). The checklist included the conditions and associated requirements as specified in the EA and EMPr. Each condition was verified, either by reviewing documentation, interviewing employees and/or visually inspecting the pipeline servitude. Each condition was rated in accordance with **Table 3-1**, and recommendations with associated target completion dates included.

It should be noted that some of the EA and EMPr conditions/commitments were apportioned according to the elements requiring compliance assessment therein. Although some elements of the condition may have been compliant, if one of the elements was determined to be non-compliant, the entire condition has been reported as such (and counted as such during percentage compliance calculation). This apportionment further allowed for the development of focussed recommendations and timeframes.

**Table 3-1 - Compliance Level Definition and Target Completion Dates**

Compliance rating	Explanation
<b>Compliant (C)</b>	Condition/mitigation measure/commitment has been achieved, with evidence provided in the form of a document or site verification. Opportunities for improvement (OFI) may be listed against compliant conditions
<b>Non-compliant (NC)</b>	Specified commitments, conditions and documents were not in place or implemented according to the requirements of the EA and associated EMP. Non-complaint conditions are given target completion dates, as follows: <ul style="list-style-type: none"> <li>Short term: 0 – 6 months.</li> <li>Medium term: 6 – 12 months.</li> <li>Long term: 12 – 18 months.</li> </ul>
<b>Not applicable (N/A)</b>	These are commitments that are either not required yet or not applicable to Sasol. Conditions marked as “Noted” are considered information points only. Where conditions are considered “not auditable” within the scope of this assessment this is stated and explained within the condition commentary.

Refer to Section 4 for the detailed audit findings (including evidence, recommendations and target completion dates).

### 3.5 AUDIT TEAM

Willem Burger (SHE: Environmental Risk & Compliance – Senior Specialist) and Aaron Langa (Pipeline Controller) hosted Consultant, Jashmika Maharaj for the duration of the Audit. WSP would like to express our gratitude for their time and attention during our visit. A brief summary of the external auditors’ experience is provided below.

■ **Lead Auditor: Jashmika Maharaj**

Jashmika holds Bachelor of Science Honours in Environmental Management Science: Jashmika has 9 years of professional work experience as an environmental consultant. Her qualifications include a BSc Environmental Science degree (2014) – University of KwaZulu-Natal and a BSc Honours in Environmental Management – University of South Africa (2019). Her role as an environmental consultant includes but is not limited to project management (project budgeting and costing, invoicing), compilation of Environmental Impact Assessments(EIAs), Basic Assessment Reports (BARs), Water Use Licence (WULAs), Environmental Audit reports, Environmental Management Programmes (EMPrs), Waste Management Licence Applications (WMLA), analysis of engineering reports and drawings, and environmental legislation, peer reviewing, stakeholder engagement, preparation of proposals and tenders, liaison with relevant competent authorities and clients.

■ **Project Manager and Quality Assurance: Ashlea Strong**

Ashlea is a Principal Associate with 21 years’ experience in the environmental field. She currently provides technical and strategic expertise on a diverse range project in the environmental management field, including environmental scoping and impact assessment studies, environmental management plans, waste and water management, as well as the provision of environmental management solutions and mitigation measures. Ashlea has been involved in the management of a number of large EIAs specifically within the energy sector such as the Medupi Power Station, and Pebble-Bed Modular Reactor (PBMR) and numerous Renewable Energy Developments and Transmission Powerlines. She also has significant environmental auditing



experience and expertise having undertaken over 70 compliance audits. Ashlea holds a Masters in Environmental Management; a BTech (Nature Conservation), and a National Diploma (Nature Conservation). She is also a Registered Environmental Assessment Practitioner

■ **Quality Assurance: Marié Schlechter**

Marié Schlechter has worked in the mining industry and environmental consultancy for over twenty-three years, gaining experience in the implementation of environmental management systems and mitigation of environmental impacts from mining and industrial activities. Marié has experience in managing environmental impacts on mining and industrial sites as well as the implementation, maintenance and internal auditing of environmental management systems and compliance audits. Marié is a registered Environmental Assessment Practitioner and has ICMI registration as a Lead and Mining Technical Expert Auditor as well as an Affiliate Member and Registered Environmental Auditor with the Institute of Environmental Management and Assessment (IEMA). She has conducted audits in South Africa, Mali, Guinea, Ghana, Tanzania, Mozambique, Mauritania and Finland.

### 3.6 ASSUMPTIONS AND LIMITATIONS

This Report has been prepared by WSP on behalf and at the request of Sasol, to provide the Client an understanding of the Relevant Documents.

Unless otherwise agreed by us in writing, we do not accept responsibility or legal liability to any person other than the Client for the contents of, or any omissions from, this Report.

To prepare this Report, we have reviewed only the documents and information provided to us by the Client or any third parties directed to provide information and documents to us by the Client. We have not reviewed any other documents in relation to this Report and except where otherwise indicated in the Report.

The findings, recommendations and conclusions given in this report are based on the author's best scientific and professional knowledge, as well as available information. This report is based on survey and assessment techniques which are limited by time and budgetary constraints relevant to the type and level of investigation undertaken; WSP and its staff reserve the right to modify aspects of the report including the recommendations if and when new information may become available from on-going research or further work in this field, or pertaining to this investigation.

Although, WSP exercises due care and diligence in rendering services and preparing documents, WSP accepts no liability, and Sasol, by receiving this document, indemnifies WSP and its directors, managers, agents and employees against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with the services rendered, directly or indirectly by the use of the information contained in this document.

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## 4 AUDIT FINDINGS

### 4.1 ENVIRONMENTAL AUTHORISATION

Table 4-1: Environmental Authorisation Audit Findings

No.	Condition	Compliance Status	Finding	Recommendation
<b>Scope of Authorisation</b>				
1.1	Authorisation of the development is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.	N/A	Noted.	None.
1.2	The holder of this authorisation shall be responsible for ensuring compliance with the conditions of this authorisation by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.	C	<p>The EA holder (Sasol) keeps track record of any monitoring against the EA conditions to ensure compliance, including inspection schedules, external audit reports.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>41102457_20200813_Sasol Gas SNI Pipeline_EA &amp; EMP Audit Report_Final_Signed</li> <li>41102457_20200813_Sasol Gas SNI Pipeline_WUL Audit Report_Final_Signed</li> </ul>	None.
1.3	The authorised development may only be carried out at the property indicated	C	The development was carried out only at the authorised property and is now in the operational	None.

No.	Condition	Compliance Status	Finding	Recommendation
	above and as described in the EIAR dated 21 March 2009, and as shown on the map set included in the EIAR.		<p>phase. The kmz file showing the pipeline pathway and was available for review.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>See Figure 1-1 above.</li> </ul>	
1.4	Any substantial changes to the project description set out in the EIAR, and authorised under this authorization must be approved, in writing, by the Department before such changes may be effected in assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.	N/A	Outside of audit period. The only deviations undertaken with regards to the project were sought in May 2010 and approved in June 2010. The amended EA to authorise the deviations was available for review. No new deviations were conducted over the audit period.	None.
1.5	This development must commence within a period of five (5) years from the date of issue of this authorisation. If commencement of the development does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the development to be undertaken.	N/A	Outside of audit period. The pipeline is operational. Therefore, this condition is not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
1.6	This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the development and associated infrastructure.	N/A	Noted. This audit does not form part of a legal audit, however, Sasol has a legal register to monitor compliance with its other legal responsibilities.	None.
1.6.1	<p>Relevant legislation that must be complied with by the holder of this authorisation include but is not limited to:</p> <ul style="list-style-type: none"> <li>■ Compliance with the requirements of Section 38 of the National Heritage Resources Act, Act 25 of 1989, including any comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed.</li> <li>■ Provisions of the Occupational Health and Safety Act, Act 85 of 1993.</li> <li>■ Provisions of the Environment Conservation Act, Act 73 of 1989.</li> <li>■ Provisions of the NEM: Air Quality Management Act, Act 39 of 2004.</li> <li>■ Provisions of the NEM: Waste Management Act, Act 59 of 2008.</li> <li>■ Provisions of the Conservation of Agricultural Resources Act, Act 43 of 1962.</li> </ul>	N/A	Outside of audit period. The pipeline is now operational with excavations only done during maintenance. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	<ul style="list-style-type: none"> <li>Provisions of the National Forests Act, Act 84 of 1998.</li> <li>Provisions of the National Water Act, Act 36 of 1998.</li> <li>Provisions of the Hazardous Substances Act, Act 15 of 1973.</li> <li>Provisions of the National Key Points Act, Act 102 of 1960.</li> <li>Provisions of the Petroleum Pipelines Act, Act 50 of 2003.</li> <li>Provisions of the Explosives Act, Act 26 of 1956.</li> <li>Provisions of the Fencing Act, Act 31 of 1963.</li> <li>Relevant local authority bylaws and regulations.</li> </ul> <p>Should any activity be planned on site that is a listed activity in terms of the NEMA Regulations, 2006, which is not covered by this authorisation, a separate application for such activity must be lodged with the relevant competent authority.</p>			

No.	Condition	Compliance Status	Finding	Recommendation
<b>Appeal of Authorisation</b>				
1.7	The holder of the authorisation must notify every registered interested and affected party (IAP), in writing and within 10 (TEN) calendar days, of receiving notice of the Departments decision to authorise the development.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.8	The notification referred to in 1.7 must -			
1.8.1	Specify the date on which the authorization was issued,	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.8.2	Inform the interested and affected party of the appeal procedure provided for in Chapter7of the regulations,	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.8.3	Advise the interested and affected party that a copy of the authorisation will be furnished on request, and	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.8.4	Give the reasons for the decision.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>Management during the Construction Phase</b>				

No.	Condition	Compliance Status	Finding	Recommendation
1.9.1	The environmental management plan (EMP) for the construction phase included in the EIAR dated 21 March 2009, section 13 on page 119, and submitted to the Department, is hereby approved for implementation. The mitigation measures proposed in the EIAR dated 21 March 2009, and requirements stipulated in the EMP as included in the EIAR, for environmental management during the construction phase forms part of the conditions of this environmental authorisation and must be implemented by the holder of this authorisation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.2	The holder of this authorisation must ensure the following measures are implemented during the construction phases of the pipelines development:			
1.9.2.1	All contractor staff must undergo environmental awareness induction training with regard to protection of the natural environment, the conditions of the environmental authorisation, the requirements of the EMP and the respect of the rights of landowners on whose properties construction takes place.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.9.2.2	All contractor staff must be easily identifiable through the use of company overalls with company logos and all contractor staff must have an identity card to ensure unwanted elements can be identified to ensure security of the surrounding communities and landowners.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.2.3	Measures for waste avoidance and minimisation at all works areas, laydown areas and construction camps and disposal of construction waste at an appropriately registered facility.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.2.4	Measures for dust control during the construction phase.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.2.5	Measures for noise control during the construction period where construction activities occur close to residences or built-up areas to limit the nuisance factor of noise.	N/A	Noted. There were no residences or built up areas close to the locations where maintenance was being undertaken following theft incidents. Therefore, noise control measures were not required to be implemented.	None.
1.9.2.6	Measures to ensure public access to any homesteads or amenities must at all times be guaranteed and shall not be restricted due to this development. Where use is made of private access roads to gain access to the construction	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	site, use of such roads must be negotiated with the affected landowners and speed limits on such roads must be enforced on all construction vehicles. All access roads used by the contractors must be reinstated to their original condition if any damage is caused to such roads.			
1.9.2.7	Archaeological remains, features and structures older than 60 years are protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any archaeological or palaeontological artefacts be exposed during excavation for the purpose of laying the pipelines, construction in the vicinity of the finding must be stopped. A heritage specialist must be called to the site for inspection. Under no circumstances shall any artefacts be destroyed or removed from the site. The South African Heritage Resource Agency must be informed of any new finds.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.3	The approved construction EMP will be seen as a dynamic document. Should the construction activities exceed any predicted impact levels, the EMP must be amended to include any additional requirements. However, any proposed	N/A	Noted. There have been no amendments to the EMP to date.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	amendment of the EMP must be submitted to the Department for approval in writing.			
1.9.4	Amendment of the EMP must be approved in writing by the Department before such changes can be implemented.	N/A	Noted. There have been no amendments to the EMP to date.	None
<b>Servitude Works Area and Pipe Laydown Areas</b>				
1.9.5	This development is authorised on condition that Sasol Oil acquires the necessary servitude rights for the pipelines route. Sasol Oil must negotiate with affected landowners within the authorised corridor alignment prior to the start of construction activities. Proof of such negotiations must be made available to the Department on request should any dispute arise.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.6	In addition, any route adjustment, due to the specific; local circumstances, which deviates outside the authorised corridor alignment of 200m, must be assessed and submitted to the Department for authorisation in writing before implementation. Approval of such deviations outside the authorised corridor must be authorised in writing by	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	the Department before such deviations may be implemented.			
1.9.7	All construction works are limited to the servitude area negotiated with the landowners; The works areas must be properly demarcated.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.8	No construction workers shall be allowed to reside on any site unless a written agreement with the affected landowner is obtained.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.9	All work areas must be supplied with proper sanitation facilities. Portable toilets (at least one for every twenty workers) must be deployed along the works areas and workers must use these facilities at all times. No use of the veld is allowed for sanitation purposes. Workers transgressing this condition must be fined or removed from site.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.10	All works areas must have waste bins for general waste and such bins must be serviced regularly. All bins must be supplied with lids to ensure littering is prevented. Bins must be secured to prevent wild animals from spreading litter from such bins. Workers littering the site must be fined or removed from site.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.





No.	Condition	Compliance Status	Finding	Recommendation
1.9.11	No open fires are allowed on site for heating or cooking purposes. The Applicant must ensure that the contractor have firefighting equipment available at all work sites in the event of accidental fires, especially during welding of the pipeline sections. Firefighting equipment must be tested regularly for operation and workers must be trained in the use of such equipment. The Applicant will be responsible for all claims emanating from run-away fires caused by the construction work teams.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.12	All pipe laydown areas outside the negotiated servitude area must be negotiated with the affected landowner and written agreement must be obtained. Proof of such negotiations and agreements must be made available to the Department on request should any dispute arise.	N/A	Outside of audit period. The pipeline is now operational. There have been no requests by the Department over the audit period.	None.
1.9.13	Servitude vegetation clearing must be done in accordance with the recommendations of the EIAR and a search and rescue operation of protected species must be done where the plants can be transplanted safely and with a reasonable success rate.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.


No.	Condition	Compliance Status	Finding	Recommendation
1.9.14	Topsoil and spoil must be stored separately and topsoil must be stored in such a way as to ensure maximum protection of the quality of the topsoil to ensure the seed bank stays viable for rehabilitation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.15	No protected species of vegetation may be destroyed without the required permit from the relevant competent authority.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.16	Where possible, large specimens of indigenous species within the construction servitude must be preserved if they will not interfere with or pose a danger to the future operation of the pipelines or cause a major obstacle during construction works.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>Construction Camps</b>				
1.9.17	Construction camps must be sited taking into consideration the local community security concerns.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.18	No construction camp site on privately owned land may be established without written approval from the affected landowner.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.9.19	No labour recruitment may be done at construction camps. Recruitment offices for labour may be set up in towns in proximity to the works areas to allow local labour to apply for work.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.20	The holder of this authorisation must have a specific management plan for management of the day to day operation of each construction camp site, including measures for waste management, sanitation and water management.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.21	Construction camps must be inspected weekly by the environmental control officer (see) for compliance with the management plan for camp sites.	N/A	Outside of audit period. The pipeline is now operational. The ECO was required during the construction phase.	None.
1.9.22	Construction camp sites must be kept neat and the visual impact of camp sites must be mitigated to acceptable levels through screening.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.23	No water may be abstracted from or effluent or waste water released into natural sources without the required permits from the DWA and Sasol oil must have written agreements with landowners for use of any water from private boreholes or dams.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>Workshop Areas at Construction Camps</b>				
1.9.24	Workshop areas for vehicle servicing must have a concrete floor area for servicing of vehicles.	N/A	There are no workshop areas on the site and no vehicles are serviced on the site.	None.
1.9.25	All hydrocarbon containing fuels and lubricants must be stored inside a bunded area which can accommodate 110 percent of the stored liquids.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.26	All spills of hydrocarbon materials shall be contained and cleaned up immediately and polluted soils shall be disposed of in a registered waste site. Minor spills can be treated on site.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.27	Should it be necessary to service any vehicles or equipment in the servitude construction area due to a breakdown, a drip tray shall be used to prevent carbon spills onto the soil.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.28	All hydrocarbon waste material generated at the workshop shall be contained in proper storage drums for recycling or disposal at a registered waste site.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.


No.	Condition	Compliance Status	Finding	Recommendation
<b>Pump Stations</b>				
1.9.29	Noise abatement measures must be installed at all pump stations to reduce the impact of noise associated with pumping during the operational phase, especially in pump stations in close proximity to residential areas.	C	<p>All pump stations have noise abatement measures installed. There were no noises noticed during the site visit and there have been no complaints from the surrounding residents.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>	None.
1.9.30	Security lighting installed at pump stations must be designed in such a way that light spill to the surrounding areas is minimised, especially where pump stations are constructed in rural areas with a high visual quality and where light spill may cause a significant aesthetical impact.	C	<p>Security lighting at pump stations is designed in such a way that light spill to the surrounding areas is minimised. The setting is such that there is limited light spill to cause a significant aesthetical impact.</p> <p>Although the site visit was done during the day, the light fixtures are oriented in a manner to limit any light spill as they are barely visible.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>  <p><b>Figure 4-1: Pump Station</b></p>	None.


No.	Condition	Compliance Status	Finding	Recommendation
1.9.31	Landscaping and architectural design of pump station structures must be done to ensure that the pump station blend in with the surrounding area to minimise the visual impact of the pump station.	C	<p>The landscaping around the pump station is that of indigenous vegetation which allows it to blend into the surrounding area. The area is maintained to allow for easy access and monitoring around the pump stations.</p> <p><u>Evidence:</u></p>  <p><b>Figure 4-2: Indigenous vegetation surrounding the pump station</b></p>	None.
1.9.32	Pump stations must be fitted with the required ablution facilities for use by any on site security or operational and maintenance personnel.	C	<p>All pump stations had the required ablution facilities for use by onsite security or operational and maintenance personnel as was observed during the site walk.</p> <p><u>Evidence:</u></p>	None.


No.	Condition	Compliance Status	Finding	Recommendation
			 <p>Figure 4-3: Ablution Facilities (Left) at Pump Station</p>	
<b>Wetland, River and Stream Crossings</b>				
1.9.33	Construction at wetland, river and stream crossings shall be done in accordance with detailed design drawings for each specific crossing point.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.34	Where crossings are required, the approval of the DWA of the engineering design shall be obtained in writing before any construction commence on such sites.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None..

No.	Condition	Compliance Status	Finding	Recommendation
1.9.35	All perennial river and stream crossings must be done through directional drilling unless otherwise authorised by the DWA. Any crossing by means other than directional drilling must take into consideration the scour effect of the water on the river or stream bottom over time to ensure that the pipe lines will be installed deep enough to remain stable for the lifespan of the pipe lines	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.36	Special care shall be taken when doing any construction work in wetland areas and the area of disturbance shall be kept to the absolute minimum. Sheet flow in wetland areas must not be prevented and the necessary measures to ensure continued sheet flow must be implemented during design of wetland crossings.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.37	All wetland areas, river and stream crossings disturbed during construction must be rehabilitated and inspected by DWA upon completion. Once construction at river, stream or wetland crossings are completed, the relevant DWA official must sign a release form indicating that rehabilitation was done satisfactorily at each crossing point. The release forms must be made available to	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.




No.	Condition	Compliance Status	Finding	Recommendation
	the Department on request should any dispute arise.			
1.9.38	Vegetation at river and stream bank crossings may be cut and treated with a suitable registered herbicide to prevent further growth and root development. Under no circumstances will de-stumping of trees on river and stream banks be allowed as this may lead to unacceptable erosion except where DWA approves an open trench design to cross a river or stream.	C	<p>The auditor was informed that the inspection team removes vegetation along the servitude including at the river and stream bank crossings. Any exotic looking plants are first confirmed via the main office before they are removed in the correct manner. There was no evidence observed during the site visit of any de-stumping of trees along the river and stream banks and where trees are evident, specifically at the Vaal River crossing.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>  <p><b>Figure 4-4: Trees at the Vaal River Crossing</b></p>	None.
1.9.39	River and stream banks must be protected against possible erosion by carefully controlling access and construction activities in such areas.	C	<p>Access control is available at all points leading to crossings with security present to monitor personnel who enter. Furthermore, there are usually at least</p>	None.

No.	Condition	Compliance Status	Finding	Recommendation
			<p>two locked gates one has to pass before reaching crossings within farm areas..</p> <p>Bank stabilisation ensured that the banks are bermed to help prevent soil erosion in conjunction with the surrounding vegetation.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>  <p><b>Figure 4-5: Bermed and Vegetated Riverbanks</b></p>	
1.9.40	Measures to ensure prevention of pollution or siltation of wetlands or rivers and streams during the construction phase must be implemented by the holder of this authorisation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>Rehabilitation of Works Areas, Laydown Areas and Construction Camps</b>				
1.9.41	All areas disturbed during the construction phase of the project	C	Rehabilitation was conducted following the completion of the construction activities. The	None.

No.	Condition	Compliance Status	Finding	Recommendation
	excluding those areas where permanent structures are erected must be rehabilitated fully in accordance with the recommendations of the specialist ecologist and to the satisfaction of the landowner.		<p>vegetation is managed during inspections done along the servitude by Sasol personnel. The clearance allows for easier servitude inspections and drives. The majority of the servitude is dominated by indigenous grass.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>  <p><b>Figure 4-6: Indigenous grass along the pipeline servitude</b></p>	
1.9.42	All works areas must be fully rehabilitated and construction rubble such as overburden and rock excavated during the excavation of the trench must be disposed of or landscaped in such a manner that the servitude area blends in with the surrounding environment. No heaps of overburden may be left on site.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.9.43	Once construction is completed, all landowners must sign a release form with the ECO indicating that rehabilitation was done satisfactorily and that all outstanding issues or claims have been settled by Petroline. The release forms must be made available to the Department on request should any dispute arise.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>Service Infrastructure</b>				
1.9.44	Disruption of service infrastructure must be kept to an absolute minimum. Should it be necessary to disrupt any services during the construction phase, the affected parties must be informed at least two (2) weeks in advance.	N/A	Service infrastructure has not been disrupted as a result of any maintenance work in locations affected by incidents during the audit period.	None
1.9.45	Should any accidental damage to service infrastructure take place during construction activities, Sasol Oil must take immediate action to restore such disrupted service in the shortest time possible.	N/A	The Auditor was informed that there has been no damage to service infrastructure during the audit period.	None
1.9.46	Any claims for damage to service infrastructure by landowners due to construction activities must be addressed within 30 days from such claim being submitted.	N/A	The Auditor was informed that there has been no damage to service infrastructure during the audit period.	None

No.	Condition	Compliance Status	Finding	Recommendation
1.9.47	Road crossings of the pipe line must be done in accordance with a provincial toads department or South African National Roads Agency Limited (SANRAL) approved design drawing and directional drilling must be implemented at all national, provincial and district road crossings as a minimum to ensure no disruption of traffic.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None
1.9.48	The use of existing roads to gain access to the servitude works area is preferred; however use of any private access roads must be agreed with the landowners in writing. All private roads not to be used for the purpose of construction must be marked clearly with no entry signs.	C	<p>Servitude access is gained through the use of a combination of public and private roads. There are access gates with locks to restrict access. Sasol has arrangements in place with landowners that allows Sasol personnel to access the farm areas for any work to be conducted.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>  <p><b>Figure 4-7: Access gates with locks to restrict access</b></p>	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.9.49	Sasol Oil must ensure that contractors adhere to an agreed speed limit on private roads to prevent accidents and road damage.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.50	Upon completion of construction all private roads must be rehabilitated to their original condition and to the satisfaction of the landowner.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.51	Rail crossings and powerline crossings must be planned in conjunction with Transnet and Eskom and the necessary approvals from these parastatal companies must be obtained prior to construction at such crossings.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.52	No fences may be flattened for the purpose of construction without the consent from the landowner. All fence crossings shall be fitted with a proper servitude gate before construction commences to ensure access for the construction teams.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.9.53	Where required deviations of fences may be done with the written consent of the landowner to allow Mr construction activities.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.9.54	Upon completion of construction all damage to fencing shall be properly fixed to the satisfaction of the landowners.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>1.10 Management During the Operational Phase</b>				
1.10.1	Before commencement of operation the following requirements for the operational phase must be complied with by Sasol Oil:			
1.10.1.1	A major hazard installation (MHI) risk assessment must be completed and approved by the relevant competent authority.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.10.1.2	Sasol Oil must ensure that all local authorities are aware of the commencement of operation and that the necessary emergency response plans for catastrophic events are in place and approved where required.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.10.2	The operational environmental management of the pipelines servitude must be included in the Sasol Oil environmental management system (EMS) for pipeline servitudes.	C	<p>Evidence of ISO 14001 certification was provided and confirms Sasol is ISO 14000 certified and has incorporated the EA requirements into the EMS for the management of the pipeline servitude.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>ROAS_ISO14001_BSI Ecertificate_Exp20241227</li> </ul>	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.10.3	A regular monitoring programme for water quality monitoring, included in the EMS, must be implemented at perennial wetland areas and in existing boreholes in close proximity of the pipeline as well as downstream of river and stream crossings to detect any leaking pollutants and ground water pollution that may occur during the operational phase. If any water pollution is detected, Sasol Oil must implement measures to remedy the situation immediately.	NC	The auditor was informed that no water quality monitoring is conducted on the perennial wetland areas and in existing boreholes in close proximity of the pipeline as well as downstream of the river and stream crossings.	Ensure that a monitoring program is formulated and implemented as required.  Target period: Short term
<b>1.11 Monitoring of the Construction Activities</b>				
1.11.1	Monitoring of the activity during construction			
1.11.1.1	The holder of this authorisation must appoint a suitably qualified and responsible person that will act as an environmental control officer (ECO) for the construction period that will have the responsibility of implementing the requirements of the approved construction EMP as well as the conditions of this authorisation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.2	The ECO must be appointed before the start of construction and the Department must be notified of the details and	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
	contact numbers of the appointee in writing for record and communication purposes.			
1.11.1.3	The ECO must compile and present the environmental awareness induction training referred to in 1.9.2.1 above	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.4	The ECO must inform as affected landowners of the commencement of construction works on their properties at least one week prior to works commencing on their properties.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.5	The ECO must ensure that all landowners are informed of the ECO contact details and must strive to keep landowners informed regarding construction progress.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.6	The ECO must monitor the construction works on a full time basis to ensure the holder of this authorisation complies with the conditions of this authorisation. Records relating to compliance monitoring must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.11.1.7	The ECO must submit a quarterly compliance report, in writing, to The Director: Environmental impact Evaluation and copy the holder of this authorisation with such report. This report shall include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. The report must reflect the DEA reference number of the project on the cover page.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.8	The ECO must report any significant environmental incident or non-conformance by the holder of this authorisation or any contractor to the Department, attention of the Director: Environmental Impact Evaluation, within 48 hours of such incident or non-conformance and copy the holder of this authorisation with such a report.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1.9	The ECO must maintain the following on site:			
1.11.1.9.1	A site diary.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.11.1 .9.2	Copies of all reports submitted to the Department.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1 .9.3	A complaints register of all public complaints and the remedies applied to such complaints.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1 .10	The ECO must compile a report on all rehabilitation measures implemented for future monitoring and measurement of success of the rehabilitation measures during the operational phase of the development.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.11.1 .11	The ECO must remain employed until all rehabilitation measures as well as site clean-up are completed, the release forms were signed by the landowners and the DWA and the site is handed over to the holder of the authorisation for operation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>1.11.2 Monitoring of the Activity During Operation</b>				
1.11.2 .1	The holder of this authorization must monitor the operational phase of the development once operation commences as part of the Sasol Oil EMS. The operational phase	C	Sasol monitors the pipeline from an inspection and maintenance perspective. There are measures in place to detect any potential leaks and security issues during the operation phase as was observed during the site visit. Furthermore, external audits are	None.

No.	Condition	Compliance Status	Finding	Recommendation
	commences when fuel is pumped for the first time.		<p>conducted against the approved Water Use Licence (WUL) for the pipelines every two years. The previous Nature and Business Alliance Africa and WSP external WUL audit reports were available for review.</p> <p>The pipeline is wrapped up in a sleeve that will hold all the leaked product. The product will flow to the reservoir located on the SCADA station. The reservoir has a level transmitter and a gas detector. As soon as there is product entering the reservoir, the gas detector will send a signal to the control room in Germiston, however, the team will wait to see if the level transmitter is tripped. The pressure transmitters along the line also indicate a pressure drop in the line, and a team is then dispatched to undertake maintenance.</p> <p>All transmitters and detectors communicate with the control room by first sending a signal to the closest SCADA station (usually placed at major river crossings) The SCADA station relays the pressure readings to the control room and the communication relies on cell phone network. The line will be isolated using the block valves around the location where the line is.</p> <p>Any liquid product leak on the environment causes a change in colour in the surrounding grass or vegetation. When any individual detects the leak, they can contact the emergency numbers that are on the pipeline markers.</p>	

No.	Condition	Compliance Status	Finding	Recommendation
			<p>Furthermore, Sasol uses different types of launch pigs to determine the nature of the pipe. The intelligent cleaning pig is used to ensure that the pipe surface does not have particulates accumulating. The intelligent pig is used to detect the pipe thickness, elevation, defects on wrapping and to see if there is corrosion.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>41102457_20200813_Sasol Gas SNI Pipeline_WUL Audit Report_Final_Signed</li> <li>41102457_20200813_Sasol Gas SNI Pipeline_EA &amp; EMP Audit Report_Final_Signed</li> <li>Sasol South Africa Ltd Secunda Commencement notification</li> </ul>	
1.11.2.2	Should the responsibility for compliance with this authorisation be transferred to any other juristic person, the transfer of the environmental authorisation from the initial holder of the authorisation to any other juristic person must be formally recorded in writing and a copy of the transfer document indicating the contact details of the juristic person must be submitted to the Director; Environmental Impact Evaluation for record purposes. The transfer document must clearly indicate the DEA reference number.	N/A	There has been no transfer of responsibility with regards to the EA.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>Reporting to the Department</b>				
1.12	The holder of the authorisation must submit an environmental compliance audit report to the Department: Attention of the Director: Environmental Impact Evaluation, upon completion of the construction activities as planned for the establishment of the individual pipe lines and associated infrastructure. This report must be submitted after completion of each phase of pipe line construction.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.12.1	The environmental audit report must indicate the date of the audit, the name of the auditor, the DEA project reference number and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions as well as the requirements of the EMP.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.12.2	The ECO may compile this report or the holder of this authorisation may appoint an external auditor to compile the report.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>1.13 Commencement</b>				
1.13.1	The authorised activities may not commence within thirty (30) days of date of signature of this authorisation.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	Commencement includes site establishment.			
1.13.2	Should you be notified by the Minister of a suspension of the authorisation pending any appeals decision on the authorised activities, you may not commence with the activities unless authorised by the Minister in writing.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>1.14 Notification to Authorities</b>				
1.14.1	Thirty (30) days written notice must be given to the Department that construction of the pipe lines will commence. Commencement for the purposes of this condition includes site preparation, The notice must include a date on which it is anticipated that the construction activity will commence.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.14.2	Thirty (30) days written notice must be given to the Department that the operational phase of the pipe lines will commence	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
<b>Site Closure and Decommissioning</b>				
1.15	Should the pipe lines ever become redundant and have to be decommissioned, the holder of the	N/A	Outside of audit period. The pipeline is currently operational and not considered redundant.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	authorisation at the time of decommissioning shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time for the decommissioning phase.			
<b>General</b>				
1.16	A copy of this authorisation must be kept at the site office where the development will be undertaken. The authorisation must be produced to any authorized official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.	N/A	Outside of audit period. The pipeline is now operational. Therefore, this condition is not applicable.	None.
1.17	Where any of the contact details of the holder of this authorisation change, including the name of the responsible person, the physical or postal address and or telephonic details, the holder of the authorisation must notify the Department as soon as the new details become known.	N/A	There have been no changes in the contact details of the holder over the audit period.	None



No.	Condition	Compliance Status	Finding	Recommendation
1.18	Upon transfer of the management function of the development the future holder of the authorisation must take ownership of the implementation of the conditions of this environmental authorisation.	N/A	There has been no transfer of the management function of the development over the audit period.	None
1.19	The holder of the authorisation must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.	NC	<p>Evidence of previous internal and external audits against the conditions of the EA were provided. However, no evidence was available of Sasol notifying the Department within 48 hours if any condition of the authorisation could not be adhered to.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>41102457_20200813_Sasol Gas GNP Pipeline_EA &amp; EMP Audit Report_Final_Signed</li> <li>41102457_20200813_Sasol Gas GNP Pipeline_WUL Audit Report_Final_Signed</li> <li>Incident register_FY24</li> </ul>	<p>An amendment should be sought to alter the onerous timeframe for reporting non-compliances. Rapid reporting of environmental incidents should remain, however a longer timeframe for reporting of non-compliances identified during audit could be considered.</p> <p><i>Target period:</i> Long term</p>
1.20	National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his successor in title in any instance where construction or	N/A	Noted.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.			

## 4.2 ENVIRONMENTAL MANAGEMENT PROGRAMME

**Table 4-2: Environmental Management Programme Auditing Findings**

No.	Condition	Compliance Status	Finding	Recommendation
<b>PLANNING AND DESIGN PHASE</b>				
<b>1</b>	<b>Integrity of the Pipelines</b>			
1.1	Design the pipelines in accordance with the international ASME-B31.4 code for material, performance, pressure testing and population class specifications.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.2	Design the pipelines in accordance with the international PD-8010 code for safety risk classification.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.3	Appoint a government approved independent inspection authority to verify the acceptability of construction materials and activities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>2</b>	<b>Undermined Areas, Future Mining and Mineral Reserves</b>			
2.1	Identify all current and future undermined areas along the proposed and alternative pipelines' routes through consultation with Sasol Mining, Anglo Coal and South Gold Mining.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
2.2	Reroute the liquid pipelines to avoid undermined areas.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.3	Consult with the Department of Minerals and Energy.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.4	The pipelines must not sterilise or influence mineral reserves.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.5	The pipelines must not influence future open cast or underground mining operations of Sasol Mining, Anglo Coal and South Gold Mining.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>3 Planning of new Eskom Lethaba Power Station between Sasolburg and Deneysville</b>				
3.1	Consult with Eskom.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.2	Avoid the potential locality of the new power station.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>4 Proximity to Existing Gas Pipelines</b>				
4.1	Stay at least 400 meters away from the three existing gas pipelines (ethylene, ethane and propylene) of Sasol Gas, to avoid stray current interference on the cathodic corrosion protection systems.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.


No.	Condition	Compliance Status	Finding	Recommendation
4.2	Monitor the effectiveness of the cathodic corrosion protection system after commissioning.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>5 Buying Out of Land</b>				
5.1	If some landowners are not willing to allow servitude across their land, buying of the land by Sasol Oil or its nominee must be considered.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.2	The buying must take place on a willing buyer willing seller principle.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.3	An independent valuer must value the land.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>6 Planning of Future Roads</b>				
6.1	Consultation must take place with the provincial roads departments of Mpumalanga, Gauteng and Free State.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
6.2	The pipelines' route must be planned in such a way that future road alignments are taken into consideration.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>7 Localities of Cathodic Corrosion Protection (CP) System Components</b>				


No.	Condition	Compliance Status	Finding	Recommendation
7.1	Minimum vegetation must be removed for the installation of the cathodic corrosion protection system.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.2	The owner of the land where the components are to be installed must give written approval.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.3	Appropriate servitudes must be negotiated with private landowners.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.4	Right-of-way agreements must be obtained from provincial and municipal landowners.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>8 Locality of Pump Station (PS)</b>				
8.1	Minimum vegetation must be removed for the installation of the PS	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
8.2	The owner of the land where the station is to be installed must give written approval	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
8.3	Appropriate servitudes must be negotiated with private landowners.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
8.4	Right-of-way agreements must be obtained from provincial and municipal landowners	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>9 Locality of Pigging Station</b>				
9.1	Minimum vegetation must be removed for the installation of the pigging station	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
9.2	The owner of the land where the station is to be installed must give written approval.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
9.3	Appropriate servitudes must be negotiated with private landowners.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
9.4	Right-of-way agreements must be obtained from provincial and municipal landowners.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
9.5	The pigging station must be installed far enough removed from dwellings, to minimise the visual and venting noise impact.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>10 Environmental Control Officer (ECO)</b>				
10.1	An environmental control officer must be appointed to do regular environmental audits during each of the six phases of the project.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
10.2	The ECO must comply with the following requirements:	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	<p>He/she must be independent from the applicant.</p> <p>He/she must have at least 5 years' experience as environmental assessment practitioner.</p> <p>He/she must be registered with the SA Council for Natural Scientific Professions (SACNASP).</p>			
<b>11</b>	<b>Prevention of Fuel Leaks</b>			
11.1	Where the pipelines cross natural water courses (rivers, spruit, wetlands) they must be installed in polyethylene or polyvinyl chloride sleeves.	<b>C</b>	<p>The pipeline has a protective sleeve at every crossing to prevent any contamination of the watercourses if leaks occur. This was observed during the site visit at the pump station before and after a crossing.</p> <p><u>Evidence:</u></p>	None.



No.	Condition	Compliance Status	Finding	Recommendation
			 <p><b>Figure 4-8: Pipeline in Sleeve</b></p>	
11.2	The sleeves must have sumps at both ends to facilitate the extraction and isolation of leaked fuels.	C	<p>The sleeves have sumps at both ends before and after crossing a watercourse at the block valves. There are sumps to collect any liquid fuel that might have leaked into the sleeve.</p> <p><u>Evidence:</u></p>	None

No.	Condition	Compliance Status	Finding	Recommendation
			 <p>Figure 4-9: Sump at Pump Station</p>	
<b>12 Early-Warning Systems on Fuel Leaks</b>				
12.1	Where the pipelines cross natural water courses (rivers, spruit, wetlands) they must be installed in polyethylene or polyvinyl chloride sleeves.	C	<p>The pipeline has a protective sleeve at every crossing to prevent any contamination of the watercourses if leaks occur. This was observed during the site visit at the pump station before and after a crossing.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-8 above</li> </ul>	<p><u>OFl:</u></p> <p>This is a duplication of commitment 11.1. The EMpr should be amended to remove this condition.</p>

No.	Condition	Compliance Status	Finding	Recommendation
12.2	The sleeves must be equipped with hydrocarbon detectors at both ends, to act as early leak detectors.	C	<p>The sleeves have sumps at both ends before and after crossing a watercourse at the block valves. There are sumps to collect any liquid fuel that might have leaked into the sleeve. High level alarms are within the sump which sends a message to the control room when triggered. This prompts the control room personnel to send the maintenance team for repairs.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-9 above</li> </ul>	None.
<p><b>CONSTRUCTION PHASE:</b></p> <p>The maintenance / incident work being carried out is covered under maintenance under the operational phase – so therefore is not considered to be “construction” as this refers to the initial activities conducted when the pipeline was laid down.</p>				
<b>1 Occupational Safety and Health of Construction Workers</b>				
1.1	All the requirements of the Occupational Health and Safety Act (Act No 85 of 1993) must be met.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.2	All the requirements of the Construction Regulations (R.1010 of 18 July 2003) must be met.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.3	The contractor must submit a Health and Safety Plan to Sasol Oil for approval prior to site establishment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.4	Daily safety toolbox talks must be held with all construction workers and must be recorded in writing	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.5	All construction workers and visitors on site must wear the prescribed personal protective clothing and equipment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.6	All daily inspection registers must be completed as required by the Construction Regulations.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>2 Possible Damage to Utility Services</b>				
2.1	Right-of-way agreements must be obtained from provincial and municipal roads authorities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.2	The construction contractor must locate all possible utility services prior to excavation work.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.3	Written approval for right-of-ways must be obtained from all utility service providers, including Transnet, Rand Water, Telkom, Eskom Transmission, Eskom Distribution, the various local municipalities (Secunda, Balfour and Sasolburg), Transnet Pipelines and Metrorail	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
2.4	The owners of utility services must be notified before excavation is done and requested to send a supervisor to the site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.5	If utility services are damaged, the owner of the service must be notified immediately and the service must be repaired to the satisfaction of the owner.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>3 Construction Noise</b>				
3.1	Noise caused by construction activities must be minimised.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.2	Construction activities must be limited to daylight hours, between 06:00 and 18:00.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.3	Adjacent landowners and inhabitants must be notified if excessive noise will be produced.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>4 Airborne Emissions</b>				
4.1	All construction vehicles must be maintained in good order to ensure that minimum exhaust smoke and gases are emitted.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
4.2	No open fires must be allowed on site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
4.3	No waste may be burnt on site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
4.4	Dust on dirt roads must be suppressed by means of water spraying. A 20% molasses solution may be used to enhance the effectiveness of the dust suppression.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>5 Offloading of Heavy Equipment and Machinery</b>				
5.1	No bystanders must be allowed nearby.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.2	Traffic must be controlled to avoid disruption.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.3	If necessary, the traffic departments of Secunda, Balfour and Sasolburg must be requested for assistance.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.4	Roads and access ways must never be blocked.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.5	Material and equipment must be stored in a safe place with proper fencing	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	around it and a lockable gate with proper security access control.			
<b>6 Removal and Storage of Topsoil</b>				
6.1	The top 150 mm layer of soil contains valuable plant nutrients that must be preserved	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
6.2	Removed topsoil must be stored separately and must be replaced last, after bedding, padding and backfilling.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
6.3	Topsoil must be stored in such a manner that wind erosion would be minimised	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
6.4	Topsoil must be stored in such a manner that water erosion would be minimised.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>7 Security of Adjacent Properties</b>				
7.1	Construction workers may not wander off site without permission.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.2	The construction contractor must keep a Complaints Register on site in which all complaints from adjacent landowners and inhabitants must be recorded with	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	an indication of how and when each complaint was resolve.			
7.3	Land may never be accessed without written approval from the owner or his/her designated representative.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.4	The construction worker camp must be located as far as possible away from private residences and buildings.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.5	Construction workers must be made aware of the fact that access top private properties without permission is forbidden	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
7.6	A Camp Supervisor must be appointed to manage the workers in the construction camp.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>8 Removal of Fences and Gates</b>				
8.1	Where fences and gates have to be removed for access to the construction area, approval must be obtained from the landowner.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
8.2	All removed fences and gates must be replaced in the same or better condition.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
<b>9 Damage to Artificial Water Drainage Systems</b>				
9.1	Drainage lines, pipes and canals installed to control storm water flow, may not be damaged.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
9.2	If damage occurred, the owner of the system must be notified and the system must be repaired immediately to the satisfaction of the owner.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>10 Production of Construction Waste and Spoil</b>				
10.1	Construction waste such as soil, rocks, stones and waste vegetation must be stored separately and neatly where it can cause no harm to people and livestock	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
10.2	Waste vegetation may not be burnt on site	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
10.3	Waste trees such as Blue Gum, Black Wattle and Pine may be cut up and donated to local inhabitants as firewood.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
10.4	Waste soil must be used as backfill material.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
10.5	Residual waste rocks and stones must be levelled in accordance with the requirements of the landowner and must blend into the natural environment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>11 Xenobiotic Contamination by Fuel, Lubricants and Chemical Substances such as Paint and Solvents</b>				
11.1	Spillages of xenobiotic materials on soil and in water must be avoided.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
11.2	If soil is contaminated, the spilled material must immediately be excavated immediately to a depth of 300 mm, segregated in a plastic container and taken to the Holfontein hazardous waste disposal site for further handling.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
11.3	Spilled materials may not be treated as general waste.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
11.4	No vehicles may be serviced on site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
11.5	When construction vehicles are parked on site, drip trays must be placed under them to catch leaking oil or diesel.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
11.6	Xenobiotic substances may never be spilled into a natural water source. In the unlikely event of it happening, the Department of Water Affairs and Forestry must be notified immediately.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>12 Construction Worker Welfare Facilities</b>				
12.1	The construction camp facilities must comply with the Occupational Health and Safety Act.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
12.2	Males and females may not be accommodated in the same camp	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
12.3	Construction workers must be educated about the serious risks of HIV/AIDS and workers must have access to condoms.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
12.4	The conditions in the construction camp must be discussed with all workers during every safety toolbox talk and must be recorded in writing.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
12.5	The Camp Supervisor must complete a daily inspection register in which the following points are checked:  Food handling facilities.  Toilets.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	Sleeping quarters. Washing facilities, with hot and cold water. No open fires. Mixing of males and females. Storage of dangerous materials. Electrical connections. Facilities to dry washed clothes. Abuse of alcohol and other intoxicating substances.			
<b>13</b>	<b>Visual Effects</b>			
13.1	Equipment and materials must be stored in a demarcated area, as far as possible out of sight for members of the public.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
13.2	Excavated soil, rock and stones must be stored in low heaps to minimise the visual impact.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
13.3	All complaints from interested and affected parties must be recorded in the Complaints Register.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>14</b>	<b>Rehabilitation of the Construction Area and Spoil Management</b>			

No.	Condition	Compliance Status	Finding	Recommendation
14.1	The construction area must be rehabilitated after completion of the installation of the pipelines and other equipment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
14.2	Each landowner must sign off the rehabilitation work on their properties as acceptable.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
14.3	The ECO must sign off the rehabilitation work as acceptable, in accordance with the conditions of the environmental authorisation.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>15 Temporary Job Creation</b>				
15.1	This is a positive impact.	N/A	Noted.	None.
15.2	The construction contractor must endeavour, as far as reasonably practicable, to appoint local labourers for the construction work.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
15.3	Local labourers must be trained in the following aspects:  How to do the work.  Safety and health in the workplace.  Environmental protection on the site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>16 Soil Erosion</b>				
16.1	Soil must be stacked as low as possible to minimise erosion caused by wind.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
16.2	Adequate water drainage must be provided at the construction site to prevent erosion of soil caused by uncontrolled water flow, especially during rainy periods	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
16.3	Silting of natural water sources must be prevented in accordance with the requirements of the water use license issued by the Department of Water Affairs and Forestry.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>17 Safety of Nearby Communities</b>				
17.1	All open trenches must be barricaded to prevent members of the public and livestock from falling into it.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
17.2	Construction workers may not wander off from the construction site without permission	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
17.3	All construction workers must be made aware of the security requirements of private people.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>18 Crossing of Tar Roads</b>				
18.1	Tar roads must be crossed in accordance with the requirements of the national, provincial and municipal roads authorities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
18.2	Damage to tar road surfaces, caused by construction vehicles, must be prevented.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
18.3	If caterpillar track machines have to cross tar roads, used lorry tyres must be placed under the tracks to protect the tar surface	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
18.4	Proper traffic control measures must be exercised to prevent traffic disruption and road accidents.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>19 Safety of Pedestrians Near the Construction Site</b>				
19.1	Pedestrian walkways must never be blocked.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
19.2	Adequate and safe bypasses must be provided for pedestrians, where necessary.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
19.3	All open holes and trenches must be barricaded to prevent pedestrians from falling into it.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>20 Allocation of Construction Contracts to Local Contractors</b>				
20.1	This is a positive impact.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
20.2	The construction contractor must endeavour to allocate subcontracts to local contractors, as far as reasonably practicable.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
20.3	The appointment of local subcontractors must be done with due cognisance of the requirements for safety and reliability of the liquid pipelines.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>21 Work Area Restriction</b>				
21.1	Dangerous areas at the construction site must be barricaded to prevent people from entering these areas.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
21.2	Where sensitive areas have been identified such as wetlands or endangered habitat, these areas must be demarcated and barricaded to prevent access by construction workers.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>22 Training of Workers</b>				
22.1	All construction workers must be trained in the following;  How to do their work.  Safety and health at the workplace.  Environmental protection.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
22.2	Proper records must be kept of such training.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>23 Interruption of Gas Supply to Customers</b>				
23.1	The supply of gas to commercial and industrial users may not be interrupted.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
23.2	Existing gas pipelines must not be damaged by the construction activities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
23.3	When the new liquid pipelines are tied in and commissioned, supply of gas to customers may not be interrupted.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>24 Disruption of Traffic Flow</b>				
24.1	The normal flow of traffic may not be disrupted by construction activities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
24.2	If necessary, the traffic departments of Secunda, Balfour or Sasolburg must be requested to assist with the management of traffic.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
24.3	Access roads may never be blocked.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>25 Safety of Bystanders</b>				
25.1	The construction activities will have spectator value for members of the public and job seekers.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
25.2	Bystanders must be controlled to stay away from the construction activities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>26 Removal of Vegetation</b>				
26.1	Minimum vegetation must be removed for construction purposes.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
26.2	Waste vegetation may not be burnt on site.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
26.3	Waste vegetation must be taken to a registered waste disposal site for disposal.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
26.4	Waste trees such as Blue Gum, Black Wattle and Pine, may be cut up and provided to members of local communities for firewood	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
26.5	Alien vegetation must be removed manually and not through the use of chemical herbicides.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
26.6	Alien vegetation growth along the pipelines construction corridor must be controlled for at least 12 months after completion of construction.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>27 Obstruction of Access Roads</b>				
27.1	Access roads to dwellings, farms, amenities, facilities and public places may not be blocked.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
27.2	If an access road has to be closed temporarily, an alternative safe and convenient route must be provided.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
27.3	All complaints from road users must be recorded in the Complaints Register.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>28 Sand Borrowing</b>				
28.1	River grade sand d will be needed for bedding and padding in the pipelines' trench.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
28.2	Sand must be procured from commercial sand suppliers or excavated soil must be screened to comply the particle size specification.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
28.3	Sand borrow pits may not be created along the pipelines' route	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>29 Water Uses</b>				
29.1	68 500 cubic metres of water will be used to test the pipelines hydrostatically.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
29.2	If water for hydrostatic testing of the liquid pipelines are to be abstracted from a natural source, the following written approvals are required:  The Landowner on whose property the water source is situated.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	The Department of Water Affairs and Forestry.			
29.3	It is recommended that water for hydrostatic testing be purchased from the nearest local municipality (Secunda, Balfour or Sasolburg).	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
29.4	Water used for hydrostatic testing (waste water) may only be discharged into a natural water source after laboratory analysis has confirmed that the quality complies with the discharge specifications of the Department of Water Affairs and Forestry.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>30 Requirements of Local Municipalities</b>				
30.1	All the bylaws of local municipalities must be obeyed.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
30.2	All affected municipalities must provide written right-of-ways to the applicant regarding services such as roads, walkways, electricity lines, sewage pipelines and water pipelines.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>31 Crossing of Natural Watercourses (Rivers, Spruit and Wetlands)</b>				
31.1	An integrated water use license must be obtained from the Department of Water Affairs and Forestry for the crossing of rivers, spruit and wetlands, in accordance with Sections 21 I and (i) of the National water Act (Act 36 of 1998).	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
31.2	All the conditions of the water use license must be met during all phases of the project.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>32 Disruption of Learner Activities</b>				
32.1	Learners at farm schools, even in remote areas, may be affected by the construction of the pipelines, in the form of distraction or access to the school.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
32.2	All attempts must be made to avoid disruption of learner activities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
33.3	If necessary, requirements must be negotiated with the principal of the school.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>34 Disruption of Sporting and Leisure Activities</b>				
34.1	The construction of the pipelines and the movement of construction vehicles may affect sporting and leisure activities, such as jogging, quad biking, hiking and fishing.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
34.2	All complaints received from members of the public must be recorded in the Complaints Register and must be resolved immediately.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>35 Consent from Affected Landowners</b>				
35.1	Private land may never be accessed without written consent from the landowner	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
35.2	The applicant must negotiate a servitude agreement with each affected landowner	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
35.3	The applicant must appoint an independent land valuer to conduct valuations on all affected land, in terms of land use, crop value and compensation.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
35.4	The applicant must register servitude against the title deed of each affected property.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>36 Directional Drilling</b>				
36.1	Directional drilling must be used as far as reasonably practicable to cross roads, rivers and wetlands.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
36.2	Bentonite used as drilling agent must not be spilled into natural water sources.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>37 Disruption of Agricultural Activities</b>				
37.1	The applicant must negotiate a servitude agreement with each affected landowner.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
37.2	The applicant must appoint an independent land valuer to conduct valuations on all affected land, in terms of land use, crop value and compensation.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
37.3	Construction on private land may start only after the owner has given written approval.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
37.4	The pipelines must be buried deep enough to allow the farmer to continue with normal agricultural activities above the pipelines.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
37.5	The requirements of the Department of Agriculture must be met	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>38 Land Use</b>				
38.1	The construction strip must be kept as narrow as reasonably practicable, to minimise the environmental footprint and temporary sterilisation of land	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
38.2	The construction and operation of the pipelines must not necessitate the rezoning of land.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
38.3	The pump station, valve boxes, telemetry equipment and pigging station must be located in an area where normal land use would not be affected.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
38.4	The contours of agricultural land must be preserved.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
38.5	Water drainage furrows constructed by landowners on agricultural land must not be altered or damaged in any way.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>39 Heritage Artefacts</b>				
39.1	Archaeological artefacts discovered during construction must be labelled and preserved.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
39.2	If the presence of artefacts is noted during excavation of the trench, excavation work must be stopped immediately and the SA Heritage Resources Agency (SAHRA) must be notified.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
39.3	All further excavation work must be done under direct supervision of a qualified archaeologist or palaeontologist	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
39.4	Artefacts must never be destroyed or damaged.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>40 Heritage Sites.</b>				
40.1	The pipelines' route must avoid all gravesites.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
40.2	No heritage object may be removed or altered to make way for the liquid pipelines.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None

No.	Condition	Compliance Status	Finding	Recommendation
40.3	The pipelines' route must avoid all heritage objects and sites.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>41 Cathodic Corrosion Protection System</b>				
41.1	The sacrificial beds must be installed in places away from rivers and wetlands so that aquatic species would not be affected.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>42 Excavation work near an ash slimes dam</b>				
42.1	A professional civil engineer must issue a certificate of soil stability for the wall of the dam	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
42.2	Excavations must take place under constant supervision.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
42.3	Water that seeps into the trench must be pumped out constantly.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
42.4	The health and safety plan of the contractor must make provision for this impact.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
42.5	Also refer to Section 14.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>43 Excavation Work where the Water Table is High, Especially Near the Ash Slimes Dam on Brandspruit Mine Land.</b>				
43.1	Excavations must take place under constant supervision.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
43.2	Water that seeps into the trench must be pumped out constantly.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
43.3	The health and safety plan of the contractor must make provision for this impact.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
43.4	Also refer to Section 14.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>REHABILITATION PHASE</b>				
<b>1 The Construction Area must be Rehabilitated</b>				
1.1	Rehabilitation must take place in accordance with all the requirements of the various authorities.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.2	Written approval for all rehabilitation work must be obtained in writing from affected landowners	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.3	Rehabilitation must take place in accordance with all the conditions of the environmental authorisation.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.


No.	Condition	Compliance Status	Finding	Recommendation
<b>2 Management of Construction Spoil</b>				
2.1	Excavated soil must be used as backfill for the trench, as far as possible.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.2	Residual soil must be landscaped in such a way that it blends in with the natural environment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.3	Rocks and stones must be levelled and spread to blend in with the natural environment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.4	Soil must temporarily be stacked during construction in such a way that wind erosion will be minimised i.e. keep the stack height as low as possible.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>COMMISSIONING PHASE</b>				
<b>1 Residual Water in the Pipelines after Hydrostatic Pressure-Testing</b>				
1.1	Residual water must be sampled and analysed against the quality standards of DWAF laid down for discharges into the natural environment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
1.2	Only if the water quality meets those standards, may it be discharged into the environment.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
1.3	A SANAS accredited laboratory must perform analysis	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>2 Spillage of Fuel into Surface Water Sources</b>				
2.1	The spillage of liquid hydrocarbon fuel must be prevented at all costs.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.2	Where the pipelines cross natural watercourses (rivers, spruite, wetlands) they must be installed in polyethylene or polyvinyl chloride sleeves.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.3	The sleeves must be equipped with hydrocarbon detectors at both ends, to act as early leak detectors.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.4	The sleeves must have sumps at both ends to facilitate the extraction and isolation of leaked fuels.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
2.5	Fuel components used for flushing of the pipelines must never be discharged into the environment but must be contained as slops and segregated in a dedicated tank at Natref.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>3 Spillage of Fuel into Underground Water Sources</b>				
3.1	The spillage of liquid hydrocarbon fuel must be prevented at all costs.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.2	Where the pipelines cross natural watercourses (rivers, spruite, wetlands) they must be installed in polyethylene or polyvinyl chloride sleeves.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.3	The sleeves must be equipped with hydrocarbon detectors at both ends, to act as early leak detectors.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
3.4	Fuel components used for flushing of the pipelines must never be discharged into the environment, but must be contained as slops and segregated in a dedicated tank at Natref.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
<b>4 Spillage of Light Fractions and the Formation of a Vapour Cloud Explosion</b>				
4.1	The potential spillage of light hydrocarbon fractions (C4 and C5) is particularly dangerous, as it can create a vapour cloud that could easily explode if ignited.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
4.2	Leakages and spillages of petrol components must be avoided.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
<b>5 Spillage of Fuel and the Creation of a Fire</b>				
5.1	Spilled or leaked fuel creates a serious fire risk.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None.
5.2	The applicant must compile an Emergency Management Plan that must makes provision for such emergencies, in collaboration with the local emergency services of Secunda, Balfour and Sasolburg.	N/A	Outside of audit period. The pipeline is now operational, and therefore, the condition is therefore considered not applicable.	None
<b>OPERATION PHASE</b>				
<b>1 Stormwater Run-off</b>				
1.1	Storm water run-off from the construction strip, pigging station and pump station must be controlled at all times, especially during heavy rainfall periods.	C	<p>Following the construction phase, the whole pipeline servitude was rehabilitated, and stormwater runoff measures put in place to prevent uncontrolled runoff during heavy rainfall periods. The riverbanks were stabilised, and the servitude is vegetated thus controlling stormwater flow. High risk areas such as crossings have gabion mattresses installed to control the flow of water as was observed during the site walk.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> </ul>	None.





No.	Condition	Compliance Status	Finding	Recommendation
			 <p><b>Figure 4-10: Gabion Mattress at Crossing</b></p>	
1.2	Where slopes exist at the site after construction, berms must be built to channel storm water in the right direction so that soil erosion can be prevented.	C	<p>Following the construction phase, the whole pipeline servitude was rehabilitated, and stormwater runoff measures put in place to prevent uncontrolled runoff during heavy rainfall periods. The riverbanks were stabilised, and the servitude is vegetated thus controlling stormwater flow. High risk areas such as crossings have gabion mattresses installed to control the flow of water as was observed during the site walk.</p> <p>Bank stabilisation ensured that the banks are bermed to help prevent soil erosion in conjunction with the surrounding vegetation.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> <li>Refer to Figure 4-10 above</li> </ul>	None.


No.	Condition	Compliance Status	Finding	Recommendation
1.3	Rocks and stones from construction spoil can be used as barriers to retard and redirect storm water flow.	C	Rocks and stones from construction spoil were used as part of rehabilitation to be barriers and retard and redirect stormwater flow as required. This was as observed during the site walk and Sasol confirmed this during the site visit.  <i>Evidence:</i> ■ Site observation.	None.
1.4	All storm water control measures on private land must be approved in writing by the landowner before it may be implemented.	N/A	Stormwater control measures were approved during the construction phase. The pipeline is now operational after rehabilitation was completed before commissioning. Therefore, this condition is not applicable.	None.
<b>2 Stimulation of the Economy</b>				
2.1	This is a positive impact.	N/A	Noted.	OFl: Prepare an amendment to remove as this, as it is a statement and not a commitment.
2.2	The applicant must expedite construction work to commission the pipelines as soon as possible, without compromising the quality of the work.	N/A	Outside of audit period. Pipeline has been operational for years. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
2.3	The applicant must make all attempts to promote the use of natural gas as alternative industrial energy source in South Africa	C	<p>The SNI pipeline is a liquid fuel line, however, the GNP gas pipeline was also installed parallel to it to help promote the use of natural gas as an alternative industrial energy source in South Africa.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>(18)1.16-ROD_2009 secunda-sasolburg_GNP</li> </ul>	None.
<b>3 Poverty Relief</b>				
3.1	This is a positive impact.	N/A	Noted.	<p>OFI:</p> <p>This is a statement and not a commitment. The EMPr can be amended to remove this condition.</p>
3.2	Temporary jobs must be created during construction.	C	<p>The pipeline has been operational for years; however, Sasol confirmed that it still creates temporary jobs in the form of maintenance operations that may require specialists for incident clean-up operations or in the form of monitoring via auditing.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Personal communication</li> </ul>	None.
3.3	The skills of temporary workers must be developed.	N/A	Sasol has permanent operational teams from an inspection and maintenance perspective who are trained on their tasks. The only temporary	None.

No.	Condition	Compliance Status	Finding	Recommendation
			workers are those of contractors who come to perform specialist activities, and these are trained within their own organisations.	
3.4	The applicant must make all attempts to promote the use of natural gas as alternative household energy source in South Africa.	C	<p>Noted. The SNI pipeline is a liquid fuel line, however, the GNP gas pipeline was also installed parallel to it to help promote the use of natural gas as an alternative industrial energy source in South Africa.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>(18)1.16-ROD_2009 secunda-sasolburg_GNP</li> </ul>	<p>OFI:</p> <p>This is a duplicate of condition 2.3. The EMPr can be amended to remove this condition.</p>
<b>4 Soil Erosion</b>				
4.1	Excavated soil must be stacked in heaps low enough to minimise wind erosion.	N/A	No excavated material was observed during the site visit.	None.
4.2	Silting of rivers and streams must be avoided.	C	<p>Following the construction phase, the whole pipeline servitude was rehabilitated, and stormwater runoff measures put in place to prevent uncontrolled runoff during heavy rainfall periods. The riverbanks were stabilised, and the servitude is vegetated thus controlling stormwater flow. High risk areas such as crossings have gabion mattresses installed to control the flow of water as was observed during the site walk.</p> <p>Bank stabilisation ensured that the banks are bermed to help prevent soil erosion in conjunction with the surrounding vegetation.</p> <p><u>Evidence:</u></p>	None.


No.	Condition	Compliance Status	Finding	Recommendation
			 <p><b>Figure 4-11: Bermed and Vegetated Riverbanks</b></p>	
4.3	Storm water must be controlled in such a way that it will not cause soil erosion.	C	<p>Following the construction phase, the whole pipeline servitude was rehabilitated, and stormwater runoff measures put in place to prevent uncontrolled runoff during heavy rainfall periods. The riverbanks were stabilised, and the servitude is vegetated thus controlling stormwater flow. High risk areas such as crossings have gabion mattresses installed to control the flow of water as was observed during the site walk.</p> <p>Bank stabilisation ensured that the banks are bermed to help prevent soil erosion in conjunction with the surrounding vegetation.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-11 above</li> </ul>	None.
4.4	Where soil erosion could be a problem, such as against slopes and along riverbanks, berms must be created with construction spoil (soil, stones and	C	<p>Berms were created using soil and stones as was observed to prevent erosion specifically at stream crossings and at locations where vehicles cross over to the other side of the banks.</p> <p><u>Evidence:</u></p>	None.

No.	Condition	Compliance Status	Finding	Recommendation
	rocks) to divert and retard the water flow.		<ul style="list-style-type: none"> <li>Refer to Figure 4-11 above</li> </ul>	
<b>5 Handling of Emergency Situations</b>				
5.1	The applicant must update its existing Emergency Management Plan to make provision for the new liquid pipelines.	N/A	There are no new liquid pipelines planned for the servitude, therefore, there is no requirement to update the EMPr.	None.
5.2	Emergency situations along the liquid pipelines must be managed by the applicant, in collaboration with the local authorities in Secunda, Balfour and Sasolburg.	C	<p>Sasol is currently managing all theft incidents that leave the pipeline leaking into the surrounding environment. Security has been improved to reduce the risk of future occurrences.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Incident register_FY24</li> </ul>  <p><b>Figure 4-12: Security at access points to the Sasol pipeline servitude</b></p>	None.


No.	Condition	Compliance Status	Finding	Recommendation
5.3	The recommendations of the major hazard installation risk assessor must be applied.	C	<p>Safeguards have been put in place to manage the pipeline as required. Sleeves are in place (contained in pump stations) at crossings to prevent leaks into watercourses, while high level alarms are within the sumps to alert control room personnel of incidents before leaks occur.</p> <p>Furthermore, block valves are installed at intervals along the servitude to allow for isolation of the pipeline during maintenance. Cathodic protections are in place to prevent possible flames / fires from developing due to static charges. Finally, Sasol engages with local communities in alerting them of the procedures to take in the case of emergency situations.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Incident register_FY24</li> </ul>  <p>Figure 4-13: Pump station along the servitude</p>	None.
6 Safe and Reliable Operation of the Liquid Fuel Pipelines				


No.	Condition	Compliance Status	Finding	Recommendation
6.1	The applicant must compile a maintenance schedule and register for the new liquid pipelines.	C	<p>Sasol have a maintenance team that focuses on fixing any defects along the pipeline servitude. An inspection schedule was provided as evidence, showing both route inspection and helicopter inspection dates.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ SNI &amp; GNP Report</li> </ul>	None.
6.2	The pipelines must be inspected at least once per month by foot, vehicle or helicopter and the inspection findings must be recorded in a register.	C	<p>The auditor was informed that inspections are conducted along the pipeline servitude mainly using vehicles. Findings are recorded on a register kept by the inspection team. The register was provided to the auditor as evidence.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ SNI &amp; GNP Report</li> </ul>	None.
6.3	The pipelines must be pigged with intelligent pigs in accordance with the maintenance schedule.	C	<p>The auditor was informed that the pipeline is pigged with intelligent pigs as per the schedule provided.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ SNI &amp; GNP Report</li> </ul>	None.
6.4	The applicant must consider the placement of warning signs at houses that are located near the liquid pipelines.	C	<p>Signs are placed at the pipeline markers along the servitude and at the gates of some of the private areas used to gain access to the site. This was as observed during the site visit.</p> <p><u>Evidence:</u></p>	None.




No.	Condition	Compliance Status	Finding	Recommendation
			 <p><b>Figure 4-14: Warning signs Along Pipeline Markers</b></p>	
6.5	The applicant must consider the provision of abbreviated emergency procedures to inhabitants of houses or public facilities that are located near the liquid pipelines, including emergency contact numbers.	C	<p>The auditor was informed that Sasol conducts in-depth consultation and issues brochures and information pamphlets when any information changes. Furthermore, pipeline markers at regular intervals have emergency information signs on them for use by local residents.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-13 above</li> <li>Refer to Figure 4-14 above</li> <li>Pipeline Safety Awareness Presentation eMalahleni 19.10.2023</li> <li>ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 19.10.2023</li> <li>Pipeline Safety Awareness Presentation eMalahleni 15.11.2023</li> <li>ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 15.11.2023</li> </ul>	None.
6.6	The applicant must design a communication campaign and	C	The auditor was informed that Sasol conducts in-depth consultation and issues brochures and information pamphlets when any information changes.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	<p>implement it on a continuous basis, to inform and educate members of communities along the pipelines' route about the following aspects:</p> <p>Advantages and disadvantages of the pipelines.</p> <p>Dangers related to the pipelines.</p> <p>Roles and responsibilities of the communities in case of a safety emergency.</p> <p>Involvement of the communities in emergency drills.</p> <p>Continuous liaison with the applicant.</p>		<p>Evidence of the ongoing Environmental Awareness Training has been provided accompanied by the respective attendance registers., showing that community members were in attendance.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ Pipeline Safety Awareness Presentation eMalahleni 19.10.2023</li> <li>■ ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 19.10.2023</li> <li>■ Pipeline Safety Awareness Presentation eMalahleni 15.11.2023</li> <li>■ ATTENDANCE REGISTERS FOR PIPELINE SAFETY AWARENESS SESSION 15.11.2023</li> </ul>	
<b>7</b>	<b>Control of Alien Vegetation</b>			
7.1	Alien vegetation along the construction strip must be eradicated manually.	<b>C</b>	<p>Alien vegetation was observed throughout the pipeline servitude. However, Sasol did inform the auditor that the removal of alien vegetation is done manually as required and is removed as per the inspection schedule.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ Site observation</li> </ul>	None.

No.	Condition	Compliance Status	Finding	Recommendation
			 <p><b>Figure 4-15: Alien vegetation along pipeline servitude</b></p>	
7.2	Chemical herbicides may not be used.	C	<p>Alien vegetation was observed throughout the pipeline servitude. However, Sasol did inform the auditor that the removal of alien vegetation is done manually as required and is removed during as per the inspection schedule. However, there was no signs of use of chemical herbicides in the form of evidence of chemical remnants, therefore the condition is note as complaint.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-15 above</li> </ul>	None.
7.3	The pipelines construction strip must be inspected 12 months after completion of construction, to ensure that all alien vegetation has been eradicated from the disturbed soil.	N/A	Outside of audit period as the pipeline is now operational. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
8	<b>Permanent Servitudes</b>			
8.1	Permanent servitudes must be registered against the title deeds of private properties, with the written consent of the landowner.	C	<p>Sasol has permanent servitudes and agreements with landowners are in place.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>■ SNI - Environmental Authorisation</li> <li>■ SNI - Amended Environmental Authorisation</li> <li>■ List of service servitude owners and wayleaveconditions_SNI</li> </ul>	None.
8.2	The conditions of the servitude would be binding on the landowner.	N/A	Noted.	None.
8.3	The landowners are not allowed to build any structures on the servitude strip.	C	<p>There were no structures along the servitude strips as observed during the site visit.</p> <p><u>Evidence:</u></p>  <p><b>Figure 4-16: Example of No Development Along Servitude Strip</b></p>	None.

No.	Condition	Compliance Status	Finding	Recommendation
8.4	Normal agricultural activities may continue above the buried pipelines.	C	<p>Normal agricultural activities are still ongoing above the buried pipelines as was observed during the site visit.</p> <p><u>Evidence:</u></p>  <p><b>Figure 4-17: Maize Field Over Buried Pipeline</b></p>	None.
8.5	No deep-rooted trees may be planted in the servitude strip, because it may damage the pipelines in time.	C	<p>There were no deep-rooted trees observed along the servitude trips. Furthermore, there have been no incidents related to damage from any plant roots.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Site observation</li> <li>Refer to <b>Error! Reference source not found.</b></li> <li>Refer to Figure 4-15</li> <li>Refer to Figure 4-17</li> </ul>	None.
<b>9 Leaking of Hydrocarbon Fuels</b>				
9.1	Leakages of hydrocarbon fuels must be prevented at all costs.	C	Sasol has measures in place to prevent pipeline leakages. This includes regular inspections and maintenance as well as use of sleeves at river crossings, sumps and high-level alarms to trigger a dispatch of personnel to	None.

No.	Condition	Compliance Status	Finding	Recommendation
			<p>fix the pipeline. All incidents recorded were due to theft and not due to any technical issues along the line or negligence.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-12 above</li> <li>Refer to Figure 4-13 above</li> <li>SNI &amp; GNP Report</li> <li>Incident register_FY24</li> </ul>	
9.2	The first action is to stop the spillage through isolation of mainline block valves.	C	<p>Sasol have a series of block valves along the pipeline servitude that isolate the affected pipeline segments and thus prevent further leakages. However, Sasol informed the auditor that no recent spillage incidents were recorded. All incidents recorded were due to theft and not due to any technical issues along the line or negligence.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Refer to Figure 4-12 above</li> <li>Refer to Figure 4-13 above</li> <li>SNI &amp; GNP Report</li> <li>Incident register_FY24</li> </ul>	None.
9.3	Any spillage must be reported to the Department of Environmental Affairs and Tourism and the Department of Water Affairs and Forestry within 24 hours	NC	<p>Four incidents were recorded in the incident register over the audit period. However, no record was provided indicating that the incidents were reported to the relevant Departments within 24 hours.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Incident register_FY24</li> </ul>	<p>Ensure that all incidents are reported within 24 hours of their occurrence or when they are discovered.</p> <p>Target period:</p>

No.	Condition	Compliance Status	Finding	Recommendation
				Short term
9.4	In case of a spillage onto soil, the contaminated area must be excavated to a depth of at least 500 mm	C	<p>The auditor did not observe an incident area, however, was informed that all incident locations which had spillages onto soil were excavated to a depth of more than 500 mm as required. A spill onto soil was recorded on the incident register during the audit period.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Incident register_FY24</li> </ul>	<p>Ensure that all incidents in the case of a spillage onto soil, the contaminated area must be excavated to a depth of at least 500 mm.</p> <p>Target Period: Short Term</p>
9.5	The excavated soil must be placed in sealable inert containers and taken to the Holfontein hazardous waste site for safe disposal.	C	The auditor did not observe an incident area.	None.
9.6	In case of a spillage into natural water source, the floating fuel must be ring fenced with surface floats and skimmed off into dedicated containers.	C	<p>None of the recorded incidents (during the audit period) had a spillage into a natural water source as per the incident register.</p> <p><u>Evidence:</u></p> <ul style="list-style-type: none"> <li>Incident register_FY24</li> </ul>	None.
9.7	The skimmed fuel must be taken to the Natref refinery for reprocessing	N/A	This is yet to be done as skimming has only recently begun.	None.



No.	Condition	Compliance Status	Finding	Recommendation
<b>DECOMMISSIONING / CLOSURE PHASE</b>				
<b>1</b>	<b>Flushing of the Redundant Pipelines</b>			
1.1	Decommissioning of the new liquid pipelines are unlikely to occur in 30 years after commissioning.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
1.2	All liquid fuel and vapours must be flushed from the pipelines through the use of nitrogen.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
1.3	All residual nitrogen must be flushed from the pipelines with air.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
1.4	Flushing of vapours must be done during unstable atmospheric conditions such as a windy period and an elevated ambient temperature.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
1.5	Vapour flushing must not be done during the night.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
1.6	Vapour flushing must not be done at points where a large number of people are gathered.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.



No.	Condition	Compliance Status	Finding	Recommendation
<b>2 Safety of the Abandoned Pipelines</b>				
2.1	The empty pipelines, flushed from liquid fuel and vapours, must be declared safe by an approved inspection authority.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
2.2	The end points of the pipelines and all tie-in points must be welded and sealed.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
2.3	The cathodic corrosion control system must be disconnected and removed from the pipelines.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
<b>3 Creation of Artificial Water Ducts</b>				
3.1	Water must not be allowed to enter the unused pipelines.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
3.2	The applicant must inspect the pipelines at least once every six months to look for signs of water flow through it.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
<b>4 Alternative Use of the Redundant Pipeline</b>				
4.1	The applicant must consider donating the redundant pipelines to a local municipality for water transportation, provided that the municipality would	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.

No.	Condition	Compliance Status	Finding	Recommendation
	declare the water quality safe for its intended use.			
4.2	The servitude across the land for the pipelines must be deregistered against the title deed.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
<b>5 Contamination of Soil by Spilled Liquid Fuel</b>				
5.1	See Section 14.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.
<b>6 Contamination of Groundwater by Spilled Liquid Fuel</b>				
6.1	See Section 14.	N/A	Outside of audit period. There are no plans to decommission the pipeline in the foreseeable future. Therefore, this condition is not applicable.	None.

## 5 SUMMARY OF THE AUDIT FINDINGS

### 5.1 ENVIRONMENTAL AUTHORISATION (REFERENCE NO: 12/12/20/1035)

The results of the audit are outlined in full in **Section 4**. This summary provides a brief overview of the key findings regarding compliance with the EA conditions, with associated timeframes recommended for compliance.

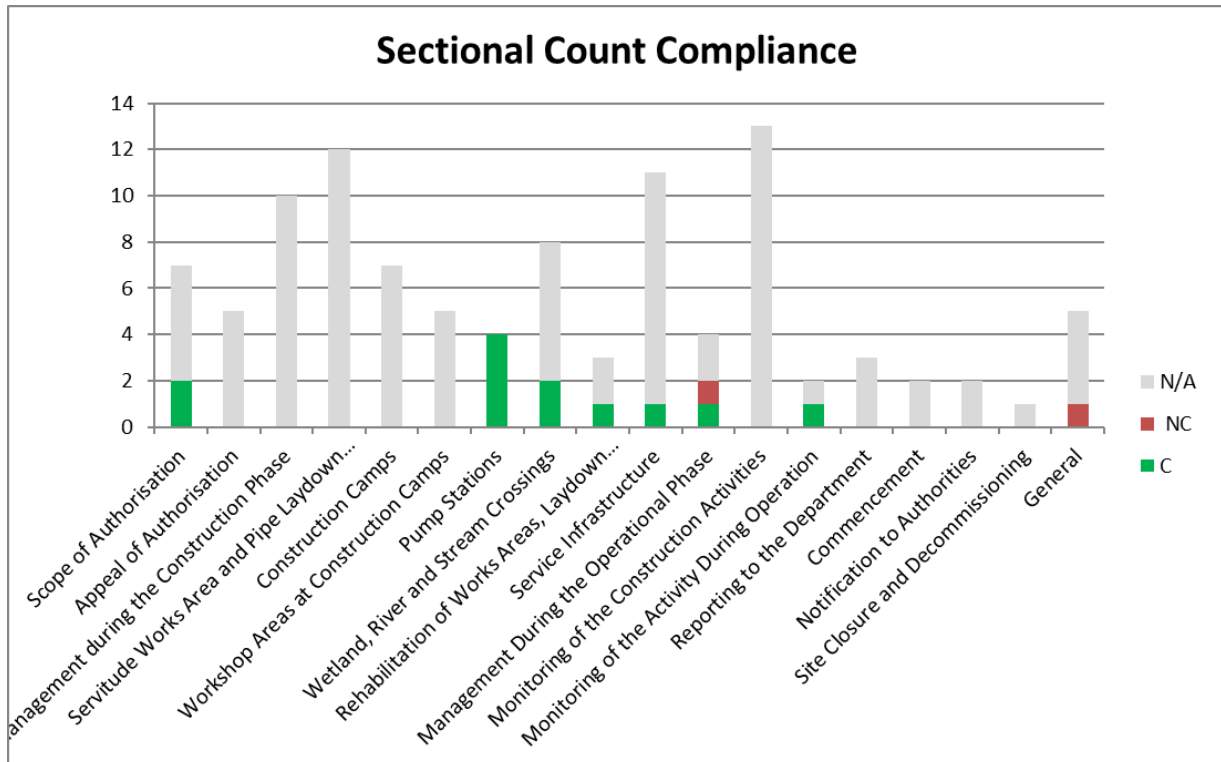
A total of 104 conditions were audited for compliance. As indicated below, 90 of the conditions were noted as not applicable, leaving 14 applicable conditions audited. **Table 5-1** shows the overall compliance levels noted because of the audit findings outlined in this report.

**Table 5-1 - Summary of EA Compliance Audit Findings**

Section of the EA	No. Commitments	C	NC	NA
Scope of Authorisation	7	2	0	5
Appeal of Authorisation	5	0	0	5
Management during the Construction Phase	10	0	0	10
Servitude Works Area and Pipe Laydown Areas	12	0	0	12
Construction Camps	7	0	0	7
Workshop Areas at Construction Camps	5	0	0	5
Pump Stations	4	4	0	0
Wetland, River and Stream Crossings	8	2	0	6
Rehabilitation of Works Areas, Laydown Areas and Construction Camps	3	1	0	2
Service Infrastructure	11	1	0	10
Management During the Operational Phase	4	1	1	2
Monitoring of the Construction Activities	13	0	0	13
Monitoring of the Activity During Operation	2	1	0	1
Reporting to the Department	3	0	0	3
Commencement	2	0	0	2
Notification to Authorities	2	0	0	2
Site Closure and Decommissioning	1	0	0	1
General	5	0	1	4

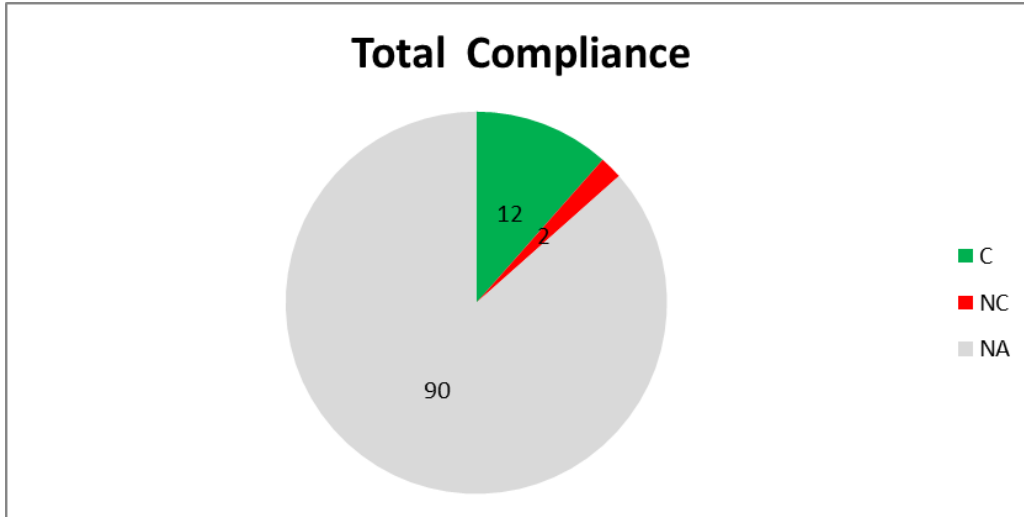
Section of the EA	No. Commitments	C	NC	NA
Total Count	104	12	2	90
Total Percentage		11.5%	2%	86.5%
Compliance with Applicable Conditions	86%			

**Figure 5-1** below illustrates the number/count contribution of the findings of the EA per section.



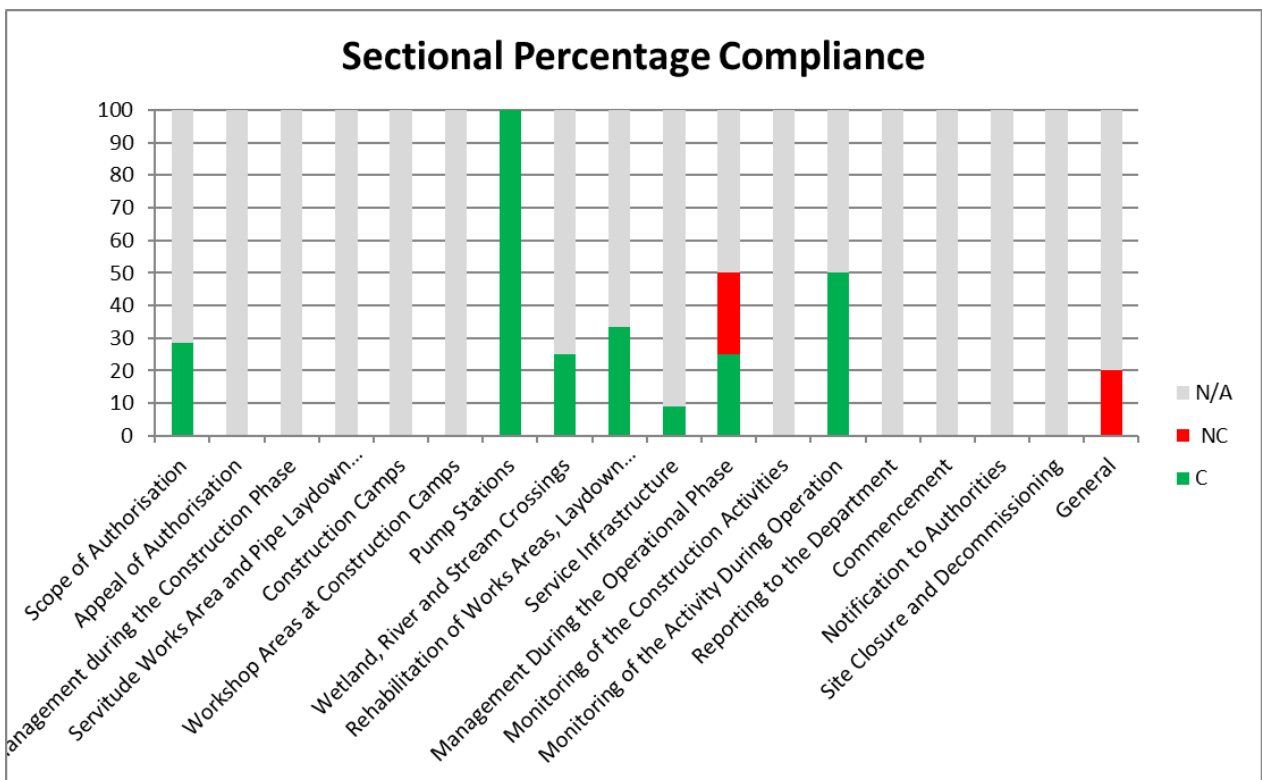
**Figure 5-1: Number/Count contribution of findings made to the EA conditions per Section**

**Figure 5-2** below presents the total proportion of compliance for the pipeline.



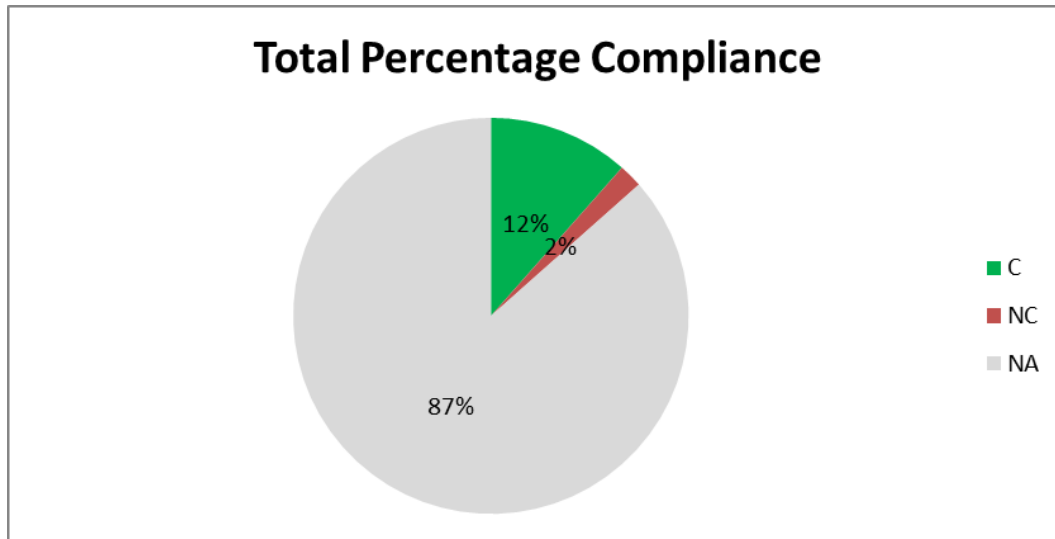
**Figure 5-2: Overall count findings on compliance to the EA conditions**

**Figure 5-3** below presents the total proportion of compliance for the pipeline as per the applicable conditions.



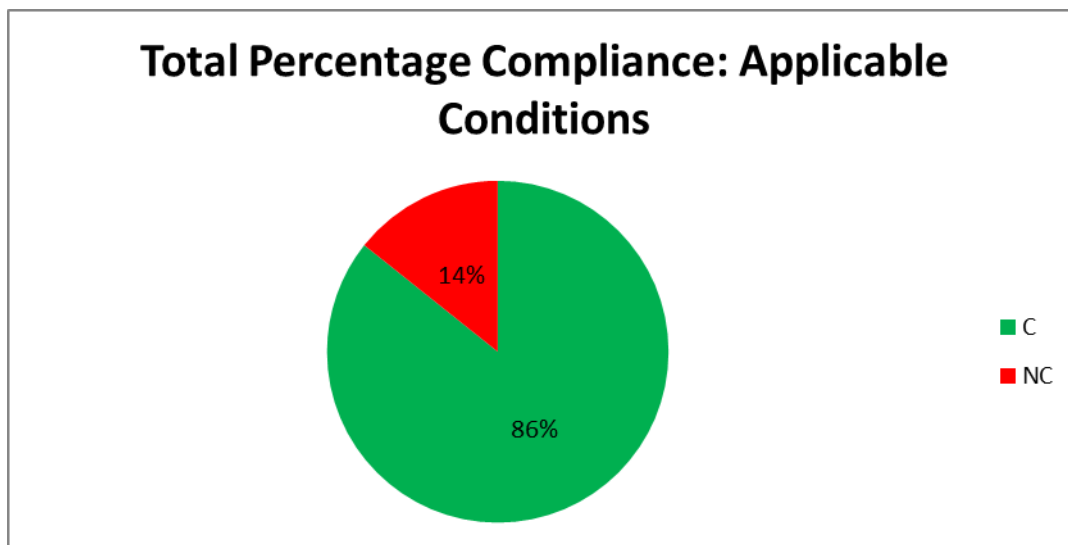
**Figure 5-3: Overall count findings on compliance to the Applicable EA conditions**

**Figure 5-4** below illustrates the percentage contribution of the findings of the EA conditions.



**Figure 5-4: Percentage contribution of findings made to the EA conditions per Section**

**Figure 5-5** presents the total percentage compliance for the pipeline as per the applicable conditions.



**Figure 5-5: Overall percentage findings on compliance to the Applicable EA conditions**

The non-compliant findings and observations should be investigated, and corrective and preventative actions should be conveyed to the external auditor during the next EA audit.

## 5.2 ENVIRONMENTAL MANAGEMENT PROGRAMME

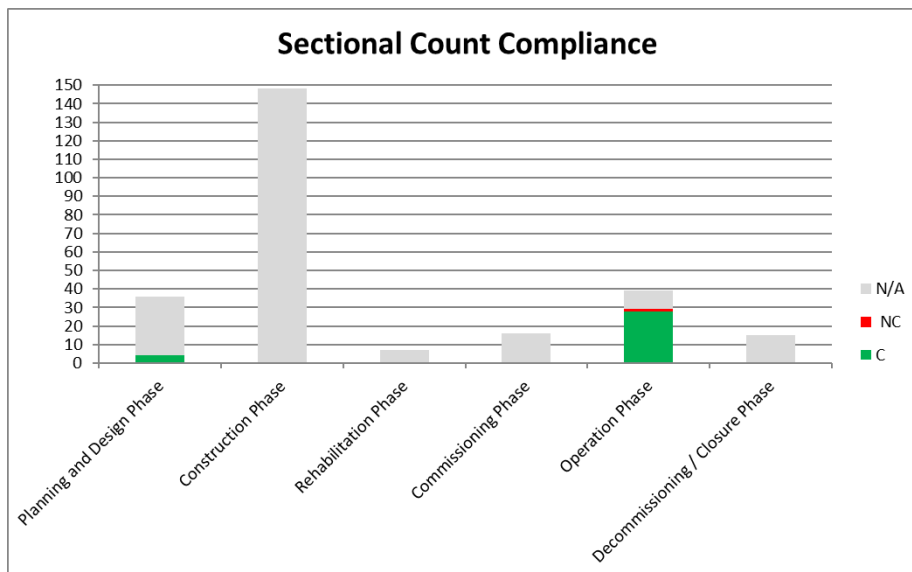
The results of the audit are outlined in full in **Section 4**. This summary provides a brief overview of the key findings regarding compliance with the EMPr conditions, with associated timeframes recommended for compliance.

A total of 261 conditions were audited for compliance. As indicated below, 225 of the conditions were noted as not applicable, leaving 36 applicable conditions audited. **Table 5-2** shows the overall compliance levels noted because of the audit findings outlined in this report.

**Table 5-2: Summary of EMPr Compliance Audit Findings**

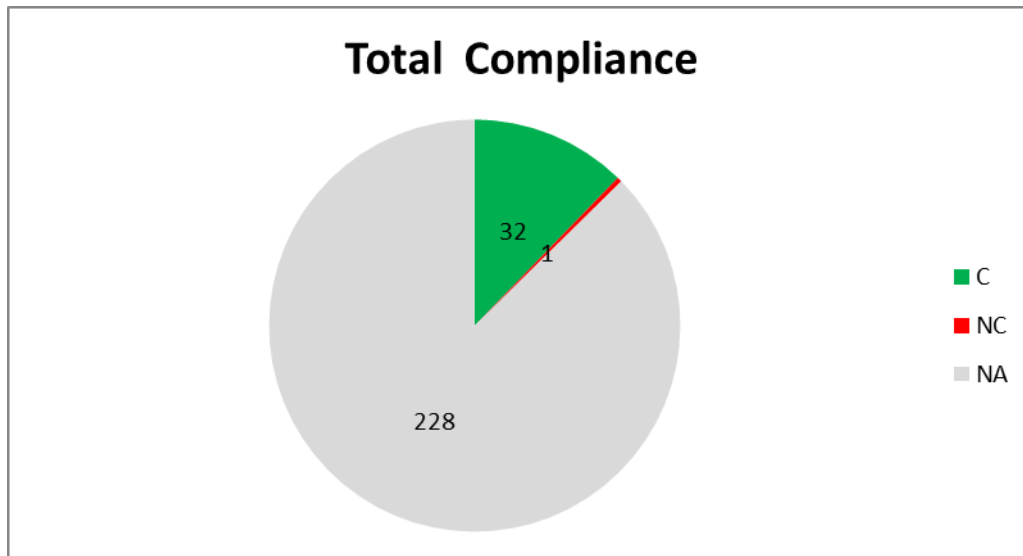
Section of the EMPr	No. Commitments	C	NC	NA
Planning and Design Phase	36	4	0	32
Construction Phase	148	0	0	148
Rehabilitation Phase	7	0	0	7
Commissioning Phase	16	0	0	16
Operation Phase	39	28	1	10
Decommissioning / Closure Phase	15	0	0	15
Total Count	261	32	1	228
Total Percentage		12%	1%	87%
Compliance with Applicable Conditions	97%			

**Figure 5-6** below illustrates the number/count contribution of the findings of the EMPr per section.



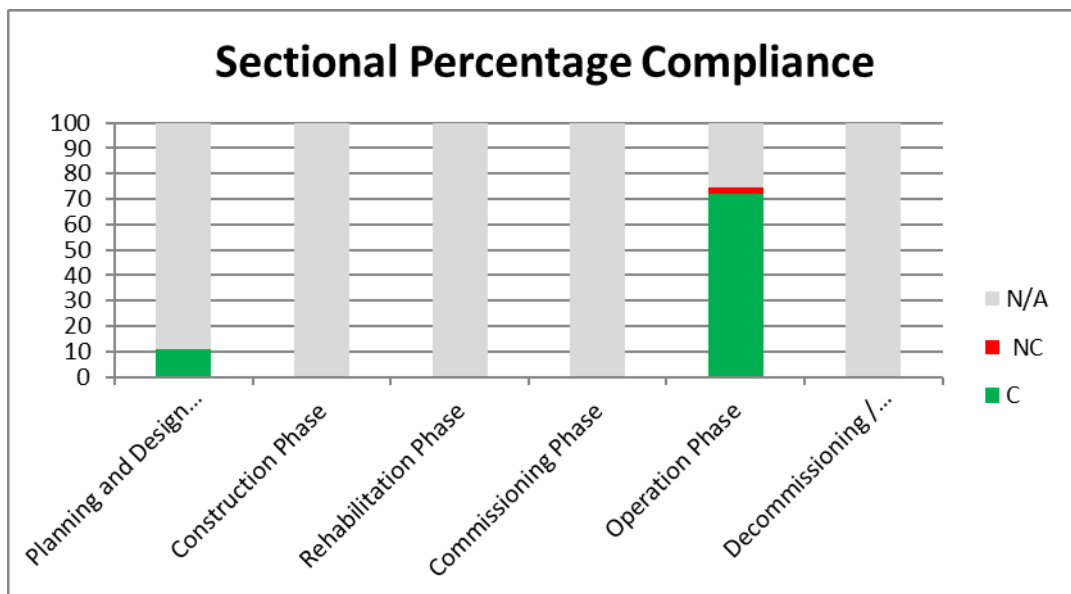
**Figure 5-6: Number/Count contribution of findings made to the EMPr conditions per Section**

**Figure 5-7** below presents the total proportion of compliance for the pipeline.



**Figure 5-7: Overall count findings on compliance to the EMPr conditions**

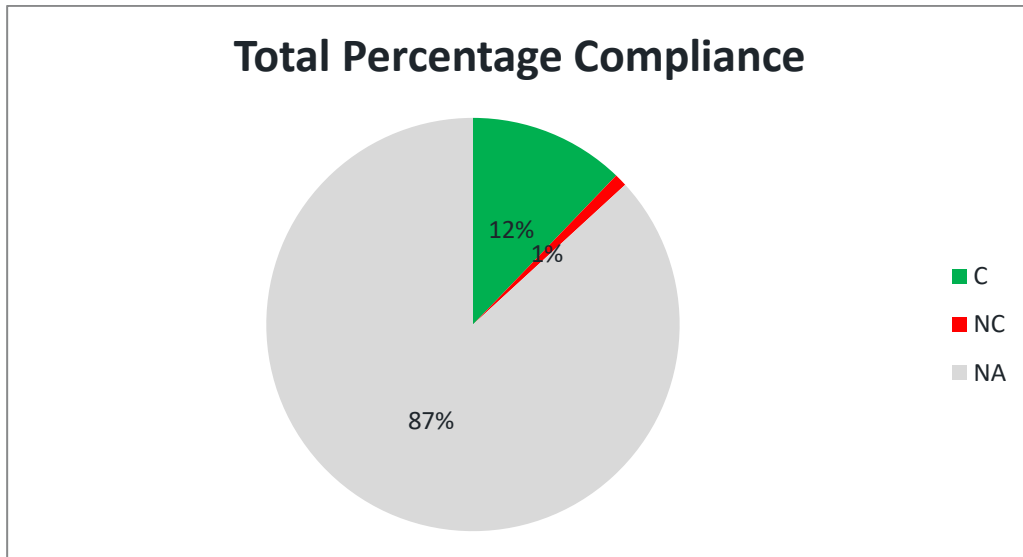
**Figure 5-8** below presents the total proportion of compliance for the pipeline as per the applicable conditions.



**Figure 5-8: Overall count findings on compliance to the Applicable EMPr conditions**

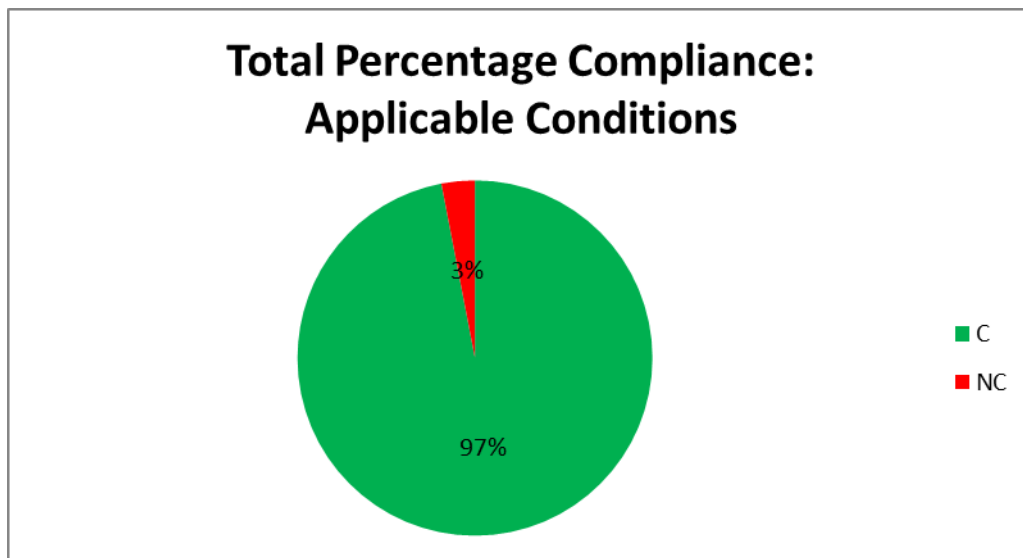
**Figure 5-9** illustrates the percentage contribution of the findings of the EMPr conditions.





**Figure 5-9: Percentage contribution of findings made to the EMPr conditions per Section**

**Figure 5-10** below presents the total percentage compliance to applicable conditions or the pipeline.



**Figure 5-10: Overall percentage findings on compliance to the Applicable EMPr conditions**

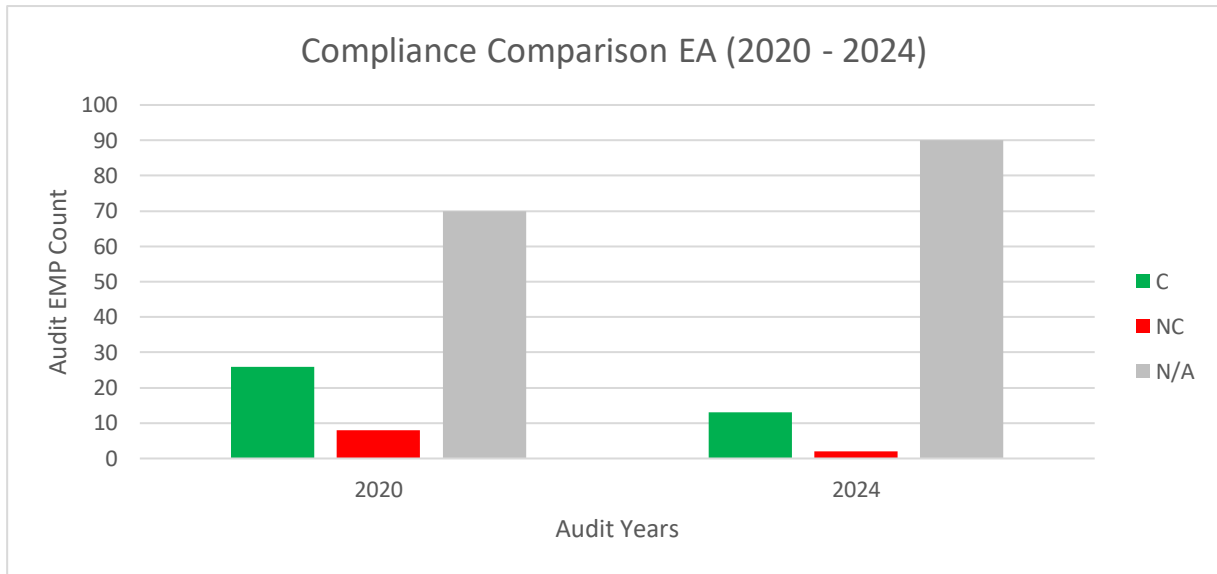
The non-compliant findings and observations should be investigated and corrective and preventative actions should be conveyed to the external auditor during the next EMPr audit.

## 5.3 CLOSE OUT OF PREVIOUS AUDIT FINDINGS

### 5.3.1 ENVIRONMENTAL AUTHORISATION

**Figure 5-11** provides a summary of the audit findings from the 2020 and the current audit (2024). The graph below shows that the facility remains fully compliant.

The audit findings are included in **Table 5-3**.



**Figure 5-11 - Compliance Comparison EA (2020 - 2024)**

**Table 5-3: Compliance comparison EA (2020-2024)**

Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
<b>Condition 1.2</b> The holder of this authorisation shall be responsible for ensuring compliance with the conditions of this authorisation by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.	NC	C	Sasol keeps track record of any monitoring against the EA conditions to ensure compliance, including inspection schedules, external audit reports. No further recommendations are required.
<b>Condition 1.9.2.1</b> All contractor staff must undergo environmental awareness induction training with regard to protection of the natural environment, the conditions of the	NC	N/A	Compliance with this condition is not applicable since the pipeline is now operational.

Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
environmental authorisation, the requirements of the EMP and the respect of the rights of landowners on whose properties construction takes place.			
<b>Condition 1.9.2.2</b> All contractor staff must be easily identifiable through the use of company overalls with company logos and all contractor staff must have an identity card to ensure unwanted elements can be identified to ensure security of the surrounding communities and landowners.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.2.3</b> Measures for waste avoidance and minimisation at all works areas, laydown areas and construction camps and disposal of construction waste at an appropriately registered facility	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.2.4</b> Measures for dust control during the construction phase.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.2.6</b> Measures to ensure public access to any homesteads or amenities must at all times be guaranteed and shall not be restricted due to this development. Where use is made of private access roads to gain access to the construction site, use of such roads must be negotiated with the affected landowners and speed limits on such roads must be enforced on all construction vehicles. All access roads used by the contractors must be reinstated to their original condition if any damage is caused to such roads.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.7</b> All construction works are limited to the servitude area	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.

Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
negotiated with the landowners; The works areas must be properly demarcated.			
<b>Condition 1.9.9</b> All work areas must be supplied with proper sanitation facilities. Portable toilets (at least one for every twenty workers) must be deployed along the works areas and workers must use these facilities at all times. No use of the veld is allowed for sanitation purposes. Workers transgressing this condition must be fined or removed from site.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.11</b> No open fires are allowed on site for heating or cooking purposes. The Applicant must ensure that the contractor have firefighting equipment available at all work sites in the event of accidental fires, especially during welding of the pipeline sections. Firefighting equipment must be tested regularly for operation and workers must be trained in the use of such equipment. The Applicant will be responsible for all claims emanating from run-away fires caused by the construction work teams.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.13</b> Servitude vegetation clearing must be done in accordance with the recommendations of the EIAR and a search and rescue operation of protected species must be done where the plants can be transplanted safely and with a reasonable success rate.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.20</b> The holder of this authorisation must have a specific management plan for management of the day to	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.

Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
day operation of each construction camp site, including measures for waste management, sanitation and water management.			
<b>Condition 1.9.22</b> Construction camp sites must be kept neat and the visual impact of camp sites must be mitigated to acceptable levels through screening.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.23</b> No water may be abstracted from or effluent or waste water released into natural sources without the required permits from the DWA and Sasol oil must have written agreements with landowners for use of any water from private boreholes or dams.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.25</b> All hydrocarbon containing fuels and lubricants must be stored inside a bunded area which can accommodate 110 percent of the stored liquids.	NC	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.26</b> All spills of hydrocarbon materials shall be contained and cleaned up immediately and polluted soils shall be disposed of in a registered waste site. Minor spills can be treated on site.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.31</b> Landscaping and architectural design of pump station structures must be done to ensure that the pump station blend in with the surrounding area to minimise the visual impact of the pump station.	N/A	C	The landscaping around the pump station is that of indigenous vegetation which allows it to blend into the surrounding area. The area is maintained to allow for easy access and monitoring around the pump stations. No further recommendations are required.
<b>Condition 1.9.40</b> Measures to ensure prevention of pollution or siltation of wetlands or rivers and streams during the construction phase must be	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.

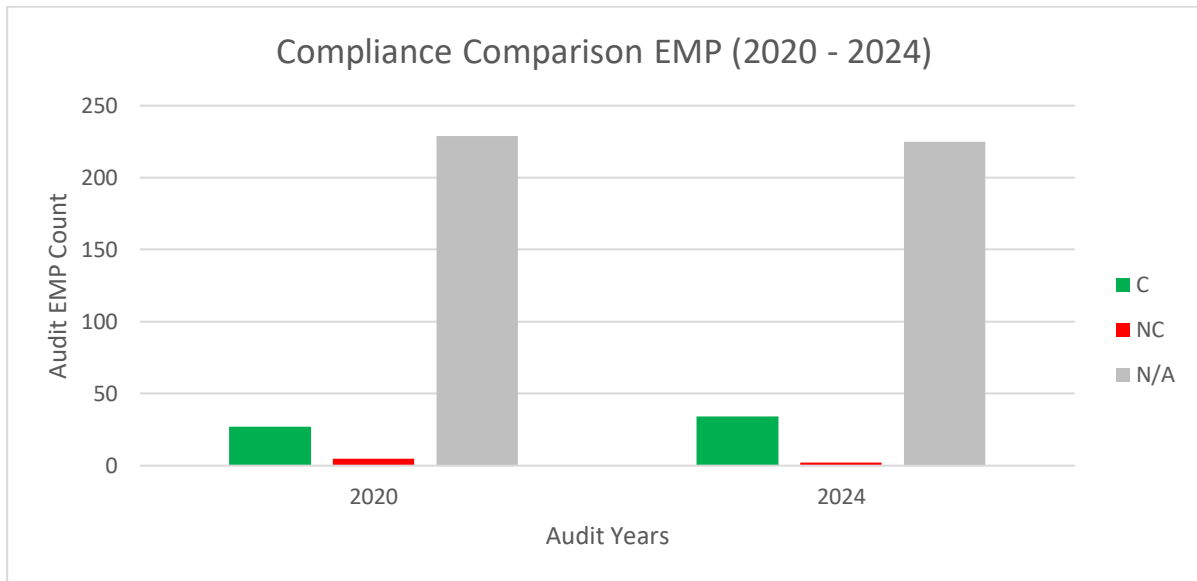
Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
implemented by the holder of this authorisation.			
<b>Condition 1.9.41</b> All areas disturbed during the construction phase of the project excluding those areas where permanent structures are erected must be rehabilitated fully in accordance with the recommendations of the specialist ecologist and to the satisfaction of the landowner.	N/A	C	Rehabilitation was conducted following the completion of the construction activities. The vegetation is managed during inspections done along the servitude by Sasol personnel. The clearance allows for easier servitude inspections and drives. The majority of the servitude is dominated by indigenous grass. No further recommendations are required.
<b>Condition 1.9.42</b> All works areas must be fully rehabilitated and construction rubble such as overburden and rock excavated during the excavation of the trench must be disposed of or landscaped in such a manner that the servitude area blends in with the surrounding environment. No heaps of overburden may be left on site.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.49</b> Sasol Oil must ensure that contractors adhere to an agreed speed limit on private roads to prevent accidents and road damage.	NC	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.9.50</b> Upon completion of construction all private roads must be rehabilitated to their original condition and to the satisfaction of the landowner.	C	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.10.2</b> The operational environmental management of the pipelines servitude must be included in the Sasol Oil environmental management system (EMS) for pipeline servitudes.	NC	C	Evidence of ISO 14001 certification was provided and confirms Sasol is ISO 14000 certified and has incorporated the EA requirements into the EMS for the management of the pipeline servitude. No further recommendations are required.
<b>Condition 1.10.3</b> A regular monitoring programme for water quality monitoring, included in the EMS, must be implemented at	NC	NC	The auditor was informed that no water quality monitoring is conducted on the perennial wetland areas and in existing boreholes in closed proximity of the pipeline

Condition	Previous Compliance Level	Current Compliance Level	Finding and Recommendation (2024)
perennial wetland areas and in existing boreholes in close proximity of the pipe line as well as downstream of river and stream crossings to detect any leaking pollutants and ground water pollution that may occur during the operational phase. If any water pollution is detected, Sasol Oil must implement measures to) remedy the situation immediately.			as well as downstream of the river and stream crossings.  Ensure that a monitoring program is formulated and implemented as required.
<b>Condition 1.16</b> A copy of this authorisation must be kept at the site office where the development will be undertaken. The authorisation must be produced to any authorized official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.	NC	N/A	Compliance with this condition is not applicable since the pipeline is now operational.
<b>Condition 1.19</b> The holder of the authorisation must notify the Department, in writing and within 48 (forty-eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non- compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.	NC	NC	Evidence of previous internal and external audits against the conditions of the EA were provided. However, no evidence was available of Sasol notifying the Department within 48 hours if any condition of the authorisation could not be adhered to.  An amendment should be sought to alter the onerous timeframe for reporting non-compliances. Rapid reporting of environmental incidents should remain, however a longer timeframe for reporting of non-compliances identified during audit could be considered.

### 5.3.2 ENVIRONMENTAL MANAGEMENT PLAN

**Figure 5-12** provides a summary of the audit findings from the 2020 and the current audit (2024). The graph below shows that the facility remains fully compliant.

The audit findings are included in **Section 4**.



**Figure 5-12 - Compliance Comparison EMP (2020 - 2024)**

**Table 5-4 - Compliance Comparison EMP (2020-2024)**

Condition	Previous Compliance Level	Finding and Recommendation (2020)	Current Compliance Level	Finding and Recommendation (2024)
<b>Condition 3.4</b> The applicant must make all attempts to promote the use of natural gas as alternative household energy source in South Africa.	N/A	Noted. The SNI pipeline is a liquid fuel line, however, the GNP gas pipeline was also installed parallel to it to help promote the use of natural gas as an alternative industrial energy source in South Africa.	C	Noted. The SNI pipeline is a liquid fuel line, however, the GNP gas pipeline was also installed parallel to it to help promote the use of natural gas as an alternative industrial energy source in South Africa.  OFI: This is a duplicate of condition 2.3. The EMPr can be amended to remove this condition.
<b>Condition 4.1</b> Excavated soil must be stacked in heaps low enough to	C	The excavated soil at incident locations was stacked in low heaps that were covered with a sheet to prevent wind erosion. This was observed during the site visit.	N/A	No excavated material was observed during the site visit.



Condition	Previous Compliance Level	Finding and Recommendation (2020)	Current Compliance Level	Finding and Recommendation (2024)
minimise wind erosion.		Evidence:		
<b>Condition 6.1</b> The applicant must compile a maintenance schedule and register for the new liquid pipelines.	NC	Sasol have a maintenance team that focuses on fixing any defects along the pipeline servitude, however, the maintenance schedule was not available for review.  Provide the maintenance schedule and register as required.	C	Sasol have a maintenance team that focuses on fixing any defects along the pipeline servitude. An inspection schedule was provided as evidence, showing both route inspection and helicopter inspection dates. No further recommendations required.
<b>Condition 6.2</b> The pipelines must be inspected at least once per month by foot, vehicle or helicopter and the inspection findings must be recorded in a register.	NC	The auditor was informed that inspections are conducted along the pipeline servitude mainly using vehicles. Findings are recorded on a register kept by the inspection team. However, the inspection schedule was not available to confirm that this is done on a monthly basis as required.  Provide the inspection schedule to indicate the frequency at which inspections are conducted.	C	The auditor was informed that inspections are conducted along the pipeline servitude mainly using vehicles. Findings are recorded on a register kept by the inspection team and was provided as evidence. No further recommendations required.
<b>Condition 6.3</b> The pipelines must be pigged with intelligent pigs in accordance with the maintenance schedule.	NC	The auditor was informed that the pipeline is pigged with intelligent pigs as per the schedule, however, the maintenance schedule was not available for review.  Provide the maintenance schedule and register as required.	C	The auditor was informed that the pipeline is pigged with intelligent pigs as per the schedule provided. No further recommendations required.
<b>Condition 6.6</b> The applicant must design a communication campaign and implement it on a continuous basis, to inform and educate	NC	The auditor was informed that Sasol has a communication plan to be implemented on a continuous basis to inform and educate members of communities along the pipelines' route. However, this plan was not provided for review.	C	The auditor was informed that Sasol conducts in-depth consultation and issues brochures and information pamphlets when any information changes. Evidence of the ongoing Environmental

Condition	Previous Compliance Level	Finding and Recommendation (2020)	Current Compliance Level	Finding and Recommendation (2024)
<p>members of communities along the pipelines' route about the following aspects:</p> <p>Advantages and disadvantages of the pipelines.</p> <p>Dangers related to the pipelines.</p> <p>Roles and responsibilities of the communities in case of a safety emergency.</p> <p>Involvement of the communities in emergency drills.</p> <p>Continuous liaison with the applicant.</p>		<p>Provide the communication campaign plan and proof of recent communication with the stakeholders.</p>		<p>Awareness Training has been provided accompanied by the respective attendance register, showing that community members were in attendance.</p> <p>No further recommendations required.</p>
<p><b>Condition 8.1</b></p> <p>Permanent servitudes must be registered against the title deeds of private properties, with the written consent of the landowner</p>	N/A	<p>Outside of audit period. This was done during the planning phase.</p>	C	<p>Sasol has permanent servitudes and agreements with landowners in place.</p>
<p><b>Condition 9.3</b></p> <p>Any spillage must be reported to the Department of Environmental Affairs and Tourism and the Department of Water Affairs and Forestry within 24 hours.</p>	NC	<p>Three incidents were recorded over the audit period. The first was in March, letter dated 19 March 2020 but only sent to the Department on 30 March 2020, the second occurred on 20 March and a notification sent on 29 March and the third occurred on the 12th of June but notification was only sent on 18 June 2020.</p> <p>Ensure that all incidents are reported within 24 hours of</p>	NC	<p>Four incidents were recorded in the incident register over the audit period. However, no record was provided indicating that the incidents were reported to the relevant Departments within 24 hours.</p> <p>Ensure that all incidents are reported within 24 hours of their</p>

Condition	Previous Compliance Level	Finding and Recommendation (2020)	Current Compliance Level	Finding and Recommendation (2024)
		their occurrence or when they are discovered.		occurrence or when they are discovered.

### 5.3.3 EFFECTIVENESS OF THE EMPR

Section 34 and Appendix 7 of the EIA Regulations 2014 (as amended) requires an assessment of the adequacy and effectiveness of the EMPr as part of the audit scope, as follows:

- Assess the extent to which the avoidance, management and mitigation measures provided for in the EMPr, achieve the objectives and outcomes laid out in these documents;
- Identify and assess any new impacts and risks that result from undertaking the activity;
- Critically evaluate the effectiveness of the EMPr;
- Identify shortcomings in the EMPr; and
- Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr.

The EMPr compliance audit has identified that approximately 87% of the listed measures are no longer applicable, as these mostly related to the planning, construction, rehabilitation and commissioning phases only. The original EMPr document was designed pre-operation principally to govern these construction phase impacts, and has been superseded during the operational phase by Sasol Business Unit-specific risk assessments; compliance with the EA, and other relevant authorisations; and through Sasol's choice to comply with the ISO 14001 Environmental Management international standard.

The EIA Regulations 2014 (as amended) requires that the EA and EMPr is audited only at least every five years, and Sasol has systems in place which are considered to be more robust for monitoring compliance and implementing changes than through the EMPr audits; including the annual audit of each business unit to meeting ISO 14001 standards.

New impacts and risks are continually identified and assessed by Sasol by its Governance SHE Risk and Assurance department; which assesses environmental risks and drives improvement implementation. The SHE Environment department facilitates Environmental Risk Assessments per business entity to ensure that gaps are addressed through implementation of mitigation measures via the Integrated Management System. Sasol further addresses all Key Undesirable Events (KUEs) from a group perspective. Risk documentation is hosted on Sasol's Information Management System.

In conclusion, WSP considers that for the duration that Sasol continues to operate each business unit under ISO 14001 standards and meet licence compliance (EA, WUL, AEL), this is effective as mitigation against any gaps in the EMPr and as a means to regularly identify new impacts and risks. In the event that Sasol elects to no longer comply with ISO standards, an alternative system must be



implemented. Such an alternative may involve updates to the EMPr and regular (annual) audits against these updates.

# Appendix A

**ENVIRONMENTAL AUTHORISATION  
(REFERENCE NO: 12/12/20/1035)**





## **environmental affairs**

Department:  
Environmental Affairs  
**REPUBLIC OF SOUTH AFRICA**

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA  
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

**Reference:** 12/12/20/1035

**Enquiries:** Mr John Geeringh

**Telephone:** (012) 310 3491 **Fax:** (012) 320 7539 **E-mail:** [jgeeringh@deat.gov.za](mailto:jgeeringh@deat.gov.za)

Mr Fanie van Wyk  
Sasol Oil (Pty) Ltd  
P O Box 4211  
**RANDBURG**  
2125

Fax no: 011 522 9841

### **PER FACSIMILE / MAIL**

Dear Mr Van Wyk

#### **APPLICATION FOR AUTHORISATION: R. 387: SASOL OIL (PTY) LTD THREE LIQUID FUEL PIPE LINES BETWEEN SECUNDA AND SASOLBURG (REFERENCE NUMBER: 12/12/20/1035).**

The environmental impact assessment report (EIAR), dated 21 March 2009 and addendum report dated 9 August 2009, for the abovementioned project, submitted to the Department refers. Please be advised that the Department has accepted the EIAR and has decided to grant authorisation. The environmental authorisation and reasons for the decision are attached herewith. The environmental management plan (EMP) submitted with the EIAR is approved for implementation and the requirements stipulated in the EMP forms part of the conditions of authorisation.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties (IAPs), in writing and within ten (10) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Attached please find a simplified copy of the appeals procedure to be followed. Kindly include a copy of this procedure with the letter of notification to IAPs.

A copy of the official appeal form can be obtained from:

Mr PKM Retief, Appeals Administrator, Tel: 012 310 3705, [pretief@deat.gov.za](mailto:pretief@deat.gov.za); or

Mr H Grové, Appeals Administrator, Tel: 012 310 3070, [hgrove@deat.gov.za](mailto:hgrove@deat.gov.za), at the Department.

Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the Minister, within 10 days of receiving notice of the decision, by means of one of the following methods:

By facsimile: (012) 320 7561;  
By post: Private Bag X447, Pretoria, 0001; or

By hand: 2<sup>nd</sup> Floor, Fedsure Form Building, North Tower, cor. Van der Walt and Pretorius Streets, Pretoria.

Should the Applicant decide to appeal, the Applicant must serve a copy of its notice of intention to appeal on all registered IAPs as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Please include the Department, attention of the Director: Environmental Impact Evaluation, in the list of IAPs, notified through your notification letter of the decision, for record purposes.

The authorised activities may not commence within thirty (30) days of the date of signature of the authorisation. Please further note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely



Ms Lize McCourt  
Chief Director: Environmental Impact Management  
Department of Environmental Affairs  
Date: 12 October 2009

CC: Mr Alfonso Niemand Nature & Business Alliance Fax: 086 609 0677

Copy to: Mr Herman Grove DEA

**APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF R. 385 OF 2006 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION**

<b>APPLICANT</b>	<b>INTERESTED AND AFFECTED PARTIES (IAPs)</b>
1. Receive notice of Environmental Authorisation from the relevant Competent Authority	1. Receive notice of Environmental Authorisation from Applicant/Consultant
2. Within 10 days of receipt of notification, notify the relevant Competent Authority and all IAPs of intention to appeal	2. Within 10 days of receipt of notification, notify the relevant Competent Authority of intention to appeal
3. Notification served by the Applicant must include: 3.1. A copy of the notice of intention to appeal; and 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by all IAPs	3. Appellant must serve on the Applicant 3.1. A copy of the notice of intention to appeal 3.2. A notice indicating where and for what period the appeal submission will be available for inspection by the applicant
4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal	4. The appeal must be submitted to the relevant Competent Authority or delegated organ of State within 30 days of lodging of the notice of intention to appeal
5. A person or organ of state that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of state within 30 days from the date that the appeal submission was made available for inspection by the appellant	5. An Applicant that receives notice of an appeal may submit a responding statement to the relevant Competent Authority or delegated organ of State within 30 days from the date the appeal submission was made available for inspection by the appellant

**NOTES:**

**1. An appeal against a decision must be lodged with:-**

- the Minister of Water and Environmental Affairs if the decision was issued by the Director-General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
- the MEC if the decision was issued by the Head of Department (or another official) acting in his/ her capacity as the delegated Competent Authority;
- the delegated organ of state where relevant.

**2. An appeal lodged with:-**

- the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
- the MEC must be submitted to the provincial department responsible for environmental affairs;
- the delegated organ of state, where relevant, must be submitted to the delegated organ of state.

**3. An appeal must be:-**

- on an official form obtainable or published by the relevant department;
- accompanied by:
  - a statement setting out the grounds of appeal;
  - supporting documentation which is referred to in the appeal and is not available to the relevant Competent Authority;
  - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62;
  - the prescribed appeal fee, if any.

**4. A copy of the official appeal form can be obtained from:**

See authorisation cover letter.





## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

### Environmental Authorisation

**Authorisation register number:** 12/12/20/1035  
**Last amended:**  
**Holder of authorisation:** SASOL OIL (PTY) LTD  
**Location of activity:** SECUNDA TO SASOLBURG

*12/10/09*

## Decision

The Department of Environmental Affairs (DEA) (hereafter referred to as the "Department") is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

## Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006 the Department hereby authorises –

Sasol Oil (Pty) Ltd

with the following contact details –

Mr Fanie van Wyk

Sasol Oil (Pty) Ltd

P O Box 4211

**RANDBURG**

2125

Tel no: 011 889 7600

Fax no: 011 522 9841

to undertake the following activities (hereafter referred to as the "development") applied for:

*GN R. 387:*

1. *The construction of facilities or infrastructure, including associated structures or infrastructure, for –*

*(j) the bulk transportation of dangerous goods using pipelines, funiculars or conveyors with a throughput capacity of 50 tons or 50 cubic metres or more per day;*

*GN R. 386:*

1. *The construction of facilities or infrastructure, including associated structures or infrastructure, for-*

*12/10/09*

- (m) any purpose within the one and ten year flood line of a river or stream, or within 32 meters from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including canals, channels, bridges, dams or weirs;
4. The dredging, excavation, infilling, removal or moving of soil, sand or rock exceeding 5 cubic meters from a river, tidal lagoon, tidal river, lake, in-stream dam, floodplain or wetland;
7. The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters, but less than 1000 cubic meters at any one location or site;
12. The transformation or removal of indigenous vegetation of 3 hectares or more, or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004); and
15. The construction of a road that is wider than 4m or that has a reserve wider than 6m, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30m long;

for the construction of the new three (3) liquid fuel pipe lines, as described in the environmental impact assessment report (EIAR), dated 21 March 2009 and addendum EIAR report dated 9 August 2009, submitted to the Department on 11 August 2009.

The pipe lines will be installed between Secunda and Sasolburg within the jurisdiction of the Govan Mbeki, Dipaleseng and Metsimaholo Municipalities, which falls within the Mpumalanga and Free State Provinces, hereafter referred to as "the property", as described in the EIAR dated 21 March 2009.

## **Description of the development**

The development of the pipe lines must take place along the route corridor approximately 400 meters south of the existing gas pipe lines as shown on the maps included in the EIAR in figure 2.2, page 38 of the EIAR dated 21 March 2009 over the properties listed on page 40 in the EIAR, within a corridor width of 100m either side of the centre line indicated on the maps



outside built up areas (to allow for minor adjustment due to localised constraints), and will consist of the following major components:

1. The installation of the three proposed 254mm diameter steel pipe lines of approximately 169km in a three phased approach.
  - a. The three pipe lines must be buried at a minimum depth of 1 metre along their entire length with a fibre optic cable for operational management and control as well as cathodic protection to prevent corrosion, installed with the pipe lines as detailed in the EIAR in accordance with the provisions of SANS 10089 and other applicable standards as listed in the EIAR on page 25.
  - b. Leak detection systems must be installed as part of this project to ensure any fuel leaks from the pipe lines are detected quickly and remedial work is done immediately.
  - c. Automatic isolation valves must be installed either side of road and rail crossings as well as at identified sensitive areas, including perennial and annual water bodies.
  - d. The final pipe lines design route crossings at water bodies must be approved by the Department of Water Affairs (DWA) as part of the Water Use License issued to the holder of this authorisation.
  - e. Where the pipe lines cross agricultural land used for crop production, the pipe lines must be buried deep enough to allow for agricultural activities and crop production to continue after construction is completed to minimise the impact on food production as food security is a very high priority for the country.
  - f. The final pipe lines design route must be inspected by a registered heritage specialist to determine the requirements for permits in relation to destruction of such sites and the specific management / protection measures required for such sites prior to construction commencing on such sites.
  - g. The final pipe lines design route must be subjected to a Major Hazard Installation (MHI) risk assessment and the emergency response plans of the affected local authorities must be updated to accommodate the new pipe lines in their respective emergency response plans before operation commence.
  - h. The construction servitude will be a maximum of 30m wide where space is available but less where confined due to other existing Infrastructure.
2. The replacement of the existing three pipe lines within the Sasol Mining property to effect essential maintenance due to the pipe lines reaching the end of their economic life for safe operation and to prevent possible leaking from these pipe lines.

12/10/09

3. Establishment of associated construction camps, lay down areas for pipe sections prior to assembly and installation.
4. Establishment of an access road for construction along the servitude.
5. The final pipe lines position must be marked with markers at regular intervals and at points where the pipe line change direction, as well as distance markers and markers visible from the air for aerial inspection by helicopter during the operational phase.
6. Construction of a pump station and pigging stations along the route for each of the three pipe lines each with associated buildings, pumps, electrical infrastructure, fire protection and water management structures within the perimeter security fence of the pump station at the approximate locations as shown on the map included in Figure 2.1 on page 26 of the EIAR dated 21 March 2009.
7. Rehabilitation works upon completion of construction to restore the environment to its natural condition prior to construction.

The granting of this environmental authorisation is subject to the conditions set out below.

## Conditions

### Scope of authorisation

- 1.1 Authorisation of the development is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 1.2 The holder of this authorisation shall be responsible for ensuring compliance with the conditions of this authorisation by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 1.3 The authorised development may only be carried out at the property indicated above and as described in the EIAR dated 21 March 2009, and as shown on the map set included in the EIAR.
- 1.4 Any substantial changes to the project description set out in the EIAR, and authorised under this authorisation must be approved, in writing, by the Department before such changes may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the



significance and impacts of such changes and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.

- 1.5 This development must commence within a period of five (5) years from the date of issue of this authorisation. If commencement of the development does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the development to be undertaken.
- 1.6 This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the development and associated infrastructure.

1.6.1 Relevant legislation that must be complied with by the holder of this authorisation include but is not limited to:

- Compliance with the requirements of Section 38 of the National Heritage Resources Act, Act 25 of 1999, including any comments and recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed.
- Provisions of the Occupational Health and Safety Act, Act 85 of 1993.
- Provisions of the Environment Conservation Act, Act 73 of 1989.
- Provisions of the NEM: Air Quality Management Act, Act 39 of 2004.
- Provisions of the NEM: Waste Management Act, Act 59 of 2008.
- Provisions of the Conservation of Agricultural Resources Act, Act 43 of 1983.
- Provisions of the National Forests Act, Act 84 of 1998.
- Provisions of the National Water Act, Act 36 of 1998.
- Provisions of the Hazardous Substances Act, Act 15 of 1973.
- Provisions of the National Key Points Act, Act 102 of 1980.
- Provisions of the Petroleum Pipelines Act, Act 60 of 2003.
- Provisions of the Explosives Act, Act 26 of 1956.
- Provisions of the Fencing Act, Act 31 of 1963.
- Relevant local authority bylaws and regulations.
- Should any activity be planned on site that is a listed activity in terms of the NEMA Regulations, 2006, which is not covered by this authorisation, a separate application for such activity must be lodged with the relevant competent authority.



**Appeal of authorisation**

- 1.7 The holder of the authorisation must notify every registered interested and affected party (IAP), in writing and within 10 (TEN) calendar days, of receiving notice of the Department's decision to authorise the development.
- 1.8 The notification referred to in 1.7 must –
  - 1.8.1 Specify the date on which the authorisation was issued;
  - 1.8.2 Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations;
  - 1.8.3 Advise the interested and affected party that a copy of the authorisation will be furnished on request, and
  - 1.8.4 Give the reasons for the decision.
- 1.9 **Management during the construction phase:**
  - 1.9.1 The environmental management plan (EMP) for the construction phase included in the EIAR dated 21 March 2009, section 13 on page 119, and submitted to the Department, is hereby approved for implementation. The mitigation measures proposed in the EIAR dated 21 March 2009, and requirements stipulated in the EMP as included in the EIAR, for environmental management during the construction phase forms part of the conditions of this environmental authorisation and must be implemented by the holder of this authorisation.
  - 1.9.2 The holder of this authorisation must ensure the following measures are implemented during the construction phases of the pipe lines development:
    - 1.9.2.1 All contractor staff must undergo environmental awareness induction training with regard to protection of the natural environment, the conditions of the environmental authorisation, the requirements of the EMP and the respect of the rights of landowners on whose properties construction takes place.
    - 1.9.2.2 All contractor staff must be easily identifiable through the use of company overalls with company logos and all contractor staff must have an identity card to ensure unwanted elements can be identified to ensure security of the surrounding communities and landowners.



- 1.9.2.3 Measures for waste avoidance and minimisation at all works areas, lay down areas and construction camps and disposal of construction waste at an appropriately registered facility.
- 1.9.2.4 Measures for dust control during the construction phase.
- 1.9.2.5 Measures for noise control during the construction period where construction activities occur close to residences or built-up areas to limit the nuisance factor of noise.
- 1.9.2.6 Measures to ensure public access to any homesteads or amenities must at all times be guaranteed and shall not be restricted due to this development. Where use is made of private access roads to gain access to the construction site, use of such roads must be negotiated with the affected landowners and speed limits on such roads must be enforced on all construction vehicles. All access roads used by the contractors must be reinstated to their original condition if any damage is caused to such roads.
- 1.9.2.7 Archaeological remains, features and structures older than 60 years are protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any archaeological or palaeontological artefacts be exposed during excavation for the purpose of laying the pipe lines, construction in the vicinity of the finding must be stopped. A heritage specialist must be called to the site for inspection. Under no circumstances shall any artefacts be destroyed or removed from the site. The South African Heritage Resource Agency must be informed of any new finds.
- 1.9.3 The approved construction EMP will be seen as a dynamic document. Should the construction activities exceed any predicted impact levels, the EMP must be amended to include any additional requirements. However, any proposed amendment of the EMP must be submitted to the Department for approval in writing.
- 1.9.4 Amendment of the EMP must be approved in writing by the Department before such changes can be implemented.





**Servitude works area and pipe lay down areas**

- 1.9.5 This development is authorised on condition that Sasol Oil acquires the necessary servitude rights for the pipe lines route. Sasol Oil must negotiate with affected landowners within the authorised corridor alignment prior to the start of construction activities. Proof of such negotiations must be made available to the Department on request should any dispute arise.
- 1.9.6 In addition, any route adjustment, due to the specific local circumstances, which deviates outside the authorised corridor alignment of 200m, must be assessed and submitted to the Department for authorisation in writing before implementation. Approval of such deviations outside the authorised corridor must be authorised in writing by the Department before such deviations may be implemented.
- 1.9.7 All construction works are limited to the servitude area negotiated with the landowners. The works areas must be properly demarcated.
- 1.9.8 No construction workers shall be allowed to reside on any site unless a written agreement with the affected landowner is obtained.
- 1.9.9 All work areas must be supplied with proper sanitation facilities. Portable toilets (at least one for every twenty workers) must be deployed along the works areas and workers must use these facilities at all times. No use of the veld is allowed for sanitation purposes. Workers transgressing this condition must be fined or removed from site.
- 1.9.10 All works areas must have waste bins for general waste and such bins must be serviced regularly. All bins must be supplied with lids to ensure littering is prevented. Bins must be secured to prevent wild animals from spreading litter from such bins. Workers littering the site must be fined or removed from site.
- 1.9.11 No open fires are allowed on site for heating or cooking purposes. The Applicant must ensure that the contractor have fire fighting equipment available at all work sites in the event of accidental fires, especially during welding of the pipe line sections. Fire fighting equipment must be tested regularly for operation and workers must be trained in the use of such equipment. The Applicant will be responsible for all claims emanating from run-away fires caused by the construction work teams.
- 1.9.12 All pipe lay down areas outside the negotiated servitude area must be negotiated with the affected landowner and written agreement must be



obtained. Proof of such negotiations and agreements must be made available to the Department on request should any dispute arise.

- 1.9.13 Servitude vegetation clearing must be done in accordance with the recommendations of the EIAR and a search and rescue operation of protected species must be done where the plants can be transplanted safely and with a reasonable success rate.
- 1.9.14 Topsoil and spoil must be stored separately and topsoil must be stored in such a way as to ensure maximum protection of the quality of the topsoil to ensure the seed bank stays viable for rehabilitation.
- 1.9.15 No protected species of vegetation may be destroyed without the required permit from the relevant competent authority.
- 1.9.16 Where possible, large specimens of indigenous species within the construction servitude must be preserved if they will not interfere with or pose a danger to the future operation of the pipe lines or cause a major obstacle during construction works.

#### **Construction camps**

- 1.9.17 Construction camps must be sited taking into consideration the local community security concerns.
- 1.9.18 No construction camp site on privately owned land may be established without written approval from the affected landowner.
- 1.9.19 No labour recruitment may be done at construction camps. Recruitment offices for labour may be set up in towns in proximity to the works areas to allow local labour to apply for work.
- 1.9.20 The holder of this authorisation must have a specific management plan for management of the day to day operation of each construction camp site, including measures for waste management, sanitation and water management.
- 1.9.21 Construction camps must be inspected weekly by the environmental control officer (ECO) for compliance with the management plan for camp sites.
- 1.9.22 Construction camp sites must be kept neat and the visual impact of camp sites must be mitigated to acceptable levels through screening.
- 1.9.23 No water may be abstracted from or effluent or waste water released into natural sources without the required permits from the DWA and Sasol Oil must



have written agreements with landowners for use of any water from private boreholes or dams.

### **Workshop areas at construction camps**

- 1.9.24 Workshop areas for vehicle servicing must have a concrete floor area for servicing of vehicles.
- 1.9.25 All hydrocarbon containing fuels and lubricants must be stored inside a bunded area which can accommodate 110 percent of the stored liquids.
- 1.9.26 All spills of hydrocarbon materials shall be contained and cleaned up immediately and polluted soils shall be disposed of in a registered waste site. Minor spills can be treated on site.
- 1.9.27 Should it be necessary to service any vehicles or equipment in the servitude construction area due to a breakdown, a drip tray shall be used to prevent carbon spills onto the soil.
- 1.9.28 All hydrocarbon waste material generated at the workshop shall be contained in proper storage drums for recycling or disposal at a registered waste site.

### **Pump stations**

- 1.9.29 Noise abatement measures must be installed at all pump stations to reduce the impact of noise associated with pumping during the operational phase, especially in pump stations in close proximity to residential areas.
- 1.9.30 Security lighting installed at pump stations must be designed in such a way that light spill to the surrounding areas is minimised, especially where pump stations are constructed in rural areas with a high visual quality and where light spill may cause a significant aesthetical impact.
- 1.9.31 Landscaping and architectural design of pump station structures must be done to ensure that the pump station blend in with the surrounding area to minimise the visual impact of the pump station.
- 1.9.32 Pump stations must be fitted with the required ablution facilities for use by any on site security or operational and maintenance personnel.

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**Wetland, river and stream crossings**

- 1.9.33 Construction at wetland, river and stream crossings shall be done in accordance with detailed design drawings for each specific crossing point.
- 1.9.34 Where crossings are required, the approval of the DWA of the engineering design shall be obtained in writing before any construction commence on such sites.
- 1.9.35 All perennial river and stream crossings must be done through directional drilling unless otherwise authorised by the DWA. Any crossing by means other than directional drilling must take into consideration the scour effect of the water on the river or stream bottom over time to ensure that the pipe lines will be installed deep enough to remain stable for the lifespan of the pipe lines
- 1.9.36 Special care shall be taken when doing any construction work in wetland areas and the area of disturbance shall be kept to the absolute minimum. Sheet flow in wetland areas must not be prevented and the necessary measures to ensure continued sheet flow must be implemented during design of wetland crossings.
- 1.9.37 All wetland areas, river and stream crossings disturbed during construction must be rehabilitated and inspected by DWA upon completion. Once construction at river, stream or wetland crossings are completed, the relevant DWA official must sign a release form indicating that rehabilitation was done satisfactorily at each crossing point. The release forms must be made available to the Department on request should any dispute arise.
- 1.9.38 Vegetation at river and stream bank crossings may be cut and treated with a suitable registered herbicide to prevent further growth and root development. Under no circumstances will de-stumping of trees on river and stream banks be allowed as this may lead to unacceptable erosion except where DWA approves an open trench design to cross a river or stream.
- 1.9.39 River and stream banks must be protected against possible erosion by carefully controlling access and construction activities in such areas.
- 1.9.40 Measures to ensure prevention of pollution or siltation of wetlands or rivers and streams during the construction phase must be implemented by the holder of this authorisation.



**Rehabilitation of works areas, lay down areas and construction camps**

- 1.9.41 All areas disturbed during the construction phase of the project excluding those areas where permanent structures are erected must be rehabilitated fully in accordance with the recommendations of the specialist ecologist and to the satisfaction of the landowner.
- 1.9.42 All works areas must be fully rehabilitated and construction rubble such as overburden and rock excavated during the excavation of the trench must be disposed of or landscaped in such a manner that the servitude area blends in with the surrounding environment. No heaps of overburden may be left on site.
- 1.9.43 Once construction is completed, all landowners must sign a release form with the ECO indicating that rehabilitation was done satisfactorily and that all outstanding issues or claims have been settled by Petroline. The release forms must be made available to the Department on request should any dispute arise.

**Service infrastructure**

- 1.9.44 Disruption of service infrastructure must be kept to an absolute minimum. Should it be necessary to disrupt any services during the construction phase, the affected parties must be informed at least two (2) weeks in advance.
- 1.9.45 Should any accidental damage to service infrastructure take place during construction activities, Sasol Oil must take immediate action to restore such disrupted service in the shortest time possible.
- 1.9.46 Any claims for damage to service infrastructure by landowners due to construction activities must be addressed within 30 days from such claim being submitted.
- 1.9.47 Road crossings of the pipe line must be done in accordance with a provincial roads department or South African National Roads Agency Limited (SANRAL) approved design drawing and directional drilling must be implemented at all national, provincial and district road crossings as a minimum to ensure no disruption of traffic.
- 1.9.48 The use of existing roads to gain access to the servitude works area is preferred; however use of any private access roads must be agreed with the



- landowners in writing. All private roads not to be used for the purpose of construction must be marked clearly with no entry signs.
- 1.9.49 Sasol Oil must ensure that contractors adhere to an agreed speed limit on private roads to prevent accidents and road damage.
- 1.9.50 Upon completion of construction all private roads must be rehabilitated to their original condition and to the satisfaction of the landowner.
- 1.9.51 Rail crossings and power line crossings must be planned in conjunction with Transnet and Eskom and the necessary approvals from these parastatal companies must be obtained prior to construction at such crossings.
- 1.9.52 No fences may be flattened for the purpose of construction without the consent from the landowner. All fence crossings shall be fitted with a proper servitude gate before construction commences to ensure access for the construction teams.
- 1.9.53 Where required deviations of fences may be done with the written consent of the landowner to allow for construction activities.
- 1.9.54 Upon completion of construction all damage to fencing shall be properly fixed to the satisfaction of the landowners.

#### **1.10 Management during the operational phase.**

- 1.10.1 Before commencement of operation the following requirements for the operational phase must be complied with by Sasol Oil:
- 1.10.1.1 A major hazard installation (MHI) risk assessment must be completed and approved by the relevant competent authority.
- 1.10.1.2 Sasol Oil must ensure that all local authorities are aware of the commencement of operation and that the necessary emergency response plans for catastrophic events are in place and approved where required.
- 1.10.2 The operational environmental management of the pipe lines servitude must be included in the Sasol Oil environmental management system (EMS) for pipe line servitudes.
- 1.10.3 A regular monitoring programme for water quality monitoring, included in the EMS, must be implemented at perennial wetland areas and in existing boreholes in close proximity of the pipe line as well as downstream of river and stream crossings to detect any leaking pollutants and ground water pollution



that may occur during the operational phase. If any water pollution is detected, Sasol Oil must implement measures to remedy the situation immediately.

## **1.11 Monitoring of the construction activities**

### **1.11.1 Monitoring of the activity during construction**

- 1.11.1.1 The holder of this authorisation must appoint a suitably qualified and responsible person that will act as an environmental control officer (ECO) for the construction period that will have the responsibility of implementing the requirements of the approved construction EMP as well as the conditions of this authorisation.
- 1.11.1.2 The ECO must be appointed before the start of construction and the Department must be notified of the details and contact numbers of the appointee in writing for record and communication purposes.
- 1.11.1.3 The ECO must compile and present the environmental awareness induction training referred to in 1.9.2.1 above.
- 1.11.1.4 The ECO must inform all affected landowners of the commencement of construction works on their properties at least one week prior to works commencing on their properties.
- 1.11.1.5 The ECO must ensure that all landowners are informed of the ECO contact details and must strive to keep landowners informed regarding construction progress.
- 1.11.1.6 The ECO must monitor the construction works on a full time basis to ensure the holder of this authorisation complies with the conditions of this authorisation. Records relating to compliance monitoring must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.
- 1.11.1.7 The ECO must submit a quarterly compliance report, in writing, to The Director: Environmental Impact Evaluation and copy the holder of this authorisation with such report. This report shall include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. The report must reflect the DEA reference number of the project on the cover page.



- 1.11.1.8 The ECO must report any significant environmental incident or non-conformance by the holder of this authorisation or any contractor to the Department, attention of the Director: Environmental Impact Evaluation, within 48 hours of such incident or non-conformance and copy the holder of this authorisation with such a report.
- 1.11.1.9 The ECO must maintain the following on site:
- 1.11.1.9.1 A site diary.
  - 1.11.1.9.2 Copies of all reports submitted to the Department.
  - 1.11.1.9.3 A complaints register of all public complaints and the remedies applied to such complaints.
- 1.11.1.10 The ECO must compile a report on all rehabilitation measures implemented for future monitoring and measurement of success of the rehabilitation measures during the operational phase of the development.
- 1.11.1.11 The ECO must remain employed until all rehabilitation measures as well as site clean-up are completed, the release forms were signed by the landowners and the DWA and the site is handed over to the holder of the authorisation for operation.

#### **1.11.2 Monitoring of the activity during operation**

- 1.11.2.1 The holder of this authorisation must monitor the operational phase of the development once operation commence as part of the Sasol Oil EMS. The operational phase commence when fuel is pumped for the first time.
- 1.11.2.2 Should the responsibility for compliance with this authorisation be transferred to any other juristic person, the transfer of the environmental authorisation from the initial holder of the authorisation to any other juristic person must be formally recorded in writing and a copy of the transfer document indicating the contact details of the juristic person must be submitted to the Director: Environmental Impact Evaluation for record purposes. The transfer document must clearly indicate the DEA reference number.





## **Reporting to the Department**

1.12 The holder of the authorisation must submit an environmental compliance audit report to the Department: Attention of the Director: Environmental Impact Evaluation, upon completion of the construction activities as planned for the establishment of the individual pipe lines and associated infrastructure. This report must be submitted after completion of each phase of pipe line construction.

1.12.1 The environmental audit report must indicate the date of the audit, the name of the auditor, the DEA project reference number and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions as well as the requirements of the EMP.

1.12.2 The ECO may compile this report or the holder of this authorisation may appoint an external auditor to compile the report.

## **1.13 Commencement**

1.13.1 The authorised activities may not commence within thirty (30) days of date of signature of this authorisation. Commencement includes site establishment.

1.13.2 Should you be notified by the Minister of a suspension of the authorisation pending any appeals decision on the authorised activities, you may not commence with the activities unless authorised by the Minister in writing.

## **1.14 Notification to authorities**

1.14.1 Thirty (30) days written notice must be given to the Department that construction of the pipe lines will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the construction activity will commence.

1.14.2 Thirty (30) days written notice must be given to the Department that the operational phase of the pipe lines will commence.



**Site closure and decommissioning**

- 1.15 Should the pipe lines ever become redundant and have to be decommissioned, the holder of the authorisation at the time of decommissioning shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time for the decommissioning phase.

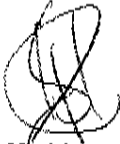
**General**

- 1.16 A copy of this authorisation must be kept at the site office where the development will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 1.17 Where any of the contact details of the holder of this authorisation change, including the name of the responsible person, the physical or postal address and / or telephonic details, the holder of the authorisation must notify the Department as soon as the new details become known.
- 1.18 Upon transfer of the management function of the development the future holder of the authorisation must take ownership of the implementation of the conditions of this environmental authorisation.
- 1.19 The holder of the authorisation must notify the Department, in writing and within 48 (fourty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 1.20 National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this



document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 12 October 2009



**Ms Lize McCourt**  
**Chief Director: Environmental Impact Management**  
**Department of Environmental Affairs**  
**Date:**

## Annexure 1: Reasons for Decision

### 1. Background

The applicant, Sasol Oil (Pty) Ltd, applied for authorisation to undertake the following activities –

GN R. 387:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for –
  - (j) the bulk transportation of dangerous goods using pipelines, funiculars or conveyors with a throughput capacity of 50 tons or 50 cubic metres or more per day;

GN R. 386:

1. The construction of facilities or infrastructure, including associated structures or infrastructure, for-
  - (m) any purpose within the one and ten year flood line of a river or stream, or within 32 meters from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including canals, channels, bridges, dams or weirs;
4. The dredging, excavation, infilling, removal or moving of soil, sand or rock exceeding 5 cubic meters from a river, tidal lagoon, tidal river, lake, in-stream dam, floodplain or wetland;
7. The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters, but less than 1000 cubic meters at any one location or site;
12. The transformation or removal of indigenous vegetation of 3 hectares or more, or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004); and
15. The construction of a road that is wider than 4m or that has a reserve wider than 6m, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30m long;



for the construction of the new three (3) liquid fuel pipe lines from Secunda to Sasolburg, as described in the environmental impact assessment report (EIAR), dated 21 March 2009 and addendum EIAR report dated 9 August 2009, submitted to the Department on 11 August 2009.

In terms of NEMA, section 24 C (2) and regulation GN R. 385: 3 the national department becomes the competent authority to issue an environmental authorisation, as the activity will take place over a provincial boundary.

The applicant appointed Nature & Business Alliance (Pty) Ltd (NBA) to undertake a scoping / EIA process and to compile an EIAR as required by regulation GN R. 385: 27. NBA appointed various specialists whom compiled specialist studies and assessed the various potential impacts identified. Mitigation measures to mitigate potential impacts were identified and included in the EIAR.

## **2. Information considered in making the decision**

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the revised SR and POSEIA dated 17 May 2008 as accepted by the Department;
- b) The comments and responses document included in the EIAR in Volume 3 of the EIAR which includes comments from interested and affected parties (IAPs);
- c) The information contained in the final EIAR, dated 21 March 2009 and addendum report dated 9 August 2009, submitted to the Department on 11 August 2009;
- d) The information contained in the specialist studies as included in the EIAR dated 21 March 2009, Volume 2;
- e) Comments received from the provincial departments of Mpumalanga and the Free State on the final EIAR;
- f) Comments received from SAHRA;
- g) Comments received from the Directorate: Biodiversity and Heritage;
- h) Minutes of meetings held between the consultants and the IAPs in all affected provinces;
- i) Route maps as included in the final EIAR;

- j) A site visit by helicopter on the proposed final pipe lines route on 28 August 2009 attended by Mr Geeringh of the Department; and
- (n) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

### 3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's decision on the EIAR and EMP. Factors considered in making the decision are the following:

- The need and desirability for the construction of the proposed new pipe lines as well as the replacement of the three existing pipe lines is clearly understood. The demand for fuel inland will soon outstrip the supply capacity of the existing pipe lines and the existing pipe lines are nearing the end of their life span.
- The potential impacts of the construction, operational and decommissioning of the proposed pipe lines is assessed in detail and no fatal flaws were identified on the proposed route of the pipe lines and the positions of the pump and pigging stations.
- Feasible and reasonable alternative options including the no-go option were investigated as part of the assessment process.
- A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA regulations, 2006 for public involvement.
- The consultant appointed various specialists to assist with the assessment of potential impacts and the specialists have recommended feasible and implementable mitigation measures to minimise potential impacts.
- No significant environmental degradation will result directly from the activities applied for and authorised in this authorisation if the approved EMP and proposed mitigation measures in the EIAR which form part of this authorisation is implemented.
- The applicant has the ability to implement the conditions of this authorisation and the requirements of the EMP.
- The requirements of the Regulations, 2006, have been complied with in respect of this application for authorisation for construction of the proposed pipe lines.



A summary of the potential impacts identified which, in the Department's view, were of the most significance is set out below.

Pump and piggings stations:

- a) The potential impacts on air quality, noise pollution and waste management.
- b) The potential impacts on land use.
- c) The potential noise impact.
- d) The potential impacts on heritage resources.
- e) The potential impact on sense of place and visual aesthetics.
- f) The potential impacts on wetlands and biodiversity.
- g) The potential ground water pollution due to leaks from equipment.

Pipe lines:

- a) The potential impacts on safety, health and security of the people in the vicinity of the pipe lines.
- b) The potential impacts on air quality, noise pollution and waste management.
- c) The potential social impacts associated with the relocation of people.
- d) The potential impacts on land use and farming operations.
- e) Potential impact on property values.
- f) The potential noise impact.
- g) The potential impacts on heritage resources.
- h) The potential impacts on wetlands, rivers and biodiversity.
- i) Potential erosion impacts.
- j) The technical constraints to the placement of a pipe line.
- k) The potential impacts on water resources due to wetland, river and stream crossings.
- l) The potential groundwater water pollution due to leaks from equipment.
- m) The future development of surrounding land and land use.

All impacts identified were assessed in detail and mitigation measures were proposed to mitigate those impacts that could not be avoided in total to acceptable levels. The implementation of the mitigation measures as part of the EMP is crucial to ensure that the project execution will have the minimum impact of the environment. The mitigation measures have been included in the draft EMP submitted with the EIAR dated 21 March

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2009 are feasible and can be implemented. No fatal flaws were identified by any specialist in relation to the proposed final route alignment of the pipe lines or the positions of the pump and pigging stations. Re-routing of the pipe line route was done regularly throughout the study as information became available to ensure that areas where significant impacts were identified are bypassed.

#### 4. Findings

After consideration of the information and factors listed above, the department made the following findings -

- The proposed development is required to address the fuel supply needs of South Africa, especially the inland regions of the Free State, Gauteng, Mpumalanga and North West into the future. The need for the proposed development is clearly demonstrated and justified.
- The liquid fuel pipe lines would have a positive impact on securing fuel supply to central South Africa and it would improve supply quantities.
- A detailed public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2006 for public involvement.
- The procedure followed for the EIA process has been adequate and compliant to the requirements of the Regulations, 2006.
- The information contained in the EIAR and addendum report is deemed accurate and credible.
- The assessment of impacts is detailed and has indicated no fatal flaws with regard to the final proposed route, pump and pigging stations.
- The area proposed for the development is already somewhat disturbed due to existing infrastructure, servitudes or agricultural activities and the proposed mitigation measures will ensure that the potential impact of the proposed pipe lines is minimised.
- The proposed development is compatible with the proposed site for the development, especially in the light of existing infrastructure in close proximity to the proposed pipe lines route.
- Legal and procedural requirements have been met.
- Comments raised by I&APs are included in the EIAR in a comments and response addendum and the consultant has responded on issues and comments.

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- A draft EMP that complies with the requirements of the Regulations, 2006: 34 was included in the EIAR submitted to the Department for acceptance.
- The Applicant is capable of implementing the proposed conditions of the environmental authorisation and proposed mitigation measures.
- The principles of NEMA can largely be upheld.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly authorised.





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