



Our reference: SO-ENV-1354

3 December 2024

Your Ref: EA nr E/03/19

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Attention: Deputy Director: Environmental Impact Assessment

## **ENVIRONMENTAL AUTHORISATION EXTERNAL REPORT SUBMISSION**

The Environmental Authorisation applicable for Sasol South Africa Limited, Research and Operation was externally audited during July 2024. The external audit was conducted to comply to the requirement contained in Chapter 5 part 3 of the Environmental Impact Assessment Regulations.

Sub regulation 34 (6) of the regulations also requires the holder of the environmental authorisation to notify all potential and registered interested and affected parties of the submission of the report and make the report available on request to anyone and on a publicly accessible website, where available.

The external audit reports will be available on <https://www.sasol.com/esg/environmental-audit-reports>.

Sasolburg Operations appointed WSP to conduct the external audits on all Environmental Authorisations and accompanying Environmental Management Programs.

The complete report, dated October 2024, is attached hereto as Annexure A. We are pleased that the report indicates full compliance.

### **Sasolburg and Ekandustria Operations**

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Company Secretary: M du Toit

The Audit report noted sufficient mitigation of environmental impacts and level of compliance to the Environmental Authorisation and Environmental Management Program (EMPr) therefore no recommendations for improvement were made.

Further, in alignment with Chapter 5 Part 4 of the regulation, regulation 36 allows amendment to the impact management action of an EMPr to be affected immediately by the holder of the environmental authorisation and reflect it in the next environmental audit report. Annexure B contains the mitigations measures identified during the environmental impact assessment, for the operational phase of the project, defining the impact management outcome and impact management actions to enable compliance to this regulation.

No impact management outcome or impact management action requires amendment for the of Fischer Tropsch Demonstration Reactor (FTDR) facility.

Yours faithfully

Signed by:Khedaren Govender  
Signed at:2024-12-03 09:50:46 +02:00  
Reason:I approve

*Khedaren Govender*

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**Annexure A**

**Audit report.**

**Fischer Tropsch Demonstration Reactor (FTDR) Ref (E/03/19)**



Sasol South Africa Ltd

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# **FTDR UNIT (REF. NO: E/03/19) AMENDED ENVIRONMENTAL AUTHORISATION AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2019 - July  
2024





Sasol South Africa Ltd

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# **FTDR UNIT (REF. NO: E/03/19) AMENDED ENVIRONMENTAL AUTHORISATION AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2019 - July 2024

**TYPE OF DOCUMENT (VERSION) CONFIDENTIAL**

**PROJECT NO. 41106913**

**DATE: OCTOBER 2024**



Sasol South Africa Ltd

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# **FTDR UNIT (REF. NO: E/03/19) AMENDED ENVIRONMENTAL AUTHORISATION AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2019 - July 2024

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# QUALITY CONTROL

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Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	FTDR Demonstration Unit Project Audit Final Audit Report			
Date	October 2024			
Prepared by	Matilda Mbazo			
Signature				
Checked by	Anri Scheepers			
Signature				
Authorised by	Anri Scheepers			
Signature				
Project number	41106913			
Report number	01			
File reference	\\corp.pbwan.net\za\Central_Data\Projects\41100xxx\41106913 - SASOL A AUDITS 2024\41 EPA\01-Reports\01-Final\02.FTDR demonstration unit EA			

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### APPENDIX A

#### AUDITOR CVS

# 1 INTRODUCTION

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## 1.1 TERMS OF REFERENCE

WSP Group Africa (Pty) Ltd (WSP), as an independent environmental consultant, was appointed by Sasol Operations, a division of Sasol South Africa Limited, to undertake an external environmental compliance audit of the commitments contained in the Amended Environmental Authorisation (EA) (reference number E/03/19) for the Fisher Tropsch Demonstration Reactor (FTDR) Unit Project and the Environmental Management Programme (EMPr), and to compile an audit report according to the requirements of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA).

The details of the EA (previously referred to as Record of Decision (RoD), the amendment of the EA and the EMPr, applicable to the current audit, are provided below:

- RoD for the FTDR Unit in Sasolburg (reference number: E/03/19), dated 28 June 2004 by the Department of Tourism, Environmental and Economic Affairs now the Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA).
- The amendment of the EA on the FTDR (on the Sasol One site) in Sasolburg (reference number: E/03/19), dated 21 September 2017 by the DESTEA. The amendments include:
  - EA Conditions
  - Holder of the Authorisation
- The amendment of the EA on the FTDR (on the Sasol One site) in Sasolburg (reference number: E/03/19), dated 21 July 2022 by the DESTEA. The amendments include:
  - Special conditions 3(i) was removed from the EA.
  - Applicant details:
    - Contact person
    - Contact numbers.
    - Address
- EMPr included in the Scoping Report dated 19 March 2004.

## 1.2 PROJECT DESCRIPTION

The FTDR unit, as an expansion of an existing reactor in Sasolburg, is used to convert hydrogen and carbon monoxide rich synthesis gas (syngas) to products consisting of wax, hydrocarbon condensate, gas and reaction water containing oxygenated hydrocarbons. The FTDR is utilised for research purposes. The FTDR was not in active operation during the audit period and is in the process of being shut down, which started in January 2024. This reaction is highly exothermic and is performed in a slurry bed reactor over a cobalt catalyst. The main purposes of the FTDR were the following:

- Determine the effect of pressure.
- Determine the maximum catalyst concentration that can be used.
- Demonstrate the new heat removal concept.
- Demonstrate the feasibility of the staged reactor concepts.

- Test tandem reactor concepts.
- Test the staged introduction of feed and/or recycle gas,
- Confirm the gas hold up correlation.
- Demonstrate the maximum superficial gas velocity that can be utilised or at least verify superficial gas velocities.

### 1.3 PROJECT TEAM

WSP auditors, Matilda Mbazo and Yvette Mmanasoe, completed a site inspection of the FDTR Unit Project against the EA conditions (reference: E/03/19) at the Sasol One Facility on **15 July 2024**

Quality assurance is a critically important part of WSP's consulting services which aim to ensure both delivery of high-quality work and provide legal and commercial protection to the company. Quality assurance of this audit report was undertaken by Anri Scheepers.

The project team is summarised in **Table 1-1** and Curricula Vitae are included as **Appendix A**.

**Table 1-1 - Details of the Audit Team**

Audit Team	Role	Experience
Anri Scheepers	Review	BA (Hons) Geography
		15 Years' Experience
		Anri graduated from the University of Johannesburg with a BA honours in Geography in 2007 and has 15 years' work experience. Anri is qualified as a Lead Auditor and has undertaken legal compliance auditing, including environmental authorisations, waste management licences, water use licences and EMPs. In addition, she has undertaken general site assessments to determine compliance against local, provincial, and national environmental legislation
Matilda Mbazo	Auditor	BSc (Hons) Geography
		2 years' Experience
		Matilda graduated from the University of Wits with a BSc honours in Geography in 2023 and is currently completing her master's in environmental science. She has 1 year experience in environmental management and currently provides technical and strategic input on a diverse range project in environmental management and environmental compliance audits.
Yvette Mmanasoe	Auditor	BSc Environmental Geography
		8 years' Experience
		Yvette has experience in environmental audits in different mining companies, compilation of ESIA's, application EAs, water use licenses, Section 24 G, Mining Rights and Prospecting Rights.

## 2 AUDIT SCOPE

WSP was appointed by Sasol to conduct the environmental compliance audit for the FTDR unit at the Sasol One site, Sasolburg. This report provides an overview of the level of compliance with the conditions contained in the EA, EA amendment and EMPr, as indicated in **Section 1.1**.

The objective of the audit was to:

- Assess the level of compliance with the commitments of the EA and changes in the EA amendment for the FDTR Unit.
- Assess the level of compliance with the commitments of the EMPr that was submitted as part of the Scoping Report for the application for environmental authorisation, as agreed and approved by DESTEA;
- Assess the extent to which the avoidance, management and mitigation measures provided for in the EMPr for the operation of the FTDR unit was implemented.
- Identify and assess any new impacts and risks that result from undertaking the activity.
- Critically evaluate the effectiveness of the EA;
- Identify shortcomings in the EA and EMPr; and
- Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EA and EMPr conditions.

The EIA Regulations are considered applicable to the FTDR unit operations. Regulation 34, of the EIA Regulations, provides for the auditing of an environmental authorisation, EMPr and closure plan. Furthermore, **Appendix 7** of Government Notice Regulation (GNR) 982 outlines the required audit report content. The 2014 Regulations, as amended, refer to a minimum audit frequency of five years. This audit is designed to meet the requirements of Regulation 34 of the EIA Regulations, 2014. **Table 2-1** indicates where the requirements of Section 34 and **Appendix 7** are met within this audit report.

**Table 2-1 - Regulation 34 and Appendix 7 of the EIA Regulations (2014)**

Sub-Section	Requirement	Report Section Reference
34 (2)a	The environmental audit report must be prepared by an independent person with the relevant environmental auditing expertise.	<b>Sub-section 1.2</b> and CV's provided in <b>Appendix A</b>
34(2)b	The environmental audit report must provide verifiable findings, in a structured and systematic manner, on:  (i) the level of performance against and compliance of an organisation or project with the provisions of the requisite environmental authorisation or EMPr and, where applicable, the closure plan; and  (ii) the ability of the measures contained in the EMPr, and where applicable the closure plan, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity;	Audit checklist tables provided in <b>Section 4</b>
3(a)	The environmental audit report must determine  (a) the ability of the EMPr, and where applicable the closure plan, to	<b>Section 4</b>

Sub-Section	Requirement	Report Section Reference
	sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis and to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and	
3(b)	The environmental audit report must determine the level of compliance with the provisions of environmental authorisation, EMPr and where applicable, the closure plan.	<b>Section 4</b>
4(a)	Where the findings of the environmental audit report indicate: (a) insufficient mitigation of environmental impacts associated with the undertaking of the activity (b) insufficient levels of compliance with the environmental authorisation or EMPr the holder must, when submitting the environmental audit report to the competent authority submit recommendations to amend the EMPr or closure plan in order to rectify the shortcomings identified in the environmental audit report	<b>Section 4</b>
a	Details of- (i) the independent person who prepared the environmental audit report; and (ii) the expertise of independent person that compiled the environmental audit report.	<b>Sub-section 1.2</b> CVs provided in <b>Appendix A</b>
b	A declaration that the independent auditor is independent in a form as may be specified by the competent authority.	<b>Sub-section 9</b>
c	An indication of the scope of, and the purpose for which, the environmental audit report was prepared.	<b>Sub-section 1.1 and Section 2</b>
d	A description of the methodology adopted in preparing the environmental audit report.	<b>Section 3</b>
e	An indication of the ability of the EMPr, and where applicable, the closure plan to- (i) sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on-going basis; (ii) sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and (iii) ensure compliance with the provisions of environmental authorisation, EMPr, and where applicable, the closure plan.	<b>Section 4</b>
f	A description of any assumptions made, and any uncertainties or gaps in knowledge.	<b>Sub-sections 0 and 2.2</b>
g	A description of any consultation process that was undertaken during the course of carrying out the environmental audit report.	<b>Sub-section 3.2</b>
j	A summary and copies of any comments that were received during any consultation process.	Not Applicable

Sub-Section	Requirement	Report Section Reference
k	Any other information requested by the competent authority.	None requested

## 2.1 DISCLAIMER

This Report has been prepared by WSP on behalf and at the request of Sasol in terms of Regulation 34 of the EIA Regulations.

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.

This report must not be altered or added to without the prior written consent of the author. This also refers to electronic copies of this report which are supplied for the purposes of inclusion as part of other reports. Similarly, any recommendations, statements or conclusions drawn from or based on this report must make reference to this report. If this report is used as part of a main report, the report in its entirety must be included as an appendix or separate section to the main report.

## 2.2 ASSUMPTIONS AND LIMITATIONS

WSP noted the following assumptions and limitations during the audit:

- The information provided by Sasol is up to date and accurately represents the Sasol Sasolburg operations.
- WSP viewed as much of the operational area as possible given the timeframe and access limitations.
- Findings made within the previous audit reports are correct; and
- Site photographs are not provided in the audit report due to the onsite Sasol Sasolburg policy that disallows any photographs being taken on site. Where conditions were deemed compliant, and

the evidence provided was onsite observation and verbal confirmation to support the findings.; this was observed by the Auditors.

This report has been prepared by WSP at the request of Sasol and the Terms of Reference as detailed in **Section 1.1**.

### 3 AUDIT METHODOLOGY

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The International Organisation of Standardisation (ISO) 14010, ISO 14011 and ISO 14012 guideline documents were utilised as a template during the compliance audit process. This methodology ensures that the compliance audit was conducted in a systematic and independent manner that was documented and objectively evaluated to determine compliance to the EA commitments.

The audit process comprised the following:

- Confirmation of the audit checklist.
- Site inspection (**15 July 2024**).
- Review of documentation relevant to the commitments of the EA and EMPr (e.g. records, permits, certificates, maintenance logs, monitoring results, previous audit reports, specialist reports (where available and applicable), etc.); and
- Compilation of an audit report.

#### 3.1 AUDIT CHECKLIST

WSP compiled a checklist of the EA and EMPr commitments, which was used as an auditing compliance tool. Refer to **Table 4.1** and **Table 4.2** for the audit checklist.

#### 3.2 SITE INSPECTION AND INTERVIEWS

An onsite inspection was conducted on **15 July 2024** during which findings and observations were recorded and are summarised in **Section 4**. Key personnel interviewed during the audit included:

- Suyen Van Zyl – SHE Specialist
- Elma Du Plessis - Senior Technologist
- Conre Langeveldt - Area Manager
- Hannes Wilken - Process Technologist
- Antoinnette Erasmus – SHE Officer



### 3.3 INFORMATION CONSIDERED

Information related to the following categorises was reviewed, where required, and used to evaluate compliance:

- A spreadsheet containing monitoring values of the flare recorded daily from January to December 2023;
- Acknowledgement Letter from DESTEA dated 01 February 2021;
- Annual Emission Report (FDDM-MET-2013-18-R1) dated 29 August 2022;
- Annual Emission Report: AEL No: FDDM-MET-2013-18-R1, dated 29 August 2022;
- EA training dated 24 April 2024;
- Environmental Impact Assessment (Scoping report) dated 19 March 2004;
- External Audit of EA/RoD/EMP/EMPr ref: CEM 2018/141, Draft Report July 2019;
- Flare emissions monitoring values Spreadsheet (January - December 2024);
- Induction Materials;
- Interwaste Waste Treatment Facility Waste licence (licence No: GPF- 00-010);
- Notification of Change of Contact Details of the Business Representative (Ref: SO-env-1285) dated 08 July 2024;
- Online Training Matrix;
- Sasol South Africa Ltd in Sasolburg, External Audits of EAs/RODs/EMPrs: Construction of new Fischer-Tröpsch Demonstration Reactor (FTDR) [E/03/19] 30 July 2019 by Centre of Environmental Management;
- Toolbox Talk: Construction FTDR dated 13 April 2024; and
- Interwaste Waste manifests.

### 3.4 ASSESSMENT EVALUATION METHODOLOGY

The consolidated report contains all commitments, which were formulated as part of the original and amended EA and EMPr. Each commitment contained in the audit checklist was assessed by reviewing site documentation, interviewing employees, and undertaking a site inspection. The implementation of the mitigation measures in the EMPr was assessed and the level of compliance rated (compliance categories contained in **Table 3-1**). The compliance of the operations listed in **Section 4** was assessed.

**Table 3-1 Levels of Compliance**

Compliance Level	Definition
<b>Compliant (C)</b>	<p>When an activity or commitment has been implemented, completed, is on-schedule or is maintained on an ongoing basis.</p> <p>Condition/mitigation measure/commitment has been achieved with evidence provided in the form of a document or site verification.</p>
<b>Non-compliant (NC)</b>	<p>When an activity or commitment has not been complied with in its entirety/certain aspects thereof have not been addressed.</p> <p>When a commitment has not been undertaken, not been completed according to plan, or where any unlawful actions have been identified. Non-compliant conditions are given target completion dates as follows:</p> <p>— Short term: 0 – 6 months.</p>

Compliance Level	Definition
	<ul style="list-style-type: none"> <li>— Medium term: 6 – 12 months.</li> <li>— Long term: 12 - 18 months</li> </ul>
Not applicable (N/A)	<p>The condition, commitment and/or mitigation measure is not applicable or is to be revised in accordance with current practice.</p> <p>A “Not Applicable” finding is also noted in event where such condition, commitment and/or mitigation measure is not yet relevant but is still relevant for future activities.</p>

## 4 AUDIT FINDINGS

### 4.1 ENVIRONMENTAL AUTHORISATION

**Table 4-1** below provides the level of compliance with the conditions within the EA and associated amendments.

**Table 4-1 - Environmental Authorisation (reference: E/03/19 dated 04 June 2004) and Amendment (reference: E/03/19 dated 21 September 2017) , Amended (reference: E/03/19 dated 21 July 2022), Audit Findings**

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
<b>Special Conditions</b>				
1.	This authorization has been granted solely for undertaking the specified activity referred to above.	C	<p>The auditor was informed that the FTDR activity, as per the description in the EA and the two amendments has not changed. The Scoping report was provided as evidence that further explains the description of the activity.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>Visual Site Observation</li> <li>Environmental Impact Assessment (Scoping report), dated 19 March 2004</li> </ul>	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
2.	All waste produced must be disposed of at a landfill licensed in terms of section 20 of the Environmental Conservation Act, 1989 (Act 73 of 1989)	C	<p>The waste generated as a result of the process consists of filter leaf cake and wax waste. This waste is managed by Interwaste, a contracted waste removal company, which ensures its disposal at a licensed waste disposal facility. During the site audit, the FTDR unit was mothballed, resulting in no additional waste being produced beyond small amounts of general waste.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Interwaste Waste Treatment Facility Waste licence (licence No: GPF- 00-010)</li> <li>Waste manifests</li> <li>Visual Site Observation</li> </ul>	None
3. a)	<p><b>Air quality</b></p> <p>The Sasol One site plant facility has an existing flare for the release of emissions and the vent gas from the proposed development will be routed to the existing flare.</p> <p>Approximately 1300 tpa of vent gas is expected and this is insignificant compared to the existing production facilities, therefore, there will be no significant effect on air quality as a result of the proposed project.</p>	C	<p>The auditor was informed that the FTDR unit was operated in compliance with its Atmospheric Emission License (AEL) (FDDM-MET-2013-18-R1). Emissions and vent gases from the FTDR unit were directed to the existing flare. A spreadsheet detailing daily monitoring values of the flare from January to December 2023 indicates an average emission of 760 kg per day.</p> <p>According to the annual report, the units function as pilot plants and operate intermittently. The flare has also been in operation on an occasional basis, and no complaints regarding the flare were received during the reporting period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Flare emissions monitoring values Spreadsheet (January - December 2024)</li> <li>AEL (FDDM-MET-2013-18-R1)</li> <li>Annual Emission Report (FDDM-MET-2013-18-R1) dated</li> </ul>	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			29 August 2022	
b)	<b>Surface and groundwater</b> The whole area where the proposed development will occur will be paved and bunded to prevent any seepage into groundwater. <ul style="list-style-type: none"> <li>Surface water from the proposed site will be directed to the existing storm water sewers at Sasol One site.</li> <li>In case acid treatment (pickling) is required for some equipment prior to commissioning, it will be done by an experienced contractor who will be responsible for the collection and disposal of spent chemicals.</li> </ul>	C	The FTDR unit is situated on a concrete pavement within a bunded area designed to contain 110% of the volume of the largest container stored on-site, effectively preventing any potential seepage into the groundwater. All surface water from the Sasol One site is directed to Bioworks for treatment and reuse.  During the site audit, the FTDR unit was observed to be mothballed. The auditor was informed that the start-up process had not yet commenced.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> </ul>	None
c)	<b>Land and soil</b> The proposed development will take place on Sasol One site that is an existing industrial area and this area is paved and bunded to prevent contamination of the soil.	C	The auditor observed that the FTDR unit is located in an existing industrial area, situated on a concrete pavement within a bunded area designed to contain 110% of the volume of the largest container stored on-site, effectively preventing any potential seepage into the groundwater.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Visual Site Observation</li> </ul>	None
c)	Excess soil that is not used for backfilling will be disposed of at a registered site.	N/A	The project is currently in operational phase. The condition is considered not applicable.	None
d)	<b>Fauna and Flora</b> The proposed project will be within an existing industrial	C	The Sasol One site is operating in an existing industrial area, therefore there is no expected impact on flora and fauna.	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	area, therefore no impact on flora and fauna is expected.		<i>Evidence:</i> <ul style="list-style-type: none"> <li>Visual Site Observation</li> </ul>	
e)	<b>Visual impact</b> The proposed development will occur in an already established industrial area and as a result no negative visual impact is expected.	C	The auditor observed that the FTDR plant is operating at an established industrial area within Sasol One site; therefore there is no expected negative visual impact.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Visual Site Observation</li> </ul>	None
f)	<b>Noise</b> Construction will be within an existing industrial area and noise will be limited to the construction, site.	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
g)	<b>Liquid effluent</b> The liquid by-products will be routed to the relevant areas on the Sasol One site for incorporation into the existing production system.	C	During operation, the product condensate was directed to Section 2000 to be integrated with the current production facility system. The process is used to generate by-products, including reaction water and steam, which is transported to designated areas at the Sasol One site for integration into the existing production systems.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>Environmental Impact Assessment (Scoping report) dated 19 March 2004</li> </ul>	None
h)	<b>Solid effluent</b> All packaging material, domestic and other non-hazardous waste will be disposed at a registered landfill	C	The waste generated as a result of the process consisted of filter leaf cake and wax waste. This waste was managed by Interwaste, a contracted waste removal company, which	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	<p>site.</p> <p>A filter cake produced as by-product will be disposed of via a suitable waste removable company. The wax product will be routed to section 200 (Natref) for incorporation into the wax production facility. In an event of off-spec product the wax will be routed to Natref to be used in their cracking process. If unsuitable it will be removed by a suitable waste removable.</p>		<p>ensures its disposal at a licensed waste disposal facility. During the site audit, the FTDR unit was mothballed, resulting in no additional waste being produced beyond small volumes of general waste.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Interwaste Waste Treatment Facility Waste licence (licence No: GPF- 00-010)</li> <li>Waste manifests</li> <li>Visual Site Observation</li> </ul>	
j)	<p><b>Socio-economic</b></p> <p>During the construction phase additional labourers will be employed and local on-site contractors will be used.</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
4	The developer must implement an Environmental Management System (EMS) for the ongoing operation of the project. The EMS must Incorporate the conditions of approval given in this record of decision as appropriate to the operation phase of the project.	C	<p>The SAPEC system, which serves as an Environmental Management System (EMS), has been implemented to oversee the FTDR's adherence to the conditions set forth in the EA. The EA holder is responsible for assessing compliance with these conditions.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Visual Site Observation</li> </ul>	None
5	The developer must compile and submit an acceptable Environmental Management Plan (EMP) for construction and operational phases of the project and also an EMP for the decommissioning phase to the Department of Tourism, Environmental and Economic Affairs before construction starts.	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
6	<p>The applicant must appoint a suitably experienced Environmental Control Officer to undertake the mitigation and rehabilitation measures and recommendations referred to above and to ensure compliance with the provisions of the construction phase EMP.</p> <p>The developer/owner must implement and ensure compliance with the operational and decommissioning phases EMPs.</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
7.	<p>The applicant must submit an Environmental Audit report to the department for approval after construction is complete and after the site has been rehabilitated. This department may require remedial action should the rehabilitation be shown to be inadequate. Should this not be forthcoming after reasonable notice, the department may have such an audit undertaken at the expense of the applicant and may authorize any person to take such measures necessary for this purpose</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
6.	<p>The applicant must appoint a suitably experienced Environmental Control Officer to undertake the mitigation and rehabilitation measures and recommendations referred to above and to ensure compliance with the provisions of the construction phase EMP. The developer/owner must implement and ensure compliance with the operational and decommissioning phases EMPs.</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
7.	<p>The applicant must advertise this Record of Decision to notify interested and affected parties of this authorisation and their right to appeal against the Record of Decision,</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None





Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	within 30 days from the approval date of the ROD.			
<b>Standard Conditions</b>				
1.	The authorization is granted in terms of section 22 of the Environment Conservation Act, 1989 (Act 73 of 1989) and does not exempt the holder thereof from compliance with any other relevant legislation.	N/A	Noted. This current audit scope did not cover a legal review of compliance of the FTDR and the Sasol One Operations with all statutory requirements and whether they were in possession and compliance of all the necessary permits, authorisations or any other official documents.	None
2.	The authorized activity, including site preparation, may not commence before the statutory 30 days appeal period expires	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
3.	One week's notice, in writing, must be given to the Department of Tourism, Environmental and Economic Affairs before commencement of the construction activities. Such notice shall make clear reference to the site location details and reference number given above.	N/A	The FTDR unit is currently in operational phase. The condition is considered not applicable.	None
4.	The Department of Tourism, Environmental and Economic Affairs must be notified, within 30 days thereof, of any change of ownership and /or project developer. Conditions imposed in this record of decision must be made known to the new owner and/or developer and are binding to the new owner and/or developer.	N/A	Noted. The auditor was informed that there was not any change of ownership and/or project developer.	None.
5.	The applicant must, within five calendar days of receipt of this record of decision:  Inform all interested and affected parties registered	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	<p>during the scoping process, of the outcome of this application and, if requested, provide copies of this record of decision, including all the conditions attached thereto;</p> <ul style="list-style-type: none"> <li>Include in such information the explicit provisions of Regulations 11 of the Environmental Impact Assessment regulations, (Government Notices No. R 1182 and 1183 of 5 September 1997) which reads as follows:</li> </ul> <p>(a) An appeal to the minister or provincial authority under section 35(3) of the Act must be done in writing within 30 days from the date on which the record of decision was issued to the applicant in terms of regulation 10(1);</p> <p>(b) An appeal must set out all the facts as well as the grounds of appeal and must be accompanied by all relevant documents or copies of them, which are certified as true by a commissioner of oaths.</p> <p>Include the date on which the record of decision was issued to the applicant in terms of regulation 10(1) and the date by which appeals must reach the MEC.</p>			
6.	<p>The conditions of the authorization should be brought to the attention of all persons (employees) associated with the undertaking of this activity and the applicant shall take such measures necessary to bind such persons to these conditions.</p>	C	<p>Sasol, as the holder of the authorisation, acknowledges responsibility for ensuring compliance with the EA and provides environmental management awareness training to staff, service providers, contractors and visitors to ensure that everyone employed or acting on their behalf is aware that they need to comply with the EA and the EMPr conditions. Induction training is provided to all staff, service provides, contractors and visitors.</p> <p><i>Evidence:</i></p>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<ul style="list-style-type: none"> <li>Verbal Confirmation</li> <li>Induction Materials</li> <li>Online Training Matrix</li> <li>EA training dated 24/04/2024</li> <li>Toolbox Talk: Construction FTDR dated 13/04/2024</li> </ul>	
7.	The owner and/or developer must notify the Department of Tourism, Environmental and Economic Affairs, in writing, within 24 hours thereof if any condition of this authorization is not adhered to.	C	<p>Sasol conducts internal and external performance audits in accordance with the requirements with Regulation 34 of the EIA Regulations during the operation phase of the FTDR unit. The audit report was submitted to the Department.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> <li>Sasol South Africa Ltd in Sasolburg, External Audits of EAs/RODs/EMPrs: Construction of new Fischer-Tröpsch Demonstration Reactor (FTDR) [E/03/19] 30 July 2019 by Centre of Environmental Management.</li> <li>Acknowledgement Letter from DESTEA dated 01 February 2021</li> </ul>	None
8.	Records relating to the compliance/non-compliance with the conditions of the authorization must be kept in good order. Such records must be made available to the Department of Tourism, Environmental and Economic Affairs within seven days of receipt of a written request by the relevant authority for such records.	C	<p>Records of compliance/non-compliance with conditions of this authorisation are kept in good condition and were readily available. Therefore, the reports should be readily available should the Department require them. No request was made by the Department during the audit period for records or documents.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Visual Site Observation</li> <li>Sasol South Africa Ltd in Sasolburg, External Audits of EAs/RODs/EMPrs: Construction of new Fischer-Tröpsch Demonstration Reactor (FTDR) [E/03/19] 30 July 2019 by Centre of Environmental Management.</li> </ul>	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
9.	If any condition imposed in terms of this authorization is not complied with, the authorization may be withdrawn after 30 days written notice to the applicant in terms of section 22(4) of the Environment Conservation Act, 1989 (Act 73 of 1989). Failure to comply with any of these conditions shall also be regarded as an offence and may be dealt with in terms of section 29, 30, and 31 of the Environment Conservation Act, 1989 (Act 73 of 1989) as well as any other appropriate legal mechanisms':	N/A	This condition is noted by the holder of the authorisation.	None
10.	The applicant shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.	N/A	This condition is noted by the holder of the authorisation.	None
11.	The Department of Tourism, Environmental and Economic Affairs must be notified of any change of address of the owner and/or developer.	C	<p>The auditor noted, based on the site-wide notification to the Department dated 08 July 2024, that the responsible person and the contact details was changed from Mr. Rightwell Laxa, to the following:</p> <p>Ntokozo Gcabashe ntokozo.gcabashe@sasol.com 016 960 2007</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Notification of Change of Contact Details of the Business Representative (Ref: SO-env-1285) dated 08 July 2024</li> </ul>	None
12	All outdoor advertising associated with this activity, whether on or off the property concerned shall comply with the South African Manual for Outdoor Advertising Control (SAMOAC) available from: The Director:	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	Environmental Impact Management Department of Environmental Affairs and Tourism Private Bag x 447 I PRETORIA 0001.			
<b>Key Factors for The Decision</b>				
1	No historical and/or archaeological sites were found on or near the site because the site is found within an industrial area.	N/A	No historical, archaeological features or cultural sites noted onsite.  <i>Evidence:</i> ■ Visual Site Observation	None
2.	No plants and animals were found on or near the site, as the proposed site situated in an already developed industrial area.	N/A	The FDTR unit has a concrete paved environment within the Sasol One site, and no plants or animals were identified.  <i>Evidence:</i> ■ Visual Site Observation	None
3	There is an existing power supply on site.	N/A	The Auditor observed existing power supply within the whole of Sasol One site.  <i>Evidence:</i> ■ Visual Site Observation	None
4.	There is an existing road to the site.	N/A	There is an existing tared road to access the site and within the site.  <i>Evidence:</i> ■ Visual Site observation	None

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
5.	The public participation process followed is to the satisfaction of the Department of Tourism Environment and Economic Affairs and no objections were received.	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None
6.	The existing reactor cannot be used because it is not suitable for testing of new concepts due to limitations of the existing equipment.	N/A	This condition is noted by the holder of the authorisation.	None
7.	The new reactor will not run permanently as it is envisaged to test runs varying in duration from a few days to a few weeks.	N/A	This condition is noted by the holder of the authorisation.	None
8.	All products and by-products will be routed to the relevant sections on the plant for incorporation into the existing production facilities.	N/A	This condition is noted by the holder of the authorisation.	None
9.	Existing storm water sewers will be used in the area and only tie-ins to the existing utility will be necessary.	N/A	This condition is noted by the holder of the authorisation.	None.
<b>Duration and Date of Expiry</b>				
	This authorization shall lapse if the activity does not commence within two years of the date of issue of this authorization.;	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	None.
<b>Appeal</b>				
	In terms of section 35 of the Environment Conservation Act, 1989 (Act 73 of 1989), formal, motivated appeals can be directed within 30days of the date of the issuing of this record of decision, to:	N/A	Noted.	None



Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	The MEC Department of Tourism, Environment and Economic Affairs PO Box 264 Bloemfontein 9300 i Fax: (051)403 3728			



## 4.2 ENVIRONMENTAL MANAGEMENT PROGRAMME

**Table 4-2** below provides the compliance of Sasol with the conditions within the EMP that were included in the Scoping Report for the Fischer Tropsch Design Reactor Project at the Sasol One site in Sasolburg, dated 19 March 2004.

**Table 4-2 - Environmental Management Programme Audit Findings**

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMP Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
<b>7.2.1 Land and Soil</b>								
	The development will take place on the Sasol One site, on an industrial area.	<b>C</b>	The auditor observed that the FTDR unit is located in an existing industrial area within Sasol One site.  <i>Evidence:</i> ■ Visual Site Observation	N/A	None	N/A	N/A	N/A
	Any excavated soil will be re-used for backfilling as far as possible. Any excess soil will be disposed of at a recognised disposal site	<b>N/A</b>	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	N/A	None	N/A	N/A	N/A
<b>7.2.2 Surface and groundwater</b>								
	During commissioning the new equipment will be cleaned with	<b>N/A</b>	The FTDR unit is currently in operational phase,	N/A	None	N/A	N/A	N/A

FTDR UNIT (REF. NO: E/03/19) AMENDED ENVIRONMENTAL AUTHORISATION AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT

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Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
	water. This is done to remove dust from the equipment. This does not pose any threat to the environment, since the new equipment is not exposed to any contaminants at this stage.  Since no contamination can occur, this water will go to the existing storm water sewers.		therefore this condition is considered not applicable.					
	The whole existing area is paved and fitted with existing sewers to capture any effluent. The project will therefore have no negative effect on the surface and groundwater quality.	C	The FTDR unit is paved and fitted with existing sewers that capture and route the effluent to Bioworks for treatment. Therefore, there is little to no potential for negative impacts on the surface and groundwater quality.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Visual Site Observation</li> <li>Verbal Confirmation</li> </ul>	N/A	None	N/A	N/A	N/A
<b>7.2.3 Air quality</b>								
	The facility has an existing stack for the release of emissions. It will be able to handle the capacity increase without any modification required. An increase of	C	When operational, the existing stack releases hydrogen, carbon oxide and methane that is sent to SEI. The auditor was informed	N/A	None	N/A	N/A	N/A

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
	approximately 15-20 % in emissions is expected. This includes formic acid, alcohols, paraffins, acetic acid and traces of hydrocarbons. The level will however still be within the limits of the current air permit. There will therefore be no significant effect on the air quality as result of this project.		<p>that the FTDR unit is operated in compliance with the conditions of the Atmospheric Emission License (AEL) (FDDM-MET-2013-18-R1). Emissions and vent gases from the FTDR unit are directed to the existing flare that is monitored on a daily basis, when operational. A spreadsheet detailing daily monitoring values from the flare for January to December 2023 indicates an average emission of 760 kg per day.</p> <p>According to the annual report, the units function as pilot plants and operate intermittently. The flare has also been in operation on an occasional basis, and no complaints regarding the flare were received during the reporting period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Flare emissions monitoring values Spreadsheet (January - December 2024)</li> </ul>					

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
			<ul style="list-style-type: none"> <li>AEL (FDDM-MET-2013-18-R1)</li> <li>Annual Emission Report (FDDM-MET-2013-18-R1) dated 29 August 2022</li> </ul>					
<b>7.2.4 Effluents</b>								
<b>7.2.4.1 Liquid effluent</b>								
	The product condensate will be routed to Section 500 for integration with the existing production facility system. Reaction water and steam are by-products that will be formed in the process. These will be routed to the relevant areas on the Sasol One site for incorporation into the existing production systems.	<b>C</b>	<p>The auditor was informed that, when operational, the gas is routed to flare and the hydrocarbon condensate is routed to Section 500 for integration with the existing production facility system.</p> <p>The reaction water and steam by-products are utilised in other plants within Sasol One site.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> <li>Visual Site Observation</li> </ul>	N/A	None	N/A	N/A	N/A
<b>7.2.4.2 Solid Effluent</b>								

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
	<p>Waste generated from the construction process will be disposed of at recognised sites. All packaging material, domestic and other non-hazardous waste will be disposed of at the Metsimaholo municipal disposal site.</p> <p>A filter cake is produced as by-product. This will be disposed via Waste Tech. The wax product is routed to Section 200 for incorporation into the normal wax production facility. In the event of off-spec product it will either be sent to the power station for fuel or routed to Natref to be used in their cracking process. If unsuitable it will be removed by Waste tech.</p> <p>There will therefore be no significant impact on the environment as result of effluents.</p>	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	N/A	None	N/A	N/A	N/A
<b>7.2.5 Fauna and Flora</b>								
	There will be no significant effect on the biological environment as the proposed project is within an existing industrial site.	C	The FTDR unit has a concrete paved environment, therefore there is no expected impact on the biological	N/A	None	N/A	N/A	N/A

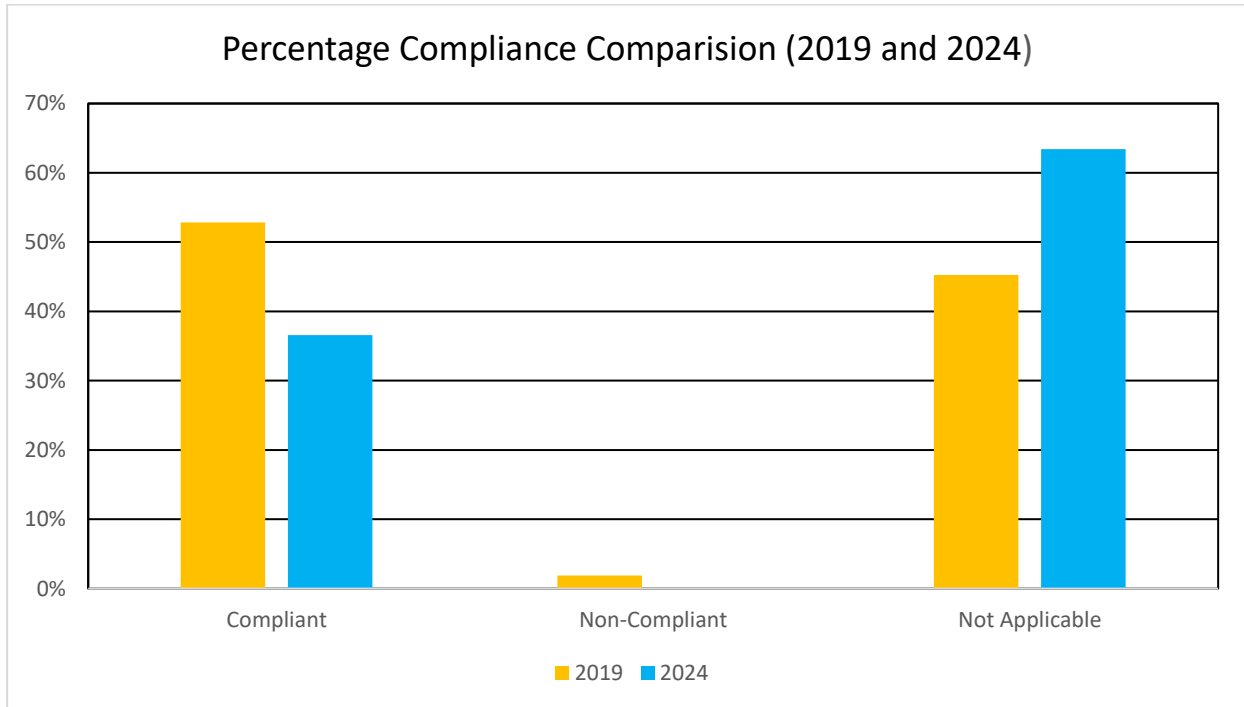
Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
			environment.  <i>Evidence:</i> ■ Visual Site Observation					
7.2.6 Visual								
	Although the structure will be quite high, the proposed plant will be situated within an established industrial area and will therefore not result in any visual impact.	C	The auditor observed that the FTDR unit is located in an established industrial area therefore there is no expected negative visual impact.  <i>Evidence:</i> ■ Visual Site Observation	N/A	None	N/A	N/A	N/A
7.2.7 Noise								
	Construction activities are usually, for certain periods, characterise with limited noise pollution. This will however be limited to the construction sites.	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	N/A	None	N/A	N/A	N/A
7.2.8 Socio-Economic								

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
	During the construction phase additional labourers will be required. Local on-site contractors will be used	N/A	The FTDR unit is currently in operational phase, therefore this condition is considered not applicable.	N/A	None	N/A	N/A	N/A
<b>7.2.9 Health, Safety and Risk Assessment</b>								
	<p>An internal SASOL's risk study, namely FMEA (Failure Mode Effect Analysis) will be conducted on the proposed project. This is a study where the whole project and all the equipment involved is reviewed in detail by the engineering design and operation team, and potential failures or departures in the normal mode of operation are assessed.</p> <p>Safety procedures are developed to cancel or ameliorate the effects of such equipment malfunctions / operator error(s). During the construction phase, strict safety rules will apply for welding / grinding. All contractors working on the site will undergo safety training as per SASOL existing procedure. Each contracting company would have a safety representative who will undertake</p>	N/A	<p>This condition is outside the audit period and therefore was not audited.</p> <p>This condition was applicable during pre-construction and construction to inform the design of the FTDR unit.</p>	N/A	None	N/A	N/A	N/A

Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
	<p>regular inspections of the workplace, to enforce the wearing of protective clothing and to ensure compliance with all relevant safety rules. All contractors and employees would furthermore be made aware of the existing emergency procedures and responsibilities where applicable.</p> <p>All workers will be trained and will undergo safety training prior to commencing work at the facility.</p>							

## 5 PROGRESS AGAINST PREVIOUS AUDIT FINDINGS

The previous EA and EMPr compliance audit report was compiled by the Northwest University CEM in 2019. A comparison in the change of compliance rating between the 2019 and 2024 audits are provided in **Figure 5-1** and **Table 5-1** below, and provides a summary of the audit findings for the previous and current audits (2019 and 2024). The 2024 Audit did not identify any non-compliances.



**Figure 5-1 – Percentage comparison of Environmental Authorisation compliance levels from 2019 to 2024**

**Table 5-1 – Progress against previous findings**

Ref	Commitment	2019 Status	2019 Finding	2024 Status	2024 Finding
<b>EA Conditions</b>					
<b>7. Standard Conditions</b>					
	The owner and/or developer must notify the Department of Tourism, Environmental and Economic Affairs, in writing, within 24 hours thereof if any condition of this authorisation is not adhered to.	NC	At the time of the audit it was found that the owner did not notify the Department of Tourism, Environmental and Economic Affairs, in writing, within 24 hours thereof about the conditions of this authorisation not adhered to. This is a non-compliance to condition 2. Standard condition 07. that requires that the owner/developer must notify	C	Sasol conducts internal and external performance audits in accordance with the requirements with Regulation 34 of the EIA Regulations during the operation phase of the FTDR unit. The audit reports were submitted to the Department.



Ref	Commitment	2019 Status	2019 Finding	2024 Status	2024 Finding
			the Department of Tourism, Environmental and Economic Affairs in writing, within 24 hours thereof if any condition of this authorisation is not adhered to.		

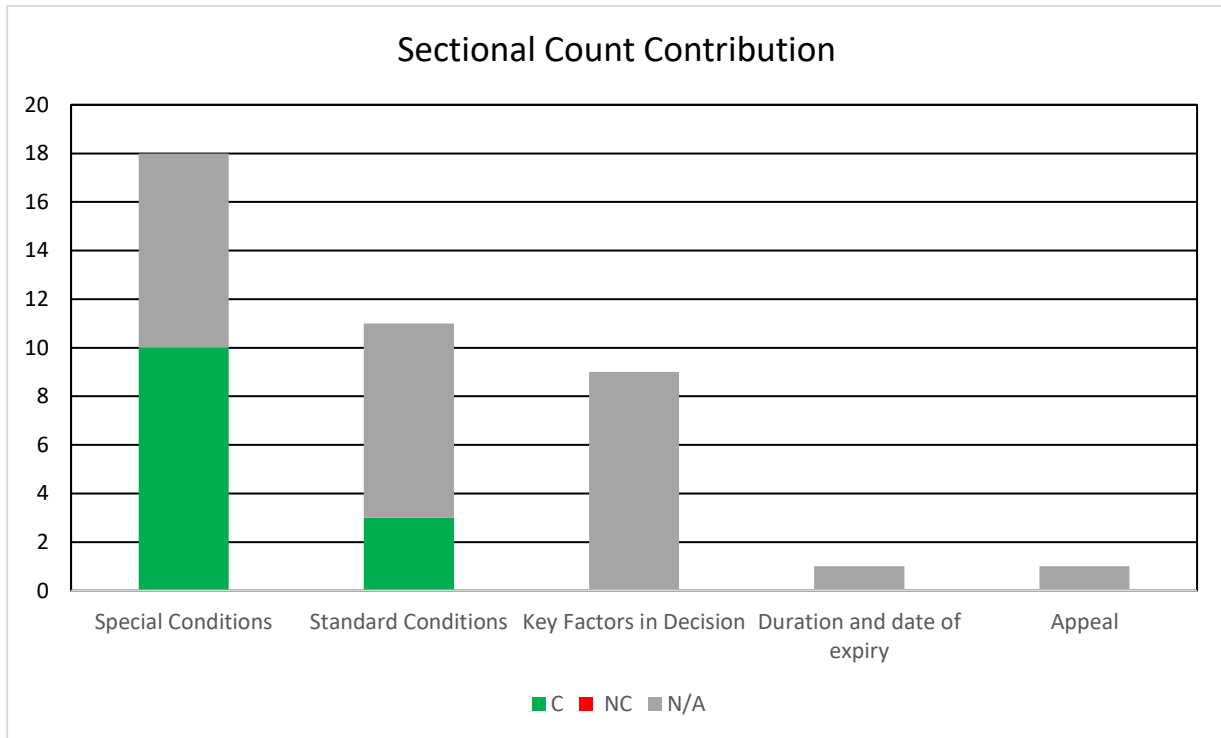
## 6 SUMMARY OF THE AUDIT FINDINGS

### 6.1 SASOL SASOLBURG FTDR EA COMPLIANCE

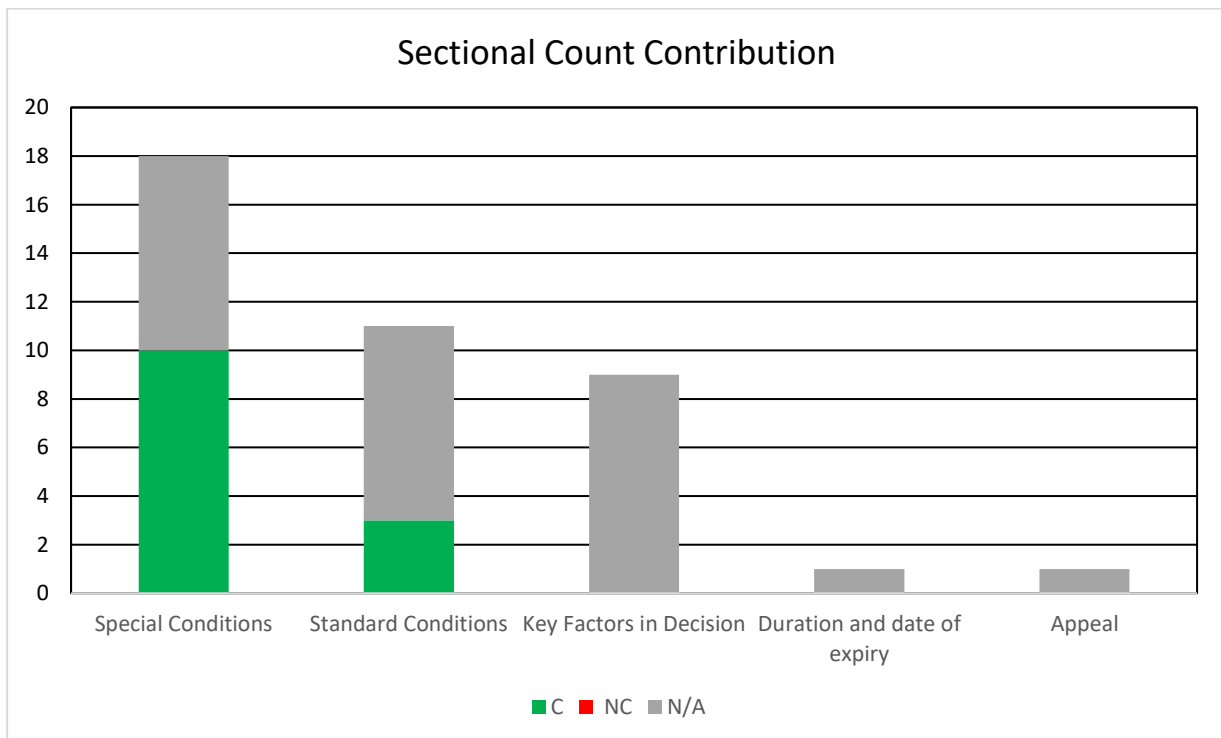
The audit findings have been summarised into the following categories: compliance, non-compliance and not applicable. The overall audit findings concerning compliance to the EA conditions are listed in **Table 6.1** below.

**Table 6-1** - Summary of EA Compliance Audit Findings

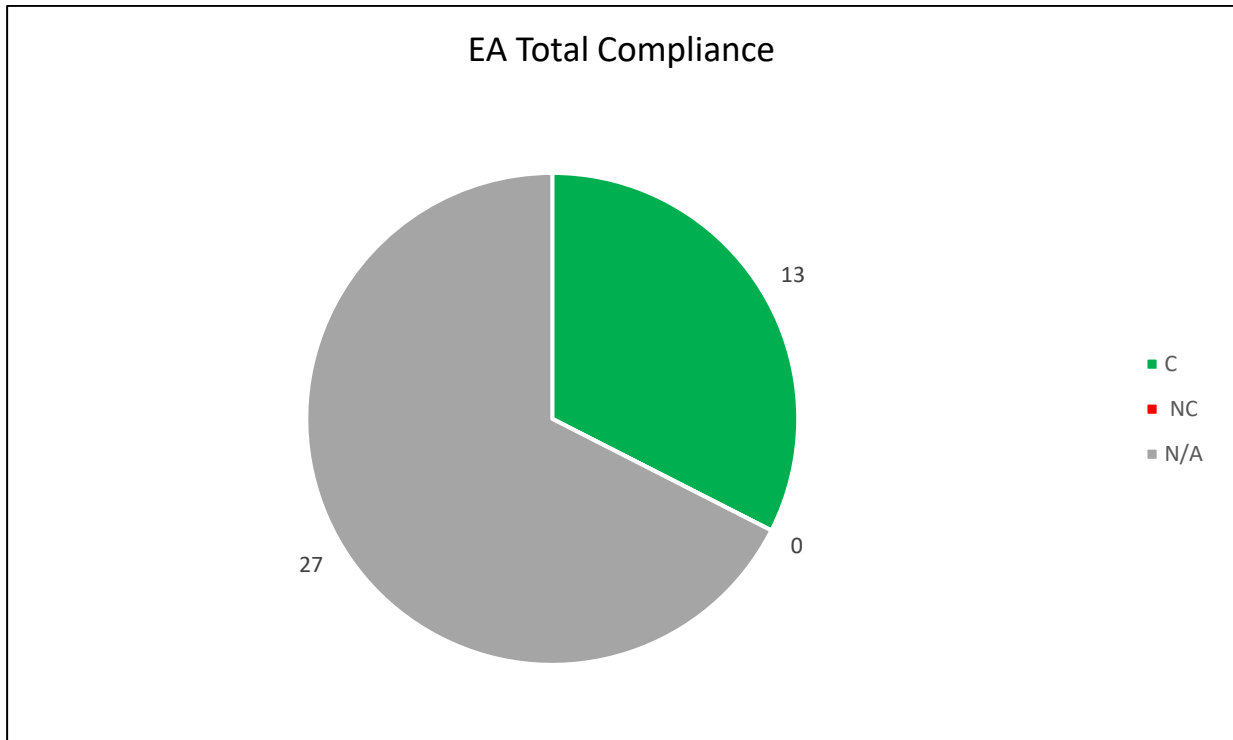
Section of the EA	No. Commitments	C	NC	N/A
Special Conditions	18	10	0	8
Standard Conditions	12	3	0	8
Key Factors in Decision	9	0	0	9
Duration and date of expiry	1	0	0	1
Appeal	1	0	0	1
Total	41	13	0	27
Total Percentage		32%	0%	66%
Percentage Compliance with Applicable Conditions	100%			



**Figure 6-1** illustrates the number/count contribution of the findings of the EA conditions per section while **Figure 6-2** presents the total proportion of compliance for the EA.

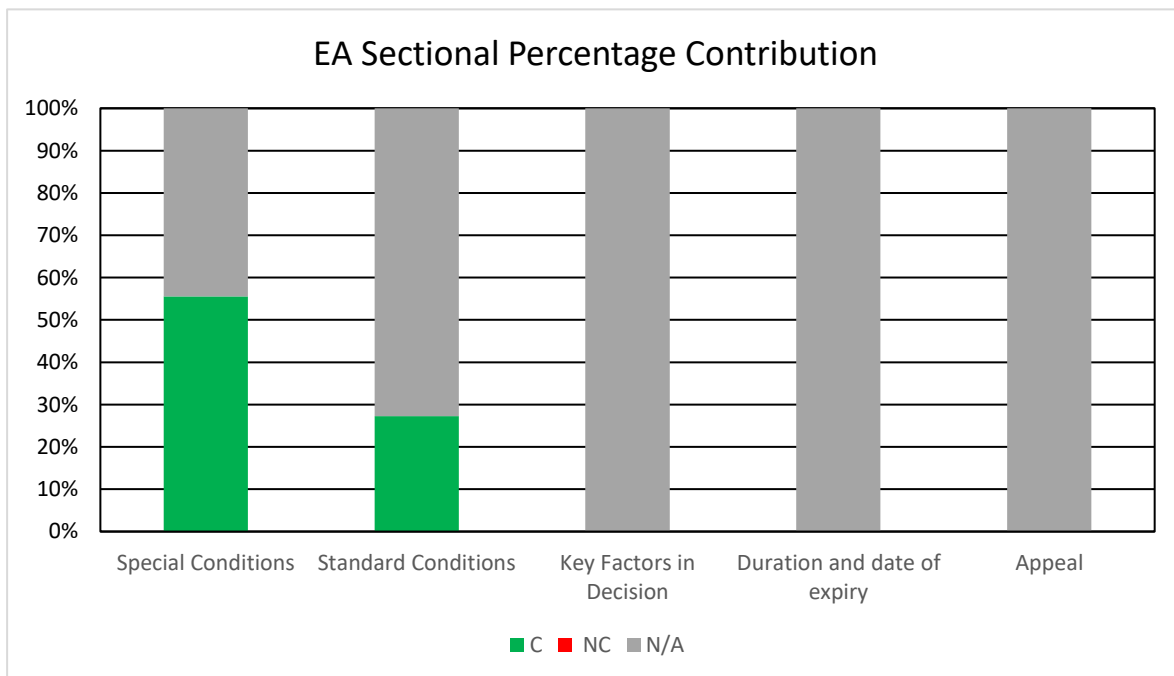


**Figure 6-1 - Number/Count contribution of findings made to the EA conditions per section**

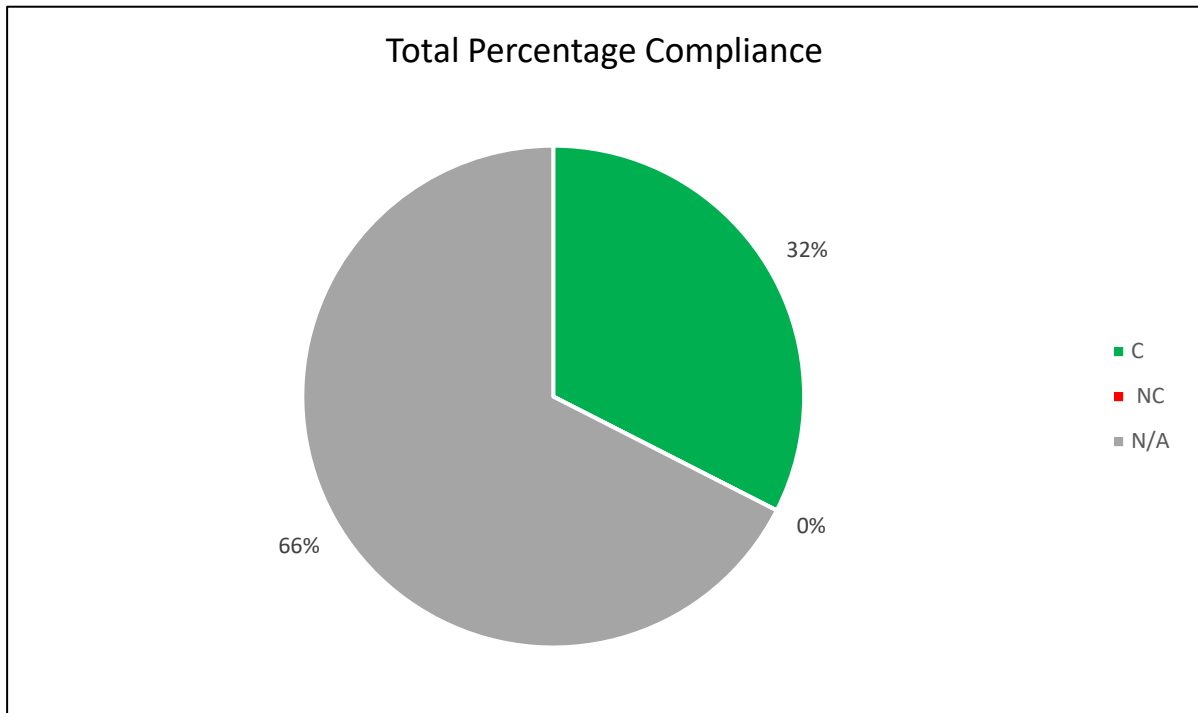


**Figure 6-2 - Overall count findings on compliance to the EA commitments**

**Figure 6-3** illustrates the percentage contribution of the findings of the EA commitments and **Figure 6-4** presents the total percentage compliance for the facility.



**Figure 6-3 - Percentage contribution of findings made to the EA Commitments per Section**



**Figure 6-4 - Total Percentage Compliance**

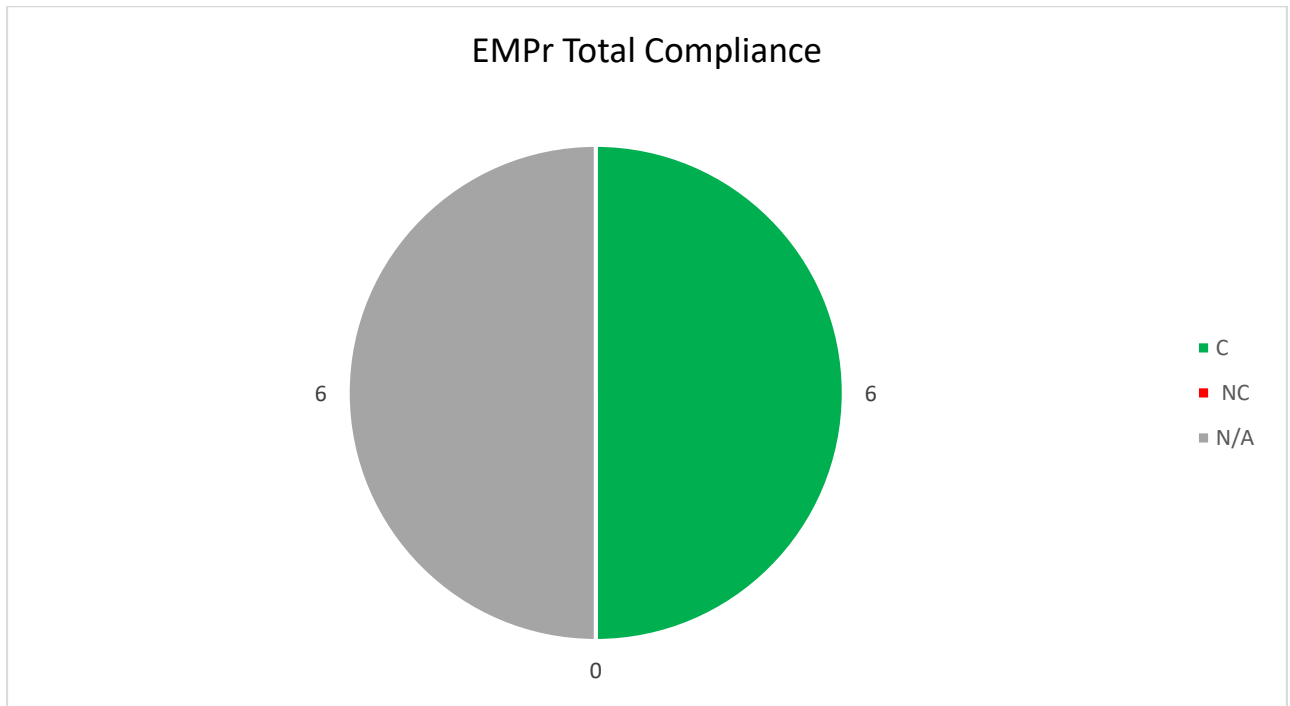
## 6.2 SASOL SASOLBURG FTDR EMPR COMPLIANCE

The audit findings have been summarised into the following categories: compliance, non-compliance and not applicable. The overall audit findings concerning compliance to the EMPr conditions are listed in **Table 6-2** below.

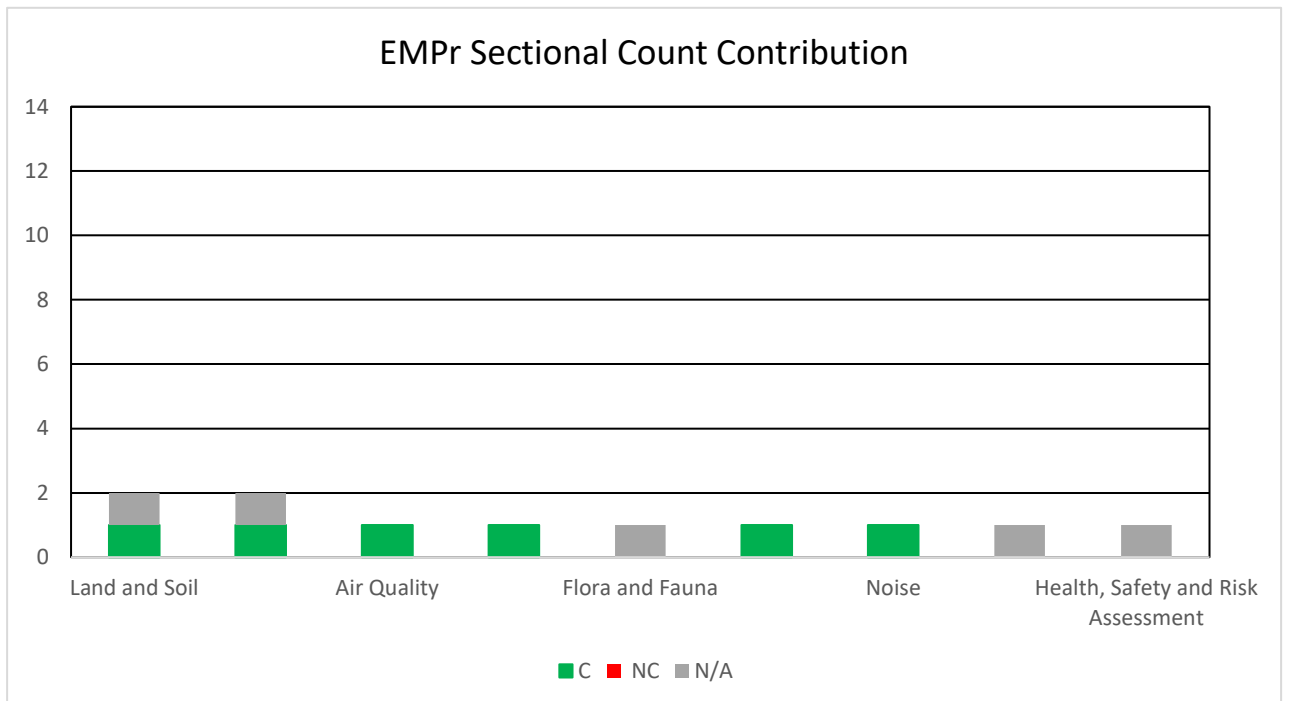
**Table 6-2 - Summary of EMPr Compliance Audit Findings**

Section of the EMPr	No. Commitments	C	NC	N/A
Land and Soil	2	1	0	1
Surface Water and Ground Water	2	1	0	1
Air Quality	1	1	0	0
Liquid Effluents	1	1	0	0
Solid Effluent	1	0	0	1
Fauna and Flora	1	1	0	0
Visual	1	1	0	0
Noise	1	0	0	1
Socio-economy	1	0	0	1
Health, Safety and Risk Assessment	1	0	0	1
Total	12	6	0	6
Total Percentage		50%	0%	50%
Percentage Compliance with Applicable Conditions	100%			

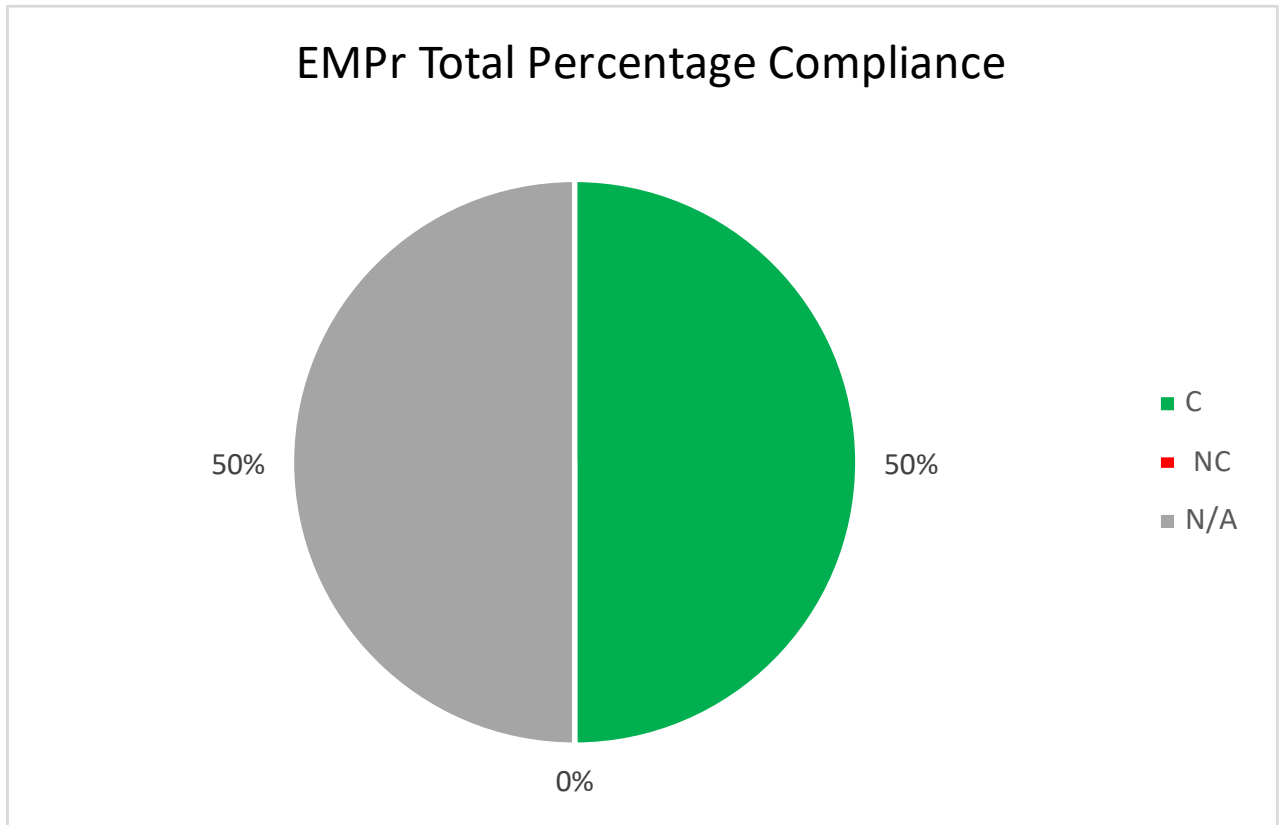
Figure 6-5 presents the total proportion of compliance for the facility and **Figure 6-6** illustrates the number/count contribution of the findings of the EMPr per section.



**Figure 6-5 - Overall count findings on compliance to the EMPr Commitments**

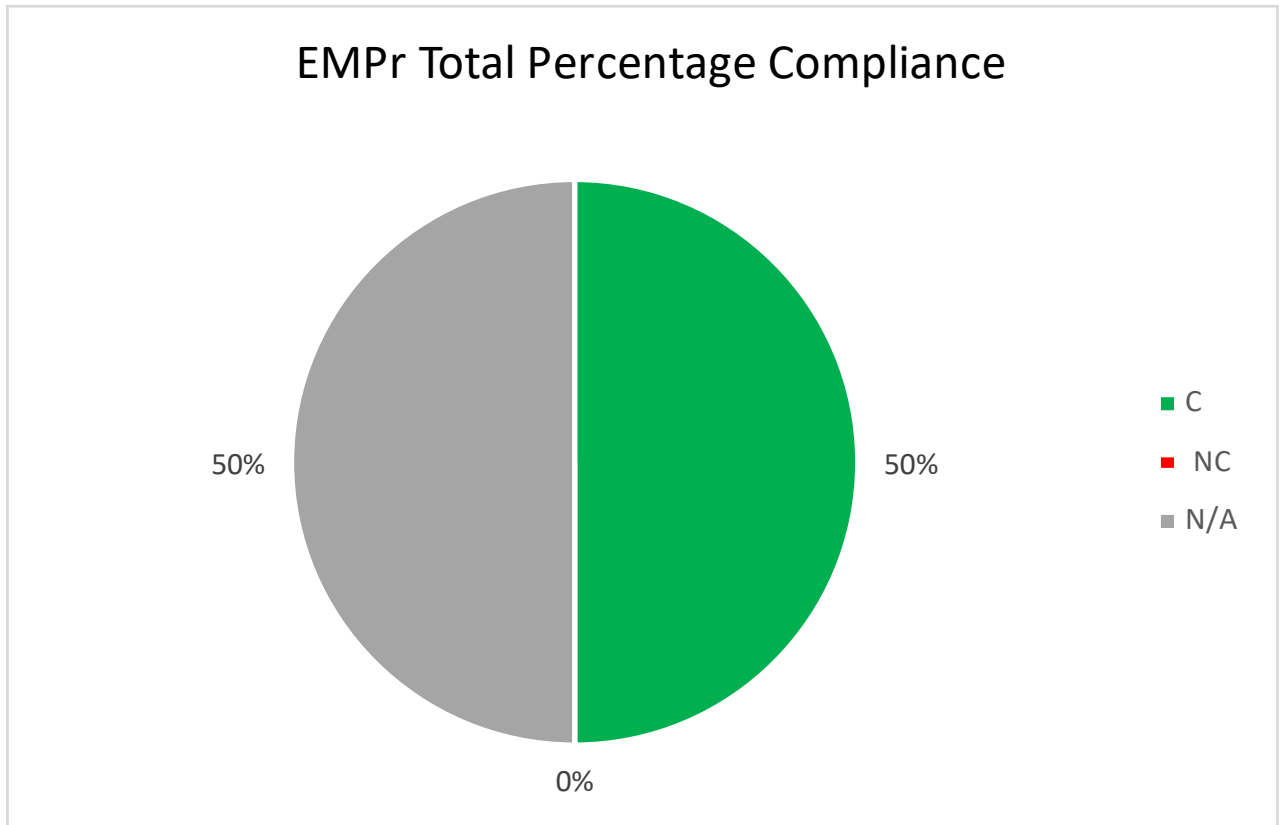


**Figure 6-6 - Number/Count contribution of findings made to the EMPr Commitments per Section**

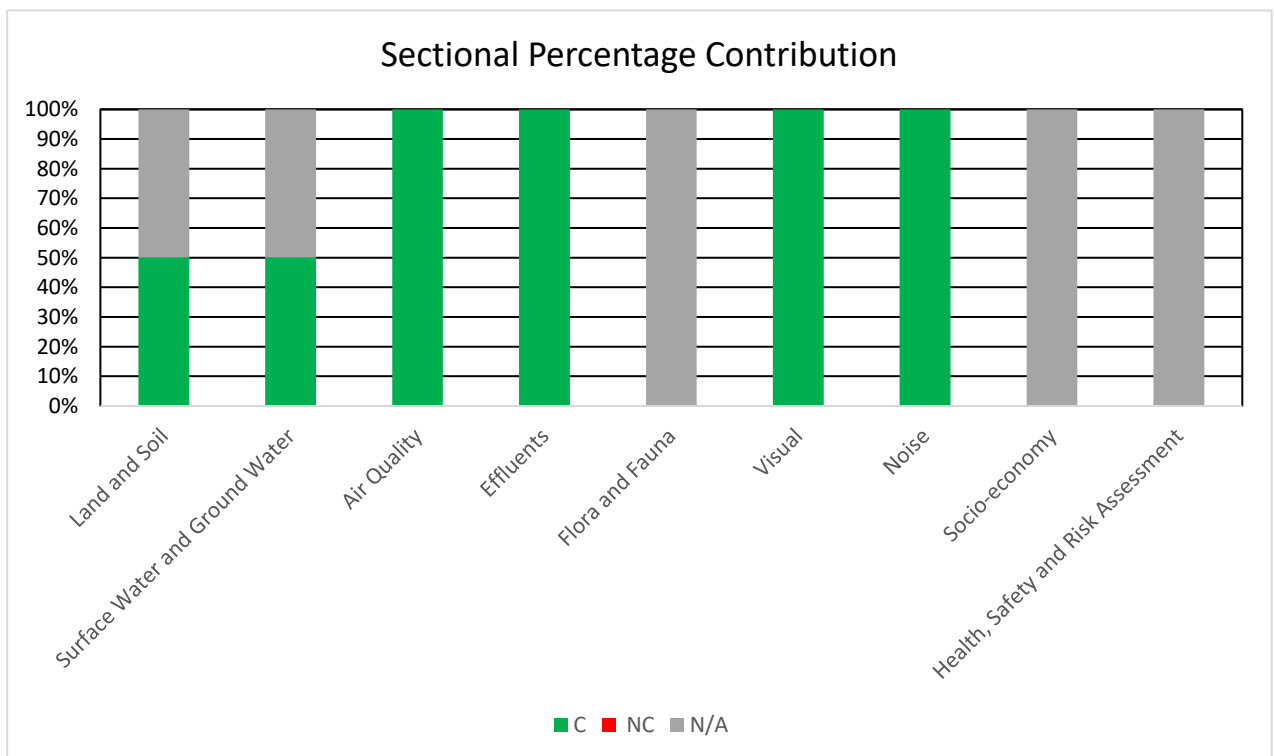


**Figure 6-7** presents the total percentage compliance for the facility and **Figure 6-8** illustrates the percentage contribution of the findings of the EMPr commitments.





**Figure 6-7 - Overall percentage findings on compliance to the EMPr Commitments**



**Figure 6-8 - Percentage contribution of findings made to the EMPr Commitments per Section**

## 7 RECOMMENDATIONS

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There were no recommendations for improvement as 100% compliance was achieved for the EA conditions and EMPr mitigations. Sasol is advised to continue to ensure compliance with the EA conditions and EMPr mitigations.

Sasol is advised to continue with the comprehensive EMS and strategy for detecting environmental risks and resolving incidents and non-compliances identified on site, and to utilize the audit report as an indicator of all areas that need attention.

## 8 EFFECTIVENESS OF THE EMPR

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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 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.

## 9 DECLARATIONS

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### INDEPENDENT AUDITOR DECLARATION

Appendix 7 of GNR 982 refers to the need for the independent auditor to declare his/her independence of the holder of the EA.

NAME OF INDEPENDENT AUDITOR: \_\_\_\_\_Matilda Mbazo\_\_\_\_\_

#### UNDERTAKING

I, \_\_\_\_\_Matilda Mbazo\_\_\_\_\_, the undersigned and duly authorized thereto, by WSP, have studied Sasol FTDR unit and compared the operations to the approved EMPr and compiled this report to the best of my knowledge. This section should be read with **Section 2**.

Signed at \_\_\_\_\_Midrand\_\_\_\_\_ on this the \_\_\_\_\_07 November\_\_\_\_\_2024

\_\_\_\_\_  
SIGNATURE OF INDEPENDENT AUDITOR

SIGNED IN LINE WITH THE REQUIREMENTS OF NEMA, GNR 982, APPENDIX 7, AS PUBLISHED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NO. 107 OF 1998), AS AMENDED, READ WITH GNR SECTION 55 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002.



# Appendix A

## AUDITOR CVS



## Matilda Mbazo

Earth and Environment, Environmental Planning & Advisory, Graduate Consultant

### CAREER SUMMARY

Matilda Mbazo graduated from Monash South Africa with a BSc in Social Sciences (cum laude) in 2021 and completed her BSc Hons in Geography at University of Witwatersrand in 2022. Matilda is currently pursuing her MSc in Environmental Sciences at University of Witwatersrand. Matilda is a Graduate Consultant in the Environmental Planning and Advisory Division of WSP Group Africa based in the Waterfall office. Matilda has close to two years' experience in the environmental field and currently provides technical and strategic input on a diverse range project in the environmental management field, including environmental audits.



**2 > years with WSP**

#### Language

Afrikaans, English, Tswana, Ndebele, and Zulu

### EDUCATION

Monash South Africa – Bachelor's degree in Social Sciences	3 years
University of Witwatersrand - Bachelor of Science Honours (Geography)	1 year
University of Witwatersrand – Master of Science (Environmental Sciences)	current

### PROFESSIONAL MEMBERSHIPS

EAPASA – Environmental Assessment Practitioner Association of South Africa- Registration No. 2023/6394

### PROFESSIONAL HISTORY

WSP - Graduate Consultant	current
WSP - Intern	2023
WSP - Vacation Student	2021 - 2022
IIE MSA - Administration Assistant	2020 - 2021
Cotton On Group - Sales Associate	2020 - 2021

### PROFESSIONAL EXPERIENCE

#### Environmental Authorisation Audits

FFS Chloorkop Fired Heater



July 2022 to June 2023

**ECO:** EA and EMPR Compliance Audit

**Environmental Auditor :** EA and EMPr Annual Compliance Audit

**Sasol South Africa Limited, Sasol Sasolburg EA Audits, South Africa**

October 2022

October 2023

July 2024

**Environmental Auditor**

At the Sasol One and Midlands Complex in Sasolburg, various operations were subject to an external compliance audit against their EA and EMPr criteria.

**South 32: Wessels and Mamatwan Mine, EA and EMPr Audits**

November 2023

**Environmental Auditor :** EA and EMPr Compliance Audit

**Impala Platinum Holdings Limited**

June 2024

**Environmental Auditor :** Norms and Standards Audit

**Sasol South Africa Limited and Wood**

July 2024 – July 2025

**ECO:** EA and EMPR Compliance Audit

**Sasol Ekandustria Operations**

September 2024 – September 2025

**ECO:** EA, EMPR and WUL Compliance Audit

**Investchem (Pty) Ltd**

September 2024

**Environmental Auditor :** EA and EMPr Compliance Audit

**Environmental Management Plans**

**ArcelorMittal South Africa, South Africa**

April 2024

Environmental Management Plan for the proposed Logistics Hub in the Western Cape.

**National Petroleum Refiners of SA (Pty) Ltd (NATREF)**

June 2024





Environmental Management Plan for the proposed Hybrid Project.

**ENERTRAG, South Africa**

2024

Amendments/updates of existing EMPs for two wind facilities, one solar facility and a grid connection.

**Legal Audits**

**Sasol South Africa Limited**

March 2024

Undertaken the Regulation 34 Compliance Audits for various Third Parties

**Barloworld Ingrain**

April 2024

Environmental, Health, and Safety Due Diligence (EHS DD) for three facilities

**Renewables**

**ENERTRAG, South Africa**

2024

Scoping and Environmental Impact Assessment for Impumelelo Wind Facility

**Eskom Holdings SOC Ltd**

September 2024

Part 2 amendment of an EA for a solar facility

**Dissertations and Research Projects**

**Department of Geography, Archaeology and Environmental Studies, University of Witwatersrand,  
Master of Science Dissertation.**

**2023-2024**

To quantify the interactive effects of extreme drought, fire frequency, and mega-herbivory on tree density in a Marula-Knobthorn savanna using Geographic Information Systems and Remote Sensing.

**Department of Geography, Archaeology and Environmental Studies, University of Witwatersrand,  
Bachelor of Science (Geography), Research Project**

**2022**

Assessment of flood impact at the Hennops river, streaming from Tembisa to Centurion, using Remote Sensing and Geographic Information System.



## Yvette Mmanasoe

Senior Consultant

### CAREER SUMMARY

has 8 years of experience in environmental and social assessments within the agriculture, mining and building industries. She holds a BSc in Environmental Geography from the University of the Free State, an Occupational Health and Safety certificate from the University of Cape Town, a Sustainable Development Goals certificate from the University of Johannesburg and an Introduction to Environmental, Social and Governance (ESG) Certificate from the Corporate Finance Institute. She has experience in applying the International Finance Corporation (IFC) Performance Standards, Public Participation Processes coordination, Stakeholder Engagements, development of Social and Labour Plans, undertaking Social Impact Assessments, and applications for environmental authorisations and licencing.



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#### *1 years with WSP*

#### *8 years of experience*

#### *Area of expertise*

Public Participation Process  
Social Impact Assessment  
IFC Principles

#### *Language*

English, Sepedi, Afrikaans, Sesotho, Setswana, Zulu

### EDUCATION

BSc Environmental Geography	2015
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### ADDITIONAL TRAINING

Occupational Health & Safety	2016
Introduction to ESG	2023
Sustainable Development	2023

### PROFESSIONAL MEMBERSHIPS

IAIASA  
2023



## **Yvette Mmanasoe**

Senior Consultant

### **PROFESSIONAL HISTORY**

WSP Group Africa (Pty) Ltd

August 2023 – present

Agron Moosrivier (Pty) Ltd

July 2015 – April 2023

### **PROFESSIONAL EXPERIENCE**

#### **Area of expertise**

#### **Sub-area (if required)**

**Thungela Resources, Zibulo Underground Extension Mine, RSA**

**Year 2021/2022**

#### **Role**

Coordinate public participation in the EIA process for the environmental authorisation application.

**Mafube Coal Mine, Ward 7 & 9 Cemetery ESIA, RSA**

**Year 2019/2020**

#### **Role**

Coordinate public participation and conduct the social impact baseline aspect in the Environmental SIA for environmental authorisation to develop a cemetery.

**Kriel Housing Development, Kriel Housing Development, RSA**

**Year 2019/202**

#### **Role**

Conduct SIA for the BAR Process



Building 1, Maxwell Office Park  
Magwa Crescent West, Waterfall City  
Midrand, 1685  
South Africa

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## Annexure B - Fischer Tropsch Demonstration Reactor (FTDR) Ref (E/03/19)

### Environmental Management Programme Operational Phase

Mitigations measures identified during the environmental impact assessment, for the operational phase of the project, defining the impact management outcome and impact management actions to enable compliance to this regulation.

<b>Impact Management Outcome</b>	<b><i>Impact Management Action</i></b>
1. Prevent surface and groundwater contamination	The whole area will be paved and bunded with sewers to capture any effluent. The project will therefore have no negative effect on the surface and groundwater quality.
2. Air Impact management	The Pilot plant facility has an existing flare for the release of emissions. The vent gas will consist of mainly hydrogen and carbon monoxide which will be routed to the existing flare. Since the unit will not be operational on a permanent basis it is difficult to predict the exact emissions. This is however insignificant when compared to the existing production facilities. There will therefore be no significant emissions
3. Liquid effluent handling	The product condensate will be routed to Section 500 for integration with the existing production facility system. Reaction water and steam are by-products that will be formed in the process. These will be routed to the relevant areas on the Sasol One site for incorporation into the existing production systems.
4. Solid effluent handling	A filter cake is produced as by-product. This will be disposed via Suitable waste disposal service provider. The wax product is routed to Section 200 for incorporation into the normal wax production facility <b>or</b> sent to Natref
	In the event of off-spec product it will either be sent to the power station for fuel <b>or</b> routed to Natref to be used in their cracking process. If unsuitable it will be removed by suitable waste disposal service provider