



Our reference: SO-ENV-1351

29 November 2024

Your Ref: EA nr EM1/1(c)/02/149

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Attention: Deputy Director: Environmental Impact Assessment

## **ENVIRONMENTAL AUTHORISATION EXTERNAL REPORT SUBMISSION**

The Environmental Authorisation applicable for Sasol South Africa Limited, Sasolburg Operations was externally audited during October 2023. 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.

Attached, please find the compliance audit report for the establishment of the Polythene 2 plant Authorisation with reference EM1/1(c)/02/149, dated November 2023.

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MS Solomon PM Vilakazi LB Zondo

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 Polythene 2 plant.

Yours faithfully

Signed by: Johann Van Wyk  
Signed at: 2024-11-29 13:28:18 +02:00  
Reason: I approve

*Johann Van Wyk*

**Johann van Wyk**  
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Sasol South Africa Ltd

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**UPGRADING POLYTHENE PLANT 2  
ENVIRONMENTAL AUTHORISATION (REF. NO:  
EM1/1(C)/02/149) AND ENVIRONMENTAL  
MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2018 -  
October 2023





Sasol South Africa Ltd

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# **UPGRADING POLYTHENE PLANT 2 ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/02/149) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2018 - October 2023

**TYPE OF DOCUMENT (VERSION) CONFIDENTIAL**

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**DATE: NOVEMBER 2023**



Sasol South Africa Ltd

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# **UPGRADING POLYTHENE PLANT 2 ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/02/149) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2018 - October 2023

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### APPENDIX A

#### AUDITOR CVS

# 1 INTRODUCTION

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## 1.1 TERMS OF REFERENCE

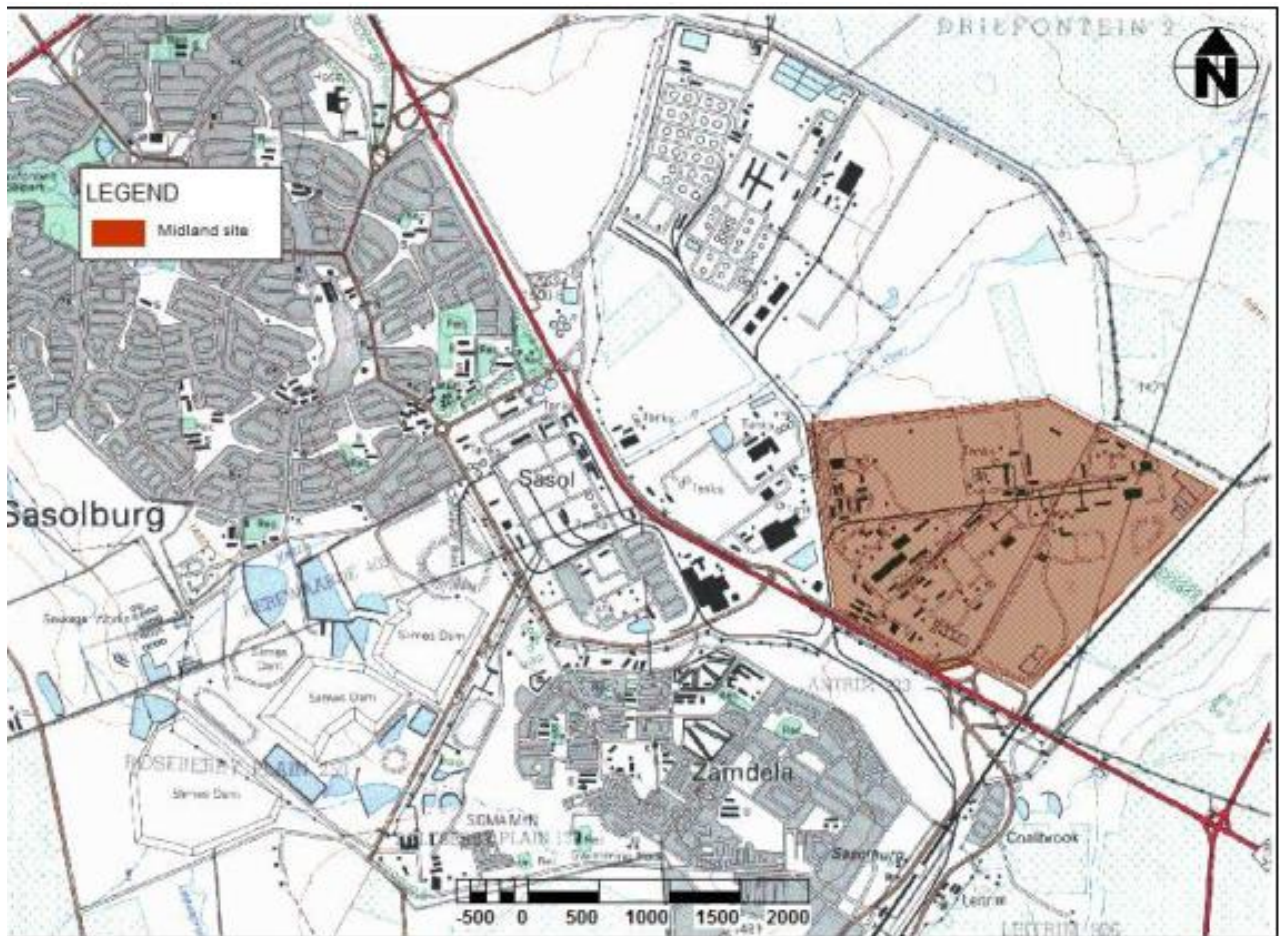
WSP Group Africa (Pty) Ltd (WSP) as an independent environmental consultant was appointed by Sasol Polymers 2, a division of Sasol South Africa Ltd (Sasol), to undertake an external environmental compliance audit of the commitments contained in the Environmental Authorisation (EA) (reference number EM1/1(c)/02/149) for the Upgrading of Polythene Plant 2 operations and the associated 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 (initially Record of Decision (RoD)), the amendment of the EA and the EMPr audited for compliance of the storage of polythene in the sphere that previously stored LPG at the Sasol One Site are provided below:

- EA for the conversion of the Upgrading of Polythene 2 unit located at the Sasol Polymers 2 site in Midlands in Sasolburg (reference number: EM1/1(c)/02/149), dated 06 June 2003 and issued to Polymers, a division of Sasol Polymers 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 for the Upgrading of Polythene 2 unit located at the Sasol Polymers 2 site in Midlands in Sasolburg (reference number: EM1/1(c)/02/149), dated 28 November 2017, 22 November 2019 and 30 June 2023 and issued to Polymers, a division of Sasol by the DESTEA. The amendments include:
  - Change of the brief description of the activity;
  - Change of location;
  - Change of the applicant details on the EA;
    - Owner of the EA;
    - Contact details and address;
  - Specific Conditions.
- EMPr for Polythene 2 at Sasol Polymers, Midland Site, dated 2019.

## 1.2 SASOL SASOLBURG – UPGRADING OF POLYTHENE 2 PLANT

Sasol Polymers is a subsidiary company owned by Sasol. Sasol Polymers plans to expand its Polyethylene Business production units in Sasolburg. Sasol Polymers is located at Sasol Midland site as shown in **Figure 1-1**. The reason for the expansion was to make use of the ethylene produced in Secunda by Sasol's Project Turbo.



**Figure 1-1 - Locality of Sasol Midlands**

Sasol Polymers has two plants that produce different types of polyethylene. The Polythene 2 plant produces Low Density Polyethylene. The Polythene 2 plant produces Linear Low-Density Polyethylene. Both these polyethylene products are produced as pellets, which are put into bags and sold to customers in the plastics industry. Low density polyethylene and linear low-density polyethylene are used for different purposes in the plastics industry.

Polyethylene, which is also called polythene, is one of the main polymers used to manufacture plastic products, including:

- clear and printed packaging
- laminations
- pet food bags
- milk cartons
- industrial and household insulation
- plastic bags
- plastic containers
- moulded products such as plastic cups

### 1.3 PROJECT TEAM

Tshepho Mamashela and Matilda Mbazo completed a site inspection of the Polythene 2 Plant against the EA conditions (reference number: EM1/1(c)/02/149) at the Sasol One on **30 October 2023**.

The draft external audit report was compiled in November 2023 and finalised in January 2024. This report will be submitted to the DETSEA by Sasol in 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
Tshepho Mamashela	Auditor	BSc Hons Environmental Management
		6 Years' Experience
		Tshepho Mamashela is an Environmental Consultant currently working for WSP Group Africa at the Johannesburg, Waterfall office in the Environmental Planning and Advisory Department. She is an Environmental Management professional with over 5 years' experience in the private and public sector. Tshepho has experience in environmental management field with expertise in environmental impact assessment, environmental auditing, environmental management plans. She is registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1846) and the South African Council for Natural Scientific Professions (SACNASP: 120878).
Matilda Mbazo	Auditor	BSc (Hons) Geography
		A Year's Experience
		Matilda graduated from the University of Witwatersrand with a BSc honours in Geography in 2023 and is currently completing her MSc in Environmental Science. She has over a year's experience in environmental management and currently provides technical and strategic input on a diverse range project in environmental management and environmental compliance audits. She is a registered Candidate Environmental Assessment Practitioner (EAP) with EAPASA (2023/6394).
Anri Scheepers	Review	BA (Hons) Geography
		15 Years' Experience
		Anri graduated from the University of Johannesburg with a BA honours in Geography in 2007. Anri has been involved in numerous mining and industrial projects in South Africa, and has experience with diamond, gold, platinum, chrome, coal and manganese mining and processing operations. 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. Anri's roles and responsibilities include the management of Environmental Authorisation and Waste Management Licence processes (Basic Assessments and Scoping and Environmental Impact Assessment Reporting), Water Use Licence Application processes and auditing. She is registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1528)

## 2 AUDIT SCOPE

WSP was appointed by Sasol to conduct the environmental compliance audit for the Upgrading of Polythene 2 unit located at the Sasol Polymers 2 site in Midlands in Sasolburg. This report provides an overview of the level of compliance with the conditions contained in the EA and EMPr as indicated in **Section 1.1**. The site audit was undertaken on **30 October 2023** at the Sasol Polymers 2, Midlands in Sasolburg.

The objective of the audit was to:

- Assess the level of compliance with the commitments of the EA for the polythene plant;
- Assess the level of compliance with the commitments of the EMPr that was submitted as part of the Scoping Report for the licencing of the Polythene 2 plant, 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 polythene sphere 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 Polythene 2 plant 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 1.3</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	<b>Section 4</b>



Sub-Section	Requirement	Report Section Reference
	(a) the ability of 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 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 1.3</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 2.1 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>

Sub-Section	Requirement	Report Section Reference
j	A summary and copies of any comments that were received during any consultation process.	Comments received during the consultation process were included as comments in the audit checklist tables in Section 4.
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 were 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 (**30 October 2023**);
- 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 **30 October 2023** where findings and observations were recorded and are summarised in **Section 4**. Key personnel interviewed during the audit included:

- Suyen Van Zyl
- Lerata Mofokeng

#### 3.3 INFORMATION CONSIDERED

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

- Amendments of an Environmental Authorisation (Ref no: E/04/02) dated 18 August 2019;
- Environmental Management Plan for Poly 2 as per an external audit dated 2019;
- Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1);



- Sasolburg and Ekandustria Operations Annual Emission Report (August 2022) to ensure compliance with the AEL conditions;
- Water Use Licence (WUL) (reference number: 14/C22K/FG/4958);
- Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022) that includes the:
  - Stormwater Management Plan (SWMP, 2022);
  - Rehabilitation Strategy and Implementation Plan (RSIP);
  - Water Conservation and Demand Management (WC/DM);
  - Malfunctions register;
  - Water management;
  - Groundwater management;
  - Waste management;
  - Contaminated Water and Wastewater Management;
  - Effluent Management; and
  - Land management.
- The reporting, investigation and recording of environmental incidents (SAP and Isomatrix system);
- Waste Management and Disposal Registers;
- Other related approvals documents.

### 3.4 ASSESSMENT EVALUATION METHODOLOGY

The consolidated report contains all commitments, which were formulated as part of the original and amended EA and EMP. Each commitment contained in the audit checklist was assessed by reviewing site documentation, interviewing employees, and undertaking a site inspection. The application of the EMP was assessed and the level of compliance rated (compliance categories contained in **Table 3-1**). The compliance of the operations listed in **Section 1.2** 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> <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>

Compliance Level	Definition
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 compliance of Sasol with the conditions within the EA and amendments to the EA.

**Table 4-1 - Environmental Authorisation (reference: EM1/1(c)/02/149 dated 06 June 2003) and Amendment (reference: EM1/1(c)/02/149 dated 28 November 2017, 22 November 2019, and 30 June 2023) Audit Findings**

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
<b>Background</b>				
	<p>Sasol South Africa Ltd acting through its Sasolburg Operations has two plants producing polyethylene. Poly3 produces the low Density Polyethylene whilst Poly 2 produces Linear Low density Polyethylene. Both these plants produce polyethylene products in the form of pellets which are stored in bags and are supplied to different plastic industries. Ethylene, which is produced in Sasolburg and Secunda is used to produce polyethylene. If the ethylene is not used for this purpose it has to be disposed to the atmosphere through flaring, thus, this activity would limit the flaring of ethylene (ethylene cannot be stored in dams nor tanks because of a fire hazard). Moreover, South Africa is presently importing polyethylene and it is for this that Sasol polymers are intending to expand their production to meet the needs for local market and to import less. Changes to be made in the plant are:</p>	<b>C</b>	<p>Sasol One personnel confirmed that the stated background is the processes being undertaken at Poly 2 Plant. 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>EA (Ref no: EM1/1(c)/02/149) dated 06 June 2003;</li> <li>Amendments of an Environmental Authorisation (Ref no: EM1/1(c)/02/149) dated 28 November 2017;</li> <li>Environmental Impact Assessment for the proposed changes at Sasol Polymers Polythene Operations, Sasol Midland Site, Sasolburg – Final Scoping Report dated 30 April 2003.</li> </ul>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	<ul style="list-style-type: none"> <li>• Increase the cooling capacity,</li> <li>• Increase conveying system,</li> <li>• Replace extruder,</li> <li>• Increase the capacity of monomers recovery and</li> <li>• Add new pack silo and packline.</li> </ul>			
<b>Applicant</b>				
	Mr. Rightwell Laxa SVP Sasolburg Operations Sasol South Africa Ltd acting through its Sasolburg Operations P.O. Box 1, SASOLBURG, 1947 Tel: +27 16 960 8001	<b>C</b>	The applicant was amended in 2019 and this is the correct applicant details.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>■ Amendments of an Environmental Authorisation (Ref no: EM1/1(c)/02/149) dated 22 November 2019.</li> </ul>	None.
<b>1. Specific Conditions</b>				
1	This authorisation has been granted solely for the purpose of undertaking the specified activity to above.	<b>C</b>	Noted, the EA was granted by FS-DESTEa for the Polythene 2 plant on 06 June 2003.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>■ EA (Ref no: EM1/1(c)/02/149) dated 06 June 2003.</li> </ul>	None.
2.	An integrated waste management approach must be used that is based on best practices and should incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste should be disposed	<b>C</b>	Sasol Midlands operate under the Procedure for the removal of waste (SSP-S-014) dated 2015/12/18. This specific procedure follows an integrated approach to the management of waste. Moreover, the IWWMP outlines the	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	of at a landfill, licensed in terms off Section 20 of the Environmental Conservation act, 1989 (Act no 73 of 1989)		mandatory approach for best practices in waste management for all sites at Sasol. These practises have also been seen to be in place during the site visit to the plant, general waste storage facilities and hazardous waste storage facilities.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022).</li> </ul>	
3.	The Impact and Mitigations in the current valid Environmental Management Plan must be adhered to	C	The auditor noted the Impact and Mitigations in the current EMPr for the Polythene 2 plant are adhered to by Polymers 2.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> <li>Environmental Management Plan for Poly 2 as per an external audit dated 2019</li> </ul>	None.
8.	Should the activity ever cease or become redundant the applicant shall undertake the required actions prescribed by the legislation at the time, in line with the identified future land use, and comply with all relevant legal requirements administered by any relevant and competent authority at that time.	N/A	Noted.	None.
<b>2. Standard Conditions</b>				
1.	The applicant must advertise this record of decision.	N/A	Noted. The advertisement of the RoD was considered for the pre-construction and construction phase; therefore, this condition is outside the audit period and was not audited.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
2.	This Authorisation is granted only in terms of Sec 28A of the Environment Conservation Act, 1989 (Act No. 73 of 1989). It therefore does not exempt any person from the requirements of any other controlling authority or from any provision of any law and does not purport to interfere with the rights of any person who have an interest in the property	N/A	Noted. This audit scope did not cover a legal review of compliance of the Polythene 2 and SSO with all statutory requirements and whether they were in possession and compliance of all the necessary permits, authorisations or any other official documents.	None.
3.	Changes in the proposal resulting in significant environmental impacts are only permissible if approved in writing by the Department	N/A	Noted. The advertisement of the RoD was considered for the pre-construction and construction phase; therefore, this condition is outside the audit period and was not audited.	None.
4.	The Department reserves the right to amend and review the conditions of authorisation every 5 years.	N/A	Noted.	None.
5.	The Department 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 on the new owner and/or developer.	C	The Department was notified about the change of the applicant and representative details; this was not a new owner. Changes in the details are provided below:  Sasol South Africa Ltd  <i>Evidence:</i>  ■ Amendments of an Environmental Authorisation (Ref no: EM1/1(c)/02/149) dated 22 November 2019.	None.
6.	The Department must be notified of any change of address of the owner and/or developer.	C	The Department has acknowledged the receipt of Sasol's application (dated 2017/10/18) for the amendment of the change of applicant name and address in the letter from the DESTEA dated 2017/11/28.  <i>Evidence:</i>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<ul style="list-style-type: none"> <li>Amendments of an Environmental Authorisation (Ref no: EM1/1(c)/02/149) dated 28 November 2017</li> </ul>	
7.	Proof of compliance with the conditions described in the Record of Decision must be forwarded to the Department one month prior to the commencement of construction of operations of the development (as appropriate)	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.
8.	One months' notice must be given to the Department before the commencement of operation.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.
9.	A copy of this authorisation shall be made available at Sasol Polymers offices in Sasolburg at all times and all staff, contractors and sub-contractors shall be acquainted with the contents of this authorisation.	C	<p>The auditor identified that a copy of the authorisation is available, at the Polythene control facility and on Sasol SAP (intranet).</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.
10	The owner/developer must notify the authority within 24 hours if any condition of the exemption is not adhered to.	N/A	Noted.	None.
11.	Records related to compliance/non-compliance with conditions of this authorisation must be kept in good order. Such records should be made available to this Department within seven (7) days of written request from the Department for such records.	C	Records of compliance/non-compliance with conditions of this authorisation were kept in good condition and were readily available, therefore, should be readily available should the Department require them. No request was made by the Department during the audit period for records or documents. In addition, the previous audit was provided with the records of compliance/non-compliance with conditions of this authorisation.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite Observation;</li> <li>Sasol South Africa Ltd in Sasolburg, External Audits of EAs/RODs/EMPrs: G&amp;U, Upgrading of Polythene 2 at Sasol One Site dated 23 November 2018 by Centre of Environmental Management.</li> </ul>	
12	Non-compliance with, or any deviation from, the conditions set out in the authorisation documentation constitutes a failure in compliance. Under such conditions, the authorisation from the regulations as laid out in the documentation will be revoked	N/A	Noted. No deviations from the stated conditions within the EA were noted during this audit.	None.
	Provincial Government, Local Authority, or committees appointed in terms of the conditions of the application or any other public authority or organization shall not be held responsible for any damages or losses suffered by the developer 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 developer with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of approval.	N/A	Noted. Sasol holds full responsibility for any damages or losses suffered by the developer or his successor in operational instances.	None.
<b>3. Key factors for Decision</b>				
1.	The site is located in the highly industrialised area of Sasol one site and is already disturbed.	C	<p>The auditor identified that Polythene 2 plant is located in a highly industrialised area of Sasol Midlands site.</p> <p><i>Evidence:</i></p>	None.



Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	
2.	The manufacturing process does not create any by-products (solid waste) that need to be disposed of since plastic that do not meet the specifications required would be sold to plastic recyclers.	C	<p>At the time of the audit, the Polythene was under maintenance shutdown from the beginning of October 2023. Therefore, there was by-products (solid waste) from the cleaning of the equipment such as material that covers the insulators. However, there is no continuous by-products from the Polythene 2 plant during operational phases, as the product manufactured is sold to a third party.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> </ul>	None.
3.	There is an existing infrastructure at the site.	C	<p>Sasol Midlands site is industrialised and has existing infrastructure.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.
4.	There will be no effect on surface and groundwater.	C	<p>The Auditor identified that there is no effect on surface and groundwater.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation;</li> <li>High Level Evaluation of Permeable Reactive Barriers (PRB's) and MNA as Remedial Technologies for Sasol Sasolburg Operations (Ref no: BISOL-21-6194) dated May 2022.</li> </ul>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
5.	No historical, archaeological features or cultural sites were identified on or near the site	C	The auditor identified that there are no historical, archaeological features or cultural sites were identified on or near the Polythene 2 site.  <i>Evidence:</i> ■ Onsite Observation	None.
6.	There are no red data or other protected plant and animal species.	C	The auditor identified that there are no red data or other protected plant and animal species on the Polythene 2 site.	None.
7.	There were no concerns raised during the public participation process.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.
8.	Section 35 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), makes provision for appeal by any person who feels aggravated by a decision made by a relevant authority in terms of these regulations. "Any person", therefore includes the applicant, interested party or member of the public. An appeal to the MEC (Tourism, Environmental & Economic Affairs) under Section 35(3) of the Environmental Conservation Act, 1989 (Act No 73 of 1989) must be done in writing within 30 days from the date on which	N/A	Noted.	None.
<b>4. Duration and date of Expiry</b>				
	This authorisation shall lapse if the activity does not commence within two years of the date of issue of this authorisation.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
<b>5. Appeal</b>				
1.	Section 35 of the Environmental Conservation Act, 1989(Act no 73 of 1989), makes provision for appeal by any person who feels aggravated by a decision made by the Department on terms of these regulations. " Any person" therefore includes the applicant, interested party or member of the public	N/A	Noted.	None.
2.	An appeal to the MEC (Tourism, Environmental& Economic Affairs) under Sec 35(3) of the Environmental Conservation Act, 1989 (Act no 73 of 1989), must be done in writing within 30 days from the date on which the ROD was issued to the applicant in terms of regulation 10(1) of the Environmental Impact Assessment Regulation (Government Notice R1182 & 1183 of 5 Sep 1997) and should be directed to the MEC (Tourism, Environmental & Economic Affairs); P/Bag X20801; BLOEMFONTEIN, 9300	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.



## 4.2 ENVIRONMENTAL MANAGEMENT PROGRAMME

**Table 4-2** below provides the compliance of Sasol with the conditions within the EMPr for the Upgrading of Polythene 2 Plant at the Sasol Polymers on the Sasol Midlands site in Sasolburg, unknown date, 2019.

**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 EMPr Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
<b>5.1.1 Air Quality</b>								
1.	The possibility of reducing air pollution (smoke) originating from flare burning will be investigated (Objective P2/3).	C	<p>During the audit, it was discovered that Sasol Midlands conducted a study to investigate the possibilities of lowering air pollution caused by flare burning ethylene from the reactor. This was a once off investigation.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Improve smokelessness on Poly 2 flare dated Sept 2007 PEZ-2001-05</li> </ul>	None.	N/A	N/A	N/A	N/A
2.	Efficient operation of the plant will be managed within current operating procedures in order to	C	Polythene 2 plant is operated in line with the current operating	None.	N/A	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)
	minimize upset conditions which may lead to unscheduled flaring		<p>procedures, including LDAR surveys, scheduled maintenance etc. Flaring only occurs during abnormal/emergency situations.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> </ul>					
<b>5.1.2 Consultation with I&amp;APs</b>								
	Open liaison channels should be established between the Sasol (developer), Polythene (operator), the contractors and Interested and Affected Parties (I&AP's) such that any queries, complaints or suggestions can be dealt with quickly and by the appropriate person(s).	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement of the construction phase and was therefore not audited.	None.	N/A	N/A	N/A	N/A
<b>5.1.2 Effluent Handling</b>								
1.	The clean and dirty water systems will be separated to prevent contaminated run-off from entering the surface and groundwater and soil.	C	<p>All stormwater and separated water from the oil goes to the Sasol effluent control dam that is managed by the Utilities department.</p> <p><i>Evidence:</i></p>	None.	N/A	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)
			<ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> <li>Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022).</li> </ul>					
2.	Polyethylene granule spillages will be contained and cleaned-up in order to minimize the amount entering the water systems.	C	<p>The polyethylene granule spillages go through to the effluent collection pit where the water and the plastic pallets are separated and cleaned, therefore no granules enter the water system.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> </ul>	None.	N/A	N/A	N/A	N/A
3.	Should an accidental spill event occur, then the effluent will be contained and managed by means of the effluent collection pit	C	The effluent collection pit has water continuously running to ensure circulation and surfing of polythene plastic/beads so they're cleaned. The dirty water from the plant is sent to the effluent treatment works via	None.	N/A	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>the Midlands site sewer system to the effluent control dam.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022).</li> </ul>					
4.	Contamination of the surface and ground water and soil will be prevented at the flare knock-out pot (Objective P2/1).	C	<p>The flare ground area is covered with stones so that it filters all contamination to the soil.</p> <p>An incident occurred on the 23<sup>rd</sup> of May 2023, when liquid hexane spillage from a lit flare burned the grass in the area. The flare knock out pot was cleaned out during shutdown where the stone that had burnt debris were replaced with new stones. Incident management procedures were implemented to ensure that contamination of surface and groundwater does not</p>	None.	N/A	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>occur as a result of the incident.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Incident and complaints register (SAP and Isometrix system).</li> </ul>					
5.	Contamination of the surface and ground water and soil as a result of oil spills from the compressors will be minimized within current operational and maintenance procedures. (Objective P2/5).	C	<p>During the shutdown phase, it was observed that all surface runoff flows to the surrounding drains and is treated as effluent water. Groundwater that is mixed with oil from the compressors goes through to the separator where oil is vacuumed from the water before it is sent to the effluent control dam. Moreover, there is no soil contamination as the area is paved.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	N/A	N/A	N/A
<b>5.1.3 Emergency Plan</b>								
1.	An emergency plan should be available for major environmental	C	An emergency preparedness and response	None.	N/A	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)
	emergencies during operation activities (with consideration of air, groundwater, soil and surface water) and appropriate training must be provided therein (Objective Poly/2).		<p>plan were developed and kept on file in the Polythene offices for each emergency. Staff received training on this.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Emergency preparedness and response plans</li> <li>Verbal Confirmation</li> </ul>					
2.	The Operator must report all major pollution incidents to DWAF within 24 hours of occurrence. Record (s) of environmental related incidents must be maintained.	N/A	Noted. The hexane liquid spillage incident that occurred on the 23rd of May 2023 was classified as a minor incident.	None.	N/A	N/A	N/A	N/A
<b>5.1.5 Materials Handling</b>								
1.	Workers should at all times be made aware of the health risks associated with all identified hazardous substances used and should be provided with appropriate protective clothing / equipment in case of spillages or accidents. Records of environmental training and incidents should be maintained.	C	Sasol as the holder of the authorisation acknowledges that 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	None.	N/A	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>behalf is aware that they need to comply with the EA and the EMPr conditions. Induction training was provided to all staff, service providers, contractors and visitors. Appropriate protective clothing / equipment is verified in the permit office or by the area manager before entering the Polythene 2 plant site.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>Onsite Observation</li> </ul>					
2.	Storage of flammable stocks for sale must be in a secure area with proper firefighting equipment and hazard signs	C	<p>The flammable stocks for sale are stored in a secured bunded area with updated firefighting equipment and appropriate hazard signs. This is also consistent with SSP-S-059 Storage of flammable and consumable fluids.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	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)
3.	When off-loading Butene or Hexene from the rail tanker into the storage tanks, all operations must be stopped immediately if a leak in the connecting line occurs. This operation must not continue until the spillage has been removed.	C	<p>The area manager confirmed that when off-loading Butene or Hexene procedure is followed. However, there are no major leaks, but operations are immediately stopped followed by a clean-up in a case of a spillage. The area is bunded, to prevent runoff of any potential spillage.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> </ul>	None.	N/A	N/A	N/A	N/A
<b>5.1.6 Noise Disturbance</b>								
1.	It must be ensured that equipment is in a good state of maintenance to prevent elevated noise levels.	C	<p>During the audit, no equipment showed degradation that result in elevated noise levels. The perimeter noise survey indicates that Polythene 2 plant complies with noise rating levels.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Environmental Noise Survey for Sasol</li> </ul>	None.	N/A	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)
			Sasolburg (ref no:24539 Rev 01 SR) by Gijima dated 23,27 and 30 May 2019					
<b>5.1.7 Soil</b>								
1.	The site must be paved, where the highest environmental impacts will be, to manage the impact of the project on the ecology of the site.	<b>C</b>	<p>The auditor identified that Polythene 2 plant is located in a highly industrialised area of Midlands site, therefore any project impact on the environment or the ecology of the site is manageable.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> </ul>	None.	N/A	N/A	N/A	N/A
<b>5.1.8 Solid Waste Management</b>								
1.	All waste material must be contained and disposed off according to the relevant legal requirements	<b>C</b>	<p>The auditor observed during the site visit that all the waste is contained and disposed off as per waste licenses and manifests.<i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	N/A	N/A	N/A

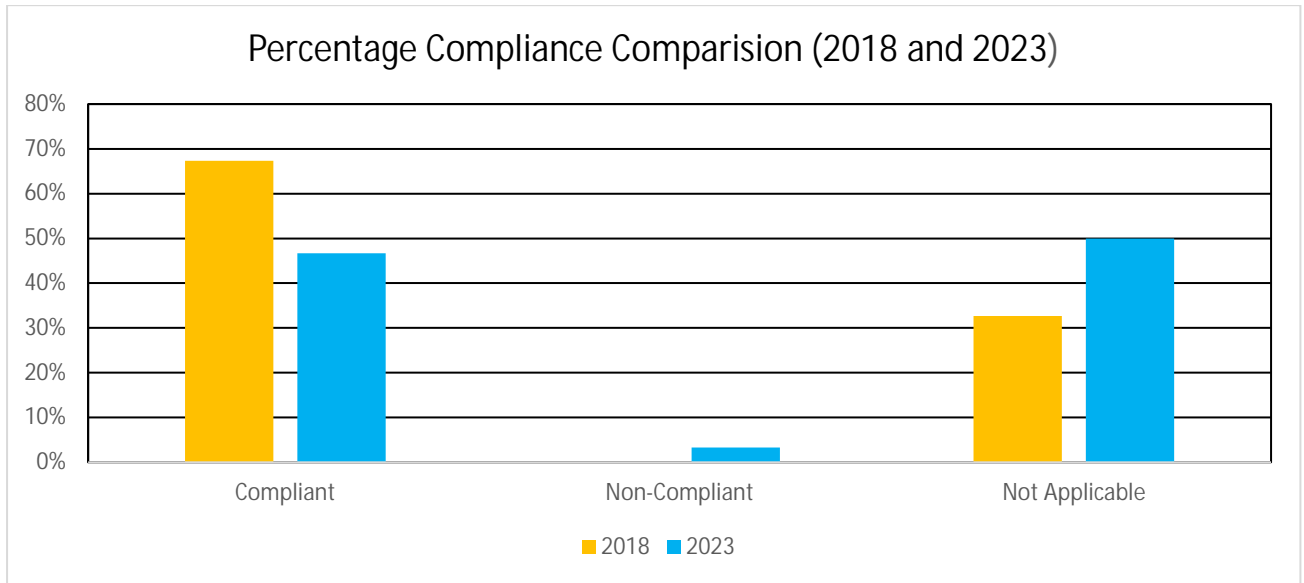
Ref	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	Measures Implemented to Address Non-Compliance	Practicality of the EMPR Commitments	Is the Non-Compliance Administrative or will it have an impact	Historical/New Non-Compliance (Administrative measures)
			<ul style="list-style-type: none"> <li>Safe Disposal Certificate, Dangerous Goods Declaration and Waste Manifest (5776) by Averda dated 01/09/2023</li> </ul>					
2.	<p><del>All domestic waste generated must be disposed of in a proper manner at the Metsimahole Municipal Landfill.</del></p> <p>All domestic waste generated must be disposed of in a proper manner at al Site a licenced landfill site.</p>	C	<p>Sasol Midlands follows the Procedure for Waste Removal (SSP-S-014) dated 2015/12/18. This specific technique adheres to an integrated waste management approach.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal Confirmation</li> <li>Waste manifests</li> </ul>	None.	N/A	N/A	N/A	N/A
3	Any hazardous waste generated must be disposed off at an appropriately classified waste site (unless it is to be recycled by approved methods). Records should be kept of the disposal of all hazardous waste being disposed of or recycled.	C	The catalyst and lagging material used for insulation is treated as hazardous waste – this applies to shut down. There is not hazardous waste during operation unless there is an upset condition at the Polythene 2 plant.	None.	N/A	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)
			<i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Verbal Confirmation</li> </ul>					
4.	In general, littering, discarding or burying of any materials must not be allowed on site.	C	<p>No littering, discarding or burying of material was observed on site during the audit. There are skips and bins in various places on site to ensure appropriate disposal of waste.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	N/A	N/A	N/A
<b>5.1.9 Storage Tanks and Equipment</b>								
	Regular monitoring of the tanks and pipelines must be undertaken to prevent pollution. Records of monitoring must be kept and made available to the FS-DTEEA / DWAF on request. Should contamination be detected, a rehabilitation plan must be compiled and executed	C	<p>Focal monitoring occurs in the Digital Control system (DCS) where the team observes the tanks and pipelines on real time.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	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)
	The leak detectors must be regularly tested, and records kept.	C	<p>The auditor identified that there are gas detectors on the plants. However, a maintenance schedule or testing records of the leak detectors was not provided during the audit.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> <li>Certificate report for gas detectors by DM dated 02/11/2023</li> </ul>	<ul style="list-style-type: none"> <li>None.</li> </ul>	N/A	N/A	N/A	N/A
	All machinery must be maintained in good working order as to prevent soil or water pollution	C	<p>The Poly 2 plant has a concrete surface. All equipment that could cause a spill is contained within a bunded area with a concrete surface.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite Observation</li> </ul>	None.	N/A	N/A	N/A	N/A

## 5 PROGRESS AGAINST PREVIOUS AUDIT FINDINGS

The previous compliance audit report against the consolidated EA and EMPr was compiled by the Northwest University CEM in 2018. A comparison in the change of compliance rating from the 2018 and 2023 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 (2018 and 2023). The 2023 audit identified six non-compliant conditions.



**Figure 5-1 – Percentage comparison of Environmental Authorisation compliance levels from 2018 to 2022**

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

Ref	Commitment	2018 Status	2018 Finding	2023 Status	2023 Finding
<b>EMPr Conditions</b>					
<b>5.1.2 Effluent Handling</b>					
4.	Contamination of the surface and ground water and soil will be prevented at the flare knock-out pot (Objective P2/1).	N/A	Burning of waste hydrocarbons are burnt via the flare through an automated process at the Poly 2 plant.	C	The flare ground area is covered with stones so that it filters all contamination to the soil. An incident occurred on the 23 <sup>rd</sup> of May 2023, when liquid hexane spillage from a lit flare burned the grass in the area. The flare knock out pot was cleaned out during shutdown where the stone that had burnt debris were replaced with new stones.



Ref	Commitment	2018 Status	2018 Finding	2023 Status	2023 Finding
					Incident management procedures were implemented to ensure that contamination of surface and groundwater does not occur as a result of the incident.

## 6 SUMMARY OF THE AUDIT FINDINGS

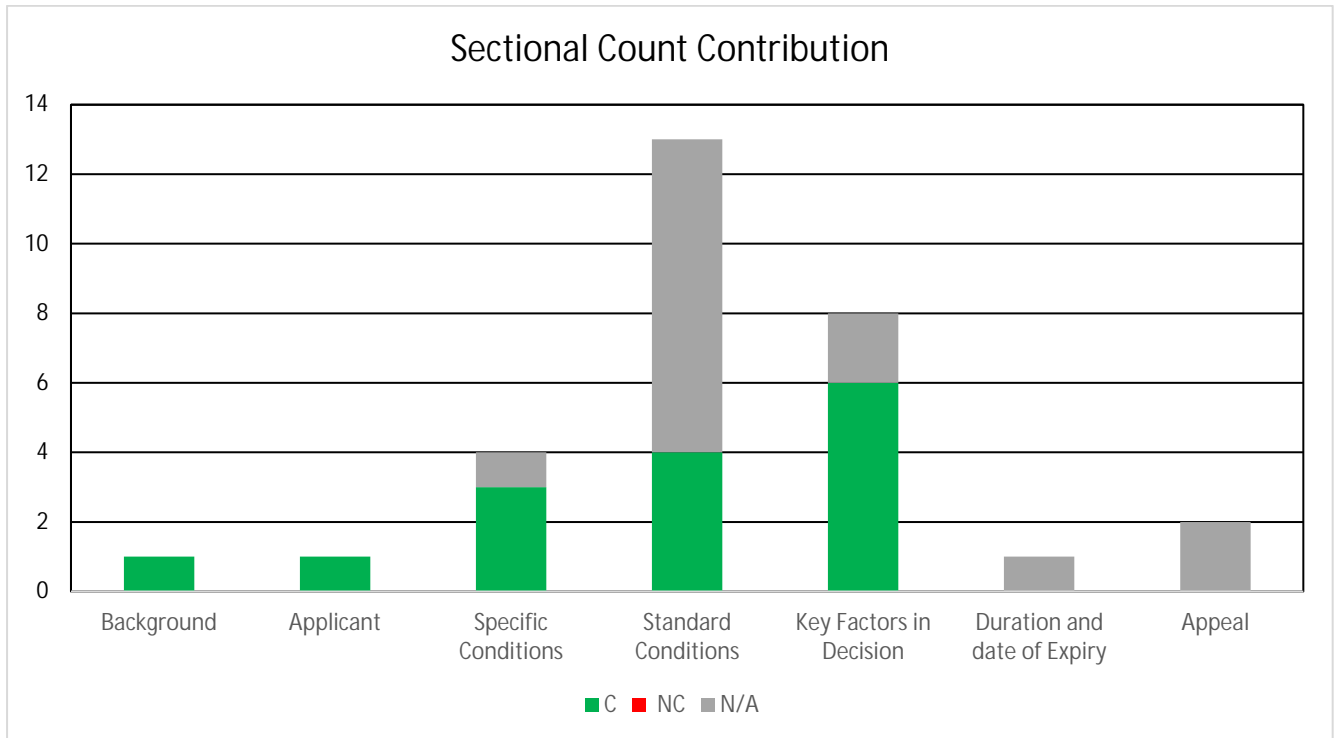
### 6.1 SASOL SASOLBURG POLYTHENE 2 PLANT EA COMPLIANCE

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.

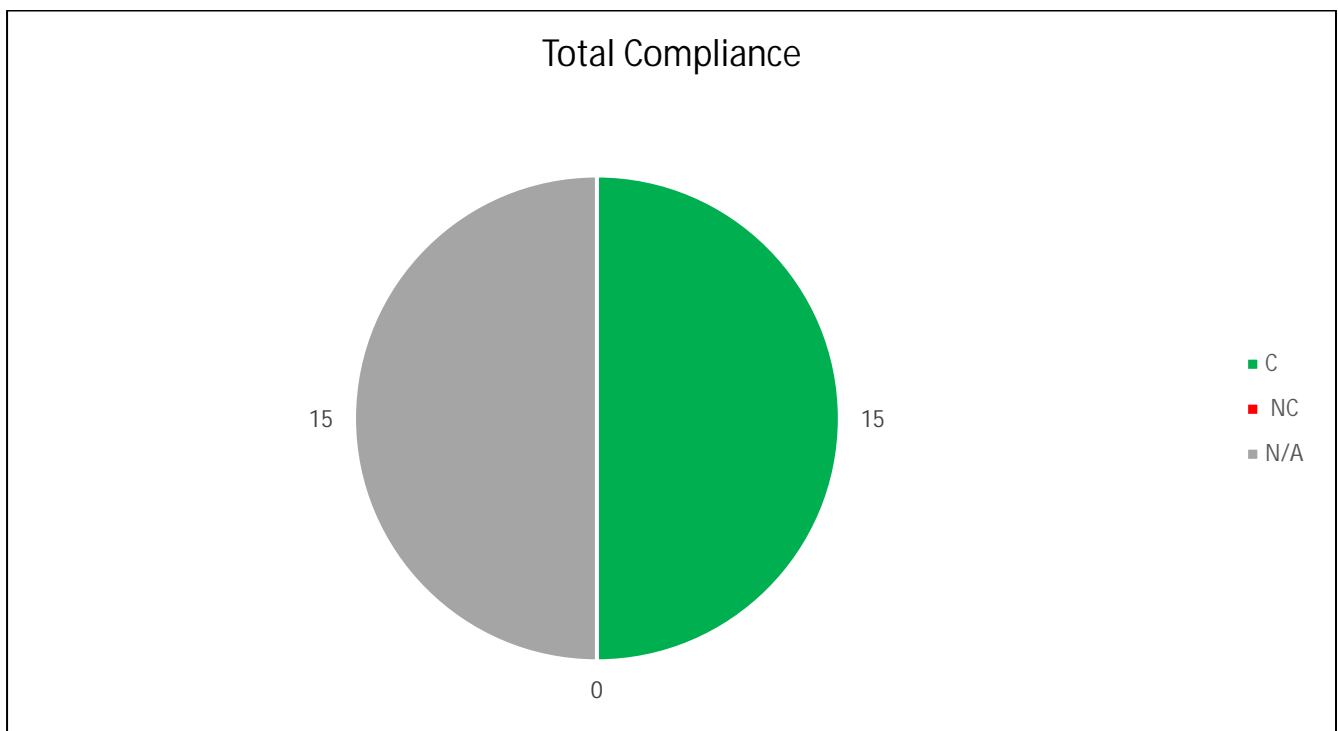
**Table 6-1** - Summary of EA Compliance Audit Findings

Section of the EA	No. Commitments	C	NC	N/A
Background	1	1	0	0
Applicant	1	1	0	0
Specific Conditions	4	3	0	1
Standard Conditions	13	4	0	9
Key Factors in Decision	8	6	0	2
Duration and date of Expiry	1	0	0	1
Appeal	2	0	0	2
Total	30	15	0	15
Total Percentage		50%	0%	50%
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.

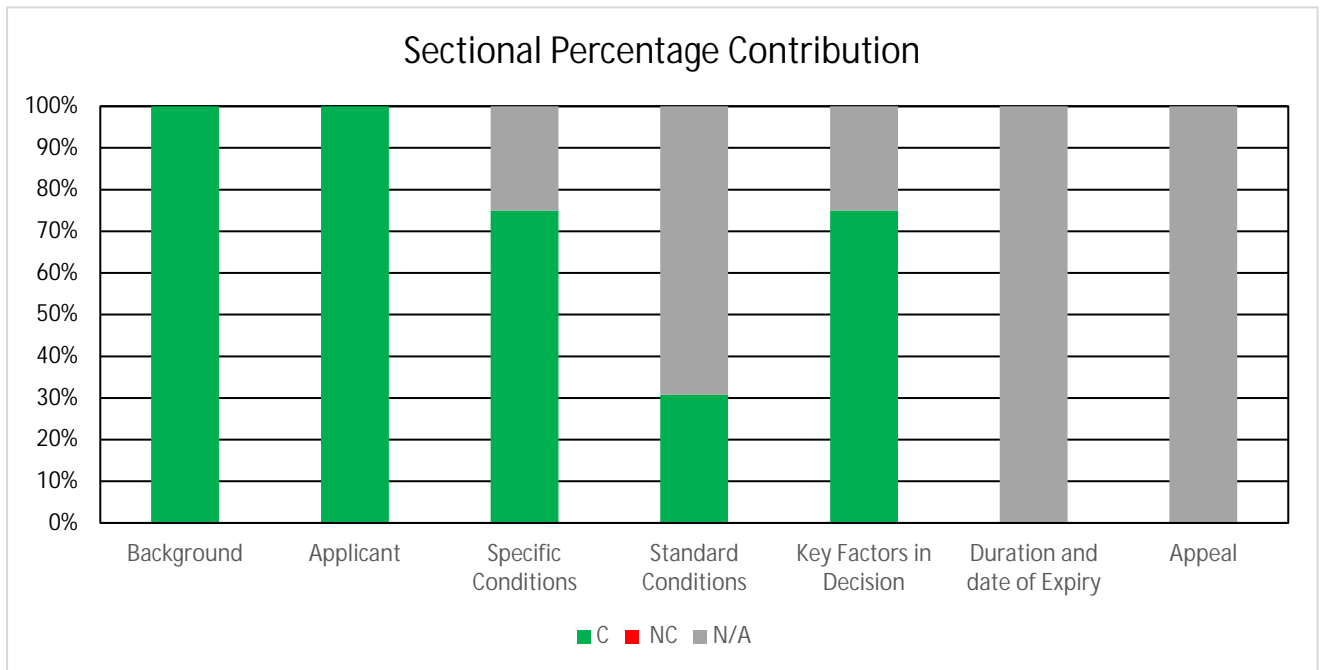


**Figure 6-1 - Number/Count contribution of findings made to the EA conditions per section**

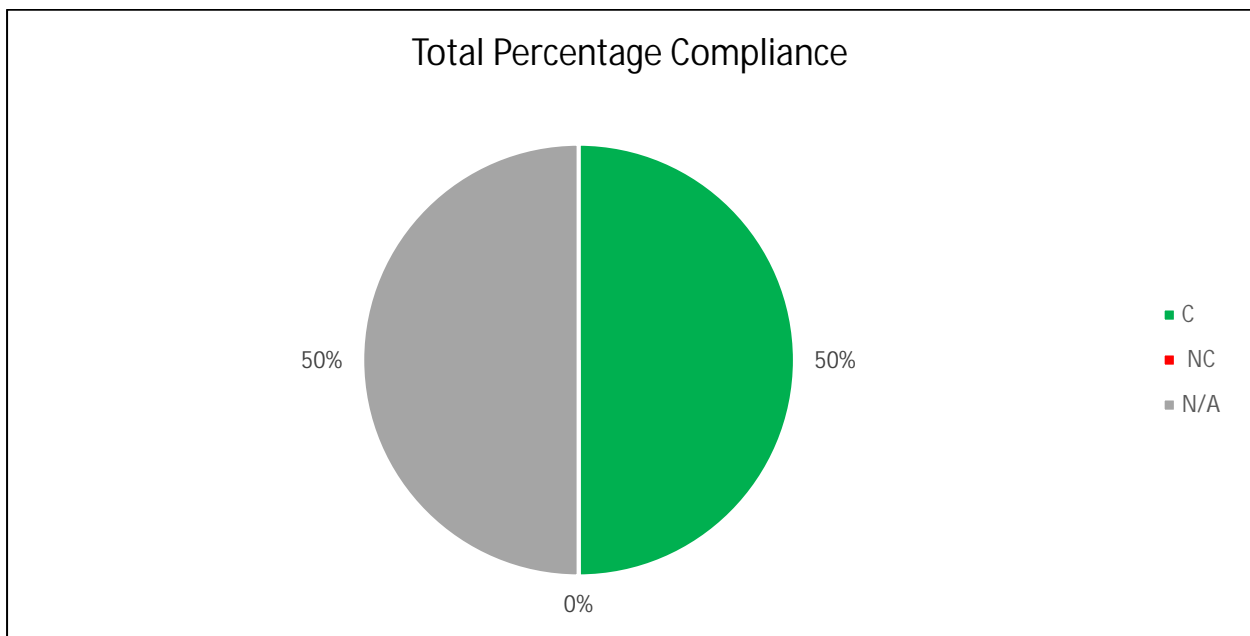


**Figure 6-2 - Overall count findings on compliance to the EA commitments**

**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 6-3 - Overall percentage findings on compliance to the EA Commitments**

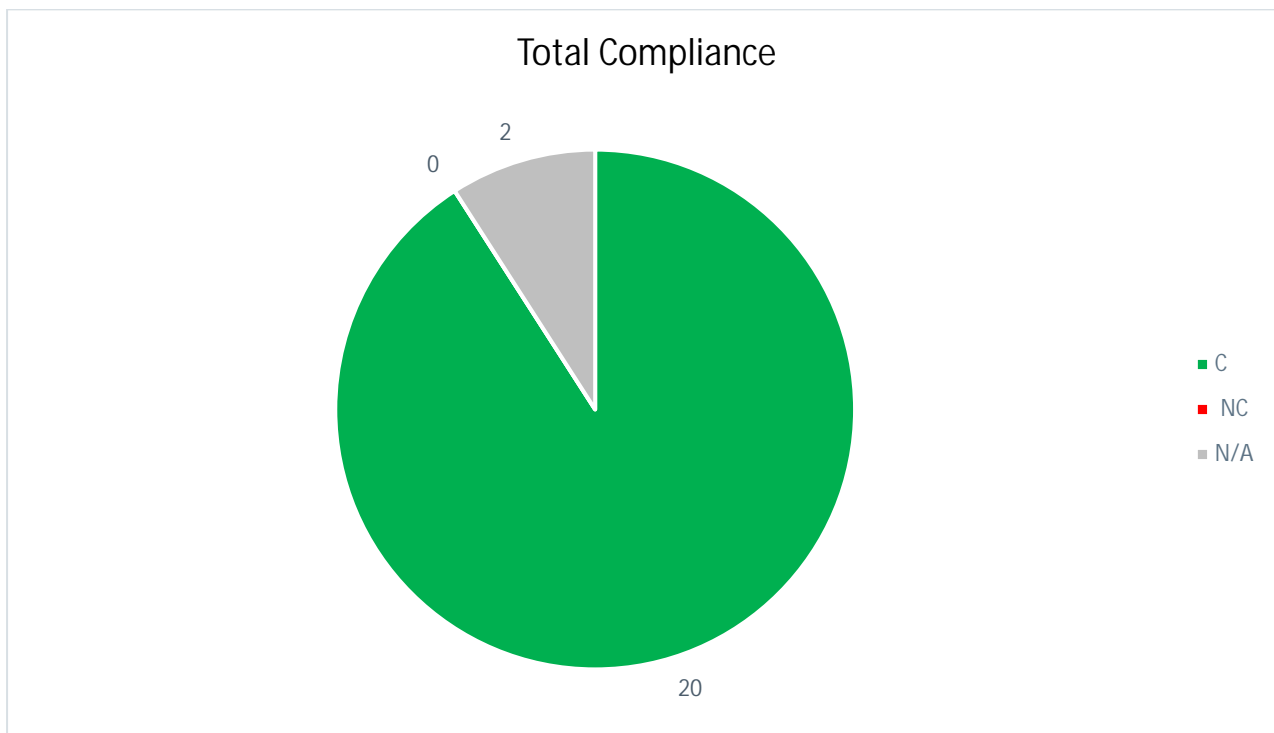
## 6.2 SASOL SASOLBURG POLYTHENE 2 PLANT EMPR COMPLIANCE

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.

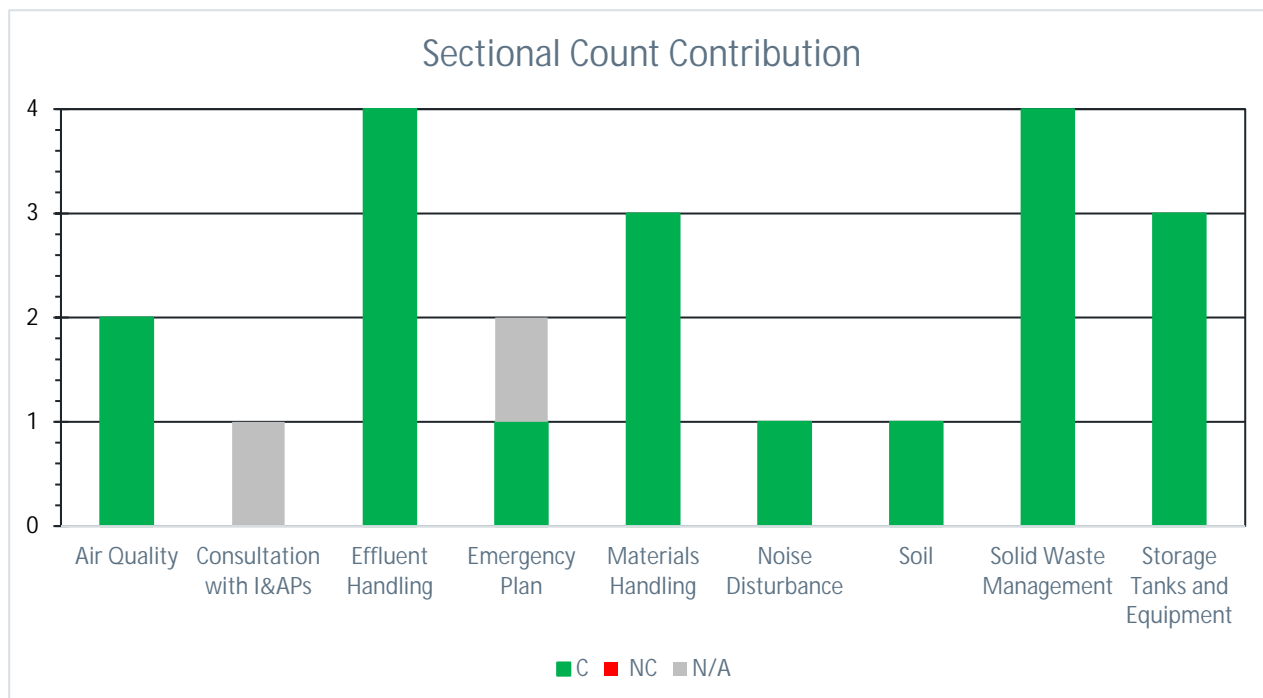
**Table 6-2 - Summary of EMPr Compliance Audit Findings**

Section of the EMPr	No. Commitments	C	NC	N/A
Air Quality	2	2	0	0
Consultation with I&APs	1	0	0	1
Effluent Handling	5	5	0	0
Emergency Plan	2	1	0	1
Materials Handling	3	3	0	0
Noise Disturbance	1	1	0	0
Soil	1	1	0	0
Solid Waste Management	4	4	0	0
Storage Tanks and Equipment	3	3	0	0
Total	22	20	0	2
Total Percentage		91%	0	9%
Percentage Compliance with Applicable Conditions	100%			

**Figure 6-4** presents the total proportion of compliance for the facility and **Figure 6-5** illustrates the number/count contribution of the findings of the EMPr per section.

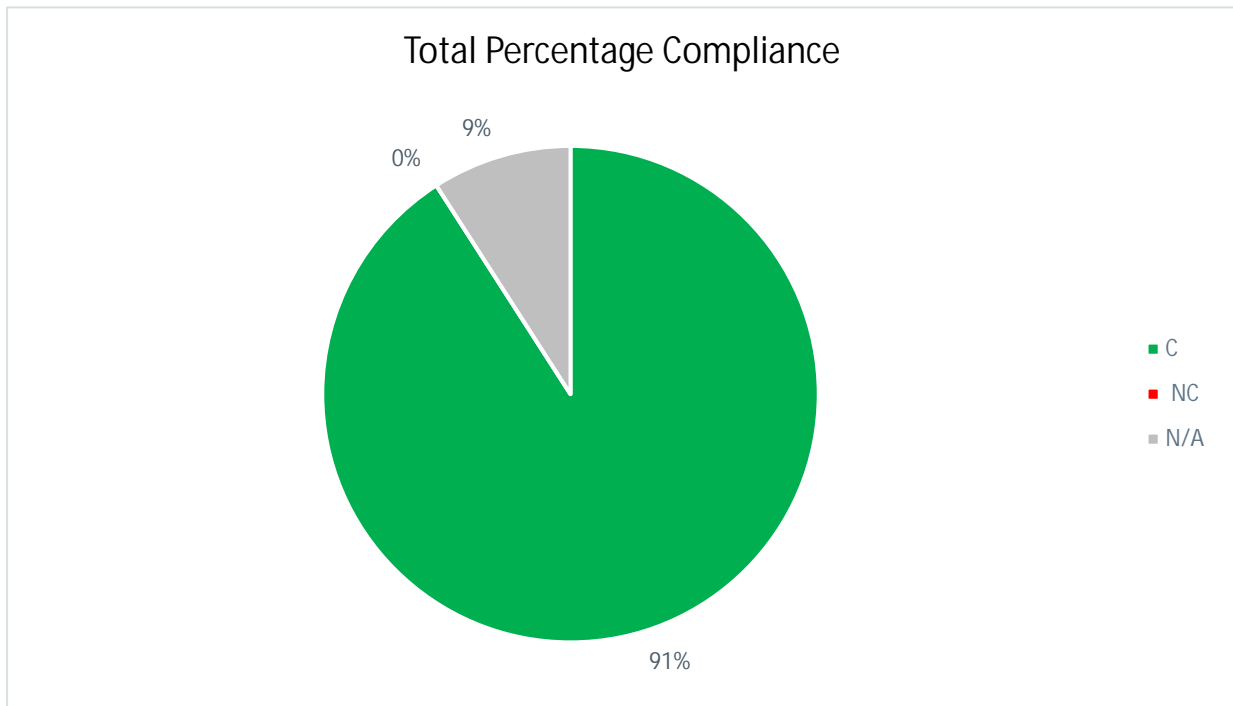


**Figure 6-4 - Overall count findings on compliance to the EMPr Commitments**

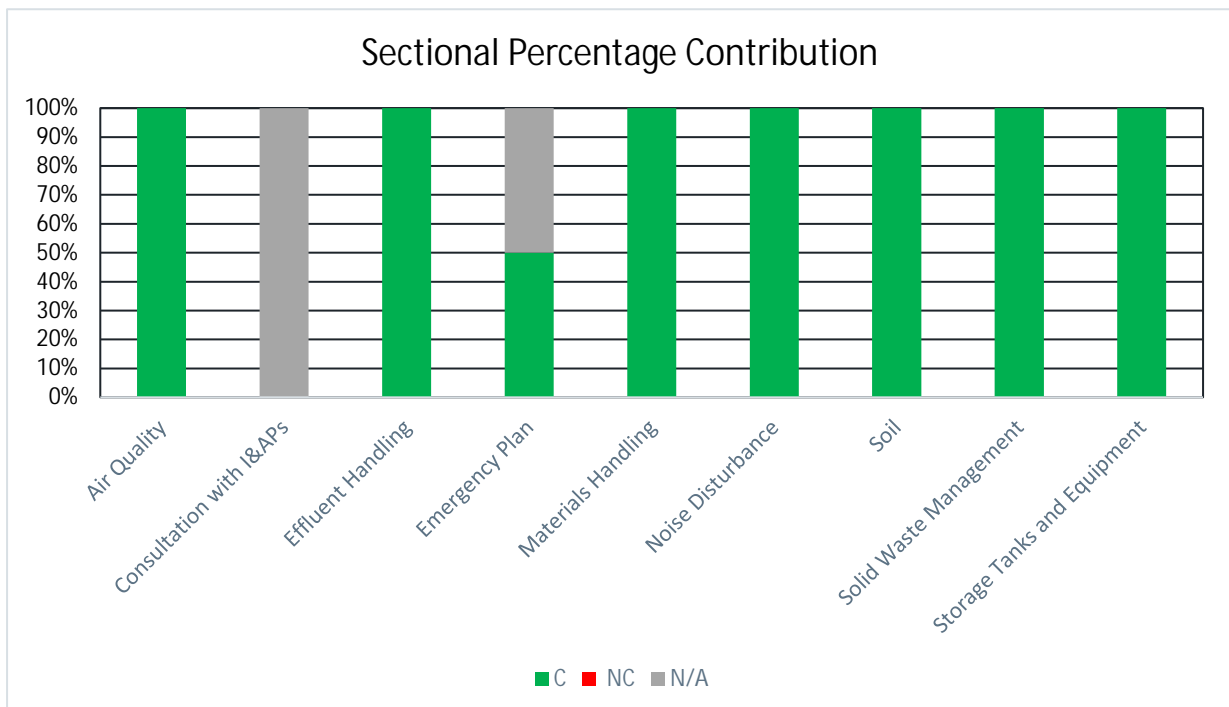


**Figure 6-5 - Number/Count contribution of findings made to the EMPr Commitments per Section**

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



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



**Figure 6-7 - Percentage contribution of findings made to the EMPr Commitments per Section**

## 7 RECOMMENDATIONS

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Zero non-compliances of the EA and EMP conditions was noted during the audit. Sasol is commended for achieving 100% compliance for the EA and EMP audit and is urged to continue to implement the environmental mitigation measures within the EA and EMP. In addition, Sasol should continue to implement their EMS for their onsite operations and to identify new environmental risks due to changes in operations, and address these when identified on site.

Sasol is advised to continue with their 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 CONCLUSION

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

- Assess the level of compliance with the conditions of the EA.

The EA compliance audit has identified that the EA commitments remain applicable, and the EA is considered effective. As such, WSP does not recommend any amendment of the EA as it is sufficient in managing environmental impacts.

WSP do acknowledge that Sasol has systems in place which are considered to be more robust for monitoring compliance and implementing changes than through the EA audit; this includes the annual audit of each business unit to meeting the ISO 14001 standards. New impacts and risks are continually identified and assessed by Sasol's Environmental Department, which assesses environmental risks and drives improvement implementation. This Department facilitates Environmental Risk Assessments per business unit to ensure that gaps are addressed through implementation of mitigation measures via an Integrated Management System.

In conclusion, WSP recommends that Sasol continues to operate each business unit under an Environmental Management System and meet the licence compliance conditions (EA, EMP, WUL, AEL, etc). This is effective for mitigation against any gaps in the EMP and to regularly identify new environmental impacts and risks that should be addressed on site.

## 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 Polythene 2 Facility 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 \_\_\_\_\_08 January\_\_\_\_\_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.

# Appendix A

## AUDITOR CVS





## Tshepho Mamashela

Earth & Environment - Environmental Consultant

### CAREER SUMMARY

Tshepho Mamashela is an Environmental Consultant currently working for WSP Group Africa at the Johannesburg, Waterfall office in the Environmental Planning and Advisory Department. She is an Environmental Management professional with over 5 years' experience in the private and public sector. Tshepho has experience in environmental management field with expertise in environmental impact assessment, environmental auditing, environmental management plans.



#### <1 years with WSP

#### 6 years of experience

#### Area of expertise

Environmental Management  
Environmental Impact Assessment  
Compliance Auditing

#### Language

English

### EDUCATION

Bachelor of Science (Honours), Environmental Management, University of South Africa	2019
Bachelor of Science, Geography, University of Pretoria	2017

### ADDITIONAL TRAINING

Esri ArcGIS Basic	2019
Esri ArcGIS Standard	2019

### PROFESSIONAL MEMBERSHIPS

EAPASA – Environmental Assessment Practitioner Association of South Africa- Registration No. 2019/18	2022
SACNASP – South African Council for Natural Scientific Professional - Certified Natural Scientist – Registration No. 120878	2021

### PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	2023 - present
Mills and Otten	2023 – 2023
Environmental Consultant International	2021 -2022
Esri South Africa	2019 -2020
Limpopo Department of Economic Development Environment and Tourism	2018 -2019



## **Tshepho Mamashela**

Earth & Environment - Environmental Consultant

Mabyoko Environmental Projects

2017 -2018

### **PROFESSIONAL EXPERIENCE**

#### **Environmental Impact Assessment Process**

**McCormick Property Development, Development of a New Shopping Centre, Motor City, Private Hospital and Housing in Dan Limpopo Province, South Africa**

**2023**

**EAP**

Compile the Scoping Report and the Environmental Impact Report.

**Cubisol Investments, Replacement of an existing sewer pipeline BA Gauteng Province, South Africa**

**2023**

**EAP**

Compile the BA report and conduct public participation.

**L Gromer, Expansion of egg processing facility, North West, South Africa**

**2023**

**EAP**

Compile the BA.

**Engen Petroleum, Upgrade and Expansion of the Engen Impala Filling Station, Limpopo, South Africa**

**2023**

**EAP**

Compile the BA report, application forms and conduct public participation.

**African Realty Trust, Construction of six in-stream storage dams at Letaba Estate, Limpopo, South Africa**

**2022**

**EAP**

Assisted with compiling scoping report, application and related public participation documents.

**Garonga Safari Camp, S24G Application for Garonga Safari Camp, Limpopo, South Africa**

**2021/2022**

**EAP**

Assisted with compiling scoping report, application and related public participation documents.

**McCormick Property Developers, Development of shopping centre and filling station at Madombizha, Limpopo Province, South Africa**

**2018/2019**

**Case officer**

Review the BA for decision making process.

**KHPJ Property Developers, Mixed-use development at Tiyani-B, Limpopo Province, South Africa**

**2018**

**Case Officer**

Review the Scoping Report and Environmental Impact Report for decision making process.

**Thulamela Local Municipality, Demarcation of 500 sites at Maphefeni, Limpopo Province, South Africa**  
**Year from/to**

**2018**

Review the Scoping Report and Environmental Impact Report for decision making process.



## **Tshepho Mamashela**

Earth & Environment - Environmental Consultant

**L. P Mogobobye Hydraulics, Filling station at Sifikile Village, Bojanala, North West Province, South Africa**  
**2017/2018**  
**EAP**

Assisted in compiling the BA and supporting documentation including application forms and public participation material.

### **Compliance Auditing**

**Total Energies, Filling Moutse Mall Filling Station, Limpopo Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the construction of the filling station.

**Sasol, Sasol Ammonia Storage Facility Upgrade, Free State Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the construction of the ammonia storage facility.

**Cubusol Investment, Soshanguve Mall Upgrade, Gauteng Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the construction of the mall.

**Alley Road, Residential Construction at Meyerton, Gauteng Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the construction of the residential complex.

**Lynx Construction Group, Thatchfield Mall Construction, Gauteng, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the construction of the mall.

**Emfuleni Estate Homeowners Association, Annual Water Use License Compliance, Free State Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting annual WUL audit.

**Engen Petroleum, Annual Compliance Audit for Gauteng Site, Gauteng Province, South Africa**  
**2023**

#### **Environmental Control Officer**

Provided Environmental Control Officer (ECO) services by conducting monthly EMPr and EA audit for the operation of the filling stations. The following filling station were audited:

- Engen Hazeldene Convenience
- Engen Vega Service Station
- Engen Silver Lakes Convenience



## **Tshepho Mamashela**

Earth & Environment - Environmental Consultant

- Engen R511 Tanganani
- Engen Wierda Park Motors
- Engen Lombardy Convenience Centre
- Engen Country View Service



## Matilda Mbazo

Earth and Environment, Environmental Planning & Advisory, Intern

### 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 an Intern in the Environmental Planning and Advisory Division of WSP Group Africa based in the Waterfall office. Matilda has less than a year 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.



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**1 < 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 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

#### 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 to October 2023

**Environmental Auditor**





At the Sasol One Complex in Sasolburg, nine unit 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

**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.



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Magwa Crescent West, Waterfall City  
Midrand, 1685  
South Africa

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## Annexure B - Upgrading of Polythene 2

### 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.

Impact management Objective	Impact management Actions
1. Air Quality Minimise the potential for deterioration of air quality	1.1. Efficient operation of the plant will be managed within current operating procedures in order to minimize upset conditions which may lead to unscheduled flaring
2. Effluent Handling Minimise the use of clean water and avoid water wastage Prevent the contamination of surface and ground water as a result of Polythene 2's activities	2.1. The clean and dirty water systems will be separated to prevent contaminated run-off from entering the surface and groundwater and soil.
	2.2. Polyethylene granule spillages will be contained and cleaned-up in order to minimize the amount entering the water systems.
	2.3. Should an accidental spill event occur, then the effluent will be contained and managed by means of the effluent collection pit.
	2.4. Contamination of the surface and ground water and soil will be prevented at the flare knock-out pot.
	2.5. Contamination of the surface and ground water and soil as a result of oil spills from the compressors will be minimized within current operational and maintenance procedures. .
3. Emergency Plan Ensure that an appropriate Emergency Procedure is in place to safeguard the environment	3.1. Emergency plan should be available for major environmental emergencies during operation activities (with consideration of air, groundwater, soil and surface water) and appropriate training must be provided therein
4. Fire Ensure that an appropriate Emergency Procedure is in place to safeguard the environment	4.1. Training must be provided to the staff members in the use of the appropriate fire-fighting equipment.
5. Materials handling Manage and use land, raw materials and resources responsibly in order to minimise the disturbance of the prevailing ecology	5.1. Storage of flammable stocks for sale must be in a secure area with proper firefighting equipment and hazard signs
	5.2. When off-loading Butene or Hexene from the rail tanker into the storage tanks, all operations must be stopped immediately if a leak in the connecting line occurs. This operation must not continue until the spillage has been removed.
6. Noise Avoid "disturbing" noise levels	6.1. It must be ensured that equipment is in a good state of maintenance to prevent elevated noise levels.

7. Soil Prevent the contamination of surface and ground water as a result of	7.1. The site must be paved, where the highest environmental impacts will be, to manage the impact of the project on the ecology of the site.
8. Solid Waste Prevent the contamination of surface and ground water	8.1. All waste material must be contained and disposed of according to the relevant legal requirements
	8.2. All domestic waste generated must be disposed of in a proper manner at a licenced landfill stie
	8.3. Any hazardous waste generated must be disposed of at an appropriately classified waste site (unless it is to be recycled by approved methods). Records should be kept of the disposal of all hazardous waste being disposed of or recycled.
	8.4. In general, littering, discarding or burying of any materials must not be allowed on site.
9. Storage Tanks Prevent the contamination of surface and ground water and air	9.1. Regular monitoring of the tanks and pipelines must be undertaken to prevent pollution. Records of monitoring must be kept and made available to the FS-DTEEA / DWS on request. Should contamination be detected, a rehabilitation plan must be compiled and executed
	9.2. The leak detectors must be regularly tested, and records kept.
	9.3. All machinery must be maintained in good working order as to prevent soil or water pollution