



Our reference: SO-ENV-1339

29 November 2024

Your Ref: EA nr 12/12/20/1549

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Attention: Chief Directorate: Integrated Environmental Authorisations

ENVIRONMENTAL AUTHORISATION EXTERNAL REPORT SUBMISSION

Environmental Authorisations of Sasol South Africa Limited, Sasolburg Operations was externally audited during October 2023. The external audits were 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 Recommissioning of Boilers at Steam Station One, Environmental Authorisation with reference 12/12/20/1549, dated November 2023.

The Report indicates compliance at large with 98% compliance noted. The non-compliance relates to changes in operational procedure impacting the management action and not the impact

Sasolburg and Ekandustria Operations

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objective included in the EMPr.

Summary of non-compliance

Condition	Finding	Recommendation	Response
Noise surveys to be conducted reduce noise impact was identified.	<p>The perimeter noise survey for 2019 indicated that the SSO exceeds the 60 dB night levels. However, the report states that it might be influenced by passing traffic. Therefore, SSO does not conduct noise surveys unless there is an incident/complaint, or when a new development takes place e.g., restaurant. The only residential area close to Sasol One boundary is along the southern side of the factory. There is no residential area close to these measuring points, thus, the measured boundary noise will not cause any annoyance or disturbance.</p> <p>Evidence:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Verbal Confirmation <input type="checkbox"/> Environmental Noise Survey for Sasol Sasolburg, Steam Station 2, SGEPP, Sasol One, Midlands & Bunsen Area by Gijima (Ref no: 24539 Rev 01-report number: SO-env-1075 (Sasolburg Operations, December 2022). 	<p>Sasol is recommended to amend this condition to reflect the frequency of conducted noise surveys.</p> <p>Timeframe:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Medium term: 6-12 months 	<p>As per regulation 36, change in operational condition was noted to the auditor prior to the Audit commencing. This constitutes a change in the impact management action.</p> <p>Perimeter noise surveys must be conducted when a noise complaint is received by the community.</p>

The Audit report noted sufficient mitigation of environmental impacts and level of compliance to the Environmental Authorisation and Environmental Management Program (EMPr).

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 mitigation 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.

Yours faithfully,

Signed by: Johann Van Wyk
Signed at: 2024-11-29 12:39:38 +02:00
Reason: I approve

Johann Van Wyk

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Annexure A

Audit report.

Recommissioning of Boilers at Steam Station One– ref (12/12/20/1549)



Sasol South Africa Ltd

**RECOMMISSIONING OF BOILERS
ENVIRONMENTAL AUTHORISATION (REF. NO:
12/1 2/20/1549/AM2) AND ENVIRONMENTAL
MANAGEMENT PROGRAMME AUDIT**

Compliance Audit Report: November 2018 -
October 2023





Sasol South Africa Ltd

**RECOMMISSIOING OF BOILERS
ENVIRONMENTAL AUTHORISATION (REF.
NO: 12/1 2/20/1549/AM2) AND
ENVIRONMENTAL MANAGEMENT
PROGRAMME AUDIT**

**Compliance Audit Report: November 2018 - October
2023**

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PROJECT NO. 41106358

DATE: NOVEMBER 2023



Sasol South Africa Ltd

RECOMMISSIOING OF BOILERS ENVIRONMENTAL AUTHORISATION (REF. NO: 12/1 2/20/1549/AM2) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT

**Compliance Audit Report: November 2018 - October
2023**

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
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Signature				
Checked by	Tshepho Mamashela	Tshepho Mamashela		
Signature				
Authorised by	Anri Scheepers	Anri Scheepers		
Signature				
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APPENDIX A

AUDITOR CVS

1 INTRODUCTION

1.1 TERMS OF REFERENCE

WSP Group Africa (Pty) Ltd (WSP), as an independent environmental consultant, was appointed by Sasol South Africa Ltd (Sasol) acting through its Sasolburg Operations, to undertake an external environmental compliance audit of the commitments contained in the Environmental Authorisation (EA) (reference number 12/1 2/20/1549) for the Recommissioning of Boiler number four and one boiler at Steam Station One (SSO) and the Environmental Management Programme (EMPr), as well as to compile an audit report according to the requirements of the National Environmental Management Act (No. 107 of 1998) (NEMA)..

The details of the EA (initial Record of Decision (RoD)), its amendment and the EMPr audited for compliance of the Recommissioning of Boilers at SSO at the Sasol One Site are provided below:

- EA for the Recommissioning of Boilers at SSO (on the Sasol One site) in Sasolburg (reference number: 12/1 2/20/1549), dated 04 August 2009 and issued to Sasol by the then Department of Environmental Affairs (DEA) (now known as Department of Forestry, Fisheries and the Environment (DFFE));
- The amendment of the EA for the conversion of Recommissioning of Boilers at SSO (on the Sasol One site) in Sasolburg (reference number: 12/1 2/20/1549/AM1), dated 08 May 2018 and (reference number: 12/1 2/20/1549/AM2) dated 28 May 2021 issued to Sasol the DFFE. The amendments include:
 - Change of the project description;
 - Change of the holder's details on the EA;
 - Holder's name
 - Contact details and address
 - Change of contact person.
- EMPr included in the Environmental Impact Assessment and Management Programmes (reference number: EMB/24(A)1(A)/08/114).

1.2 SASOL SASOLBURG – RECOMMISSIONING OF BOILERS

The boilers and generators at Steam Station One, Sasol are used primarily to produce steam to generate electricity from turbines and was commissioned as from 1964 to 1965 (**Table 1-1**).

Table 1-1 - Boiler commissioning dates

Boiler	Date
Boiler 1	1954
Boiler 2	1954
Boiler 3	1955

Boiler 4	1955
Boiler 5	1960
Boiler 6	1963
Boiler 7	1964
Boiler 8	1965

To generate steam from the boilers, coal from the bunkers is utilised as feedstock. The coal is transported from the coal mine via conveyor belts, silos and bunkers.

These boilers can deliver up to 145 t/h of steam on a continuous basis. This generated steam will be used either in the plant as process steam or will be used to generate electricity.

1.3 PROJECT TEAM

Tshepho Mamashela and Matilda Mbazo completed a site inspection of the Recommissioning of Boilers against the EA conditions (reference: 12/1 2/20/1549) at the Sasol One site on **30 October 2023**.

The draft external audit report was compiled in November 2023 and finalised in January 2024. The report was then submitted to the DFFE, 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 1-2** and Curricula Vitae are included as **Appendix A**.

Table 1-2 - 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.
Matilda Mbazo	Auditor	BSc (Hons) Geography
		Matilda graduated from the University of Wits 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.

Audit Team	Role	Experience
		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 conversion of the Recommissioning of Boilers at SSO, 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 SSO, Sasol One site.

The objective of the audit was to:

- Assess the level of compliance with the commitments of the EA for the Recommissioning of Boilers;
- Assess the level of compliance with the commitments of the EMPr that was submitted as part of the EIA for the Recommissioning of Boilers, as agreed and approved by DFFE;
- Assess the extent to which the avoidance, management and mitigation measures provided for in the EMPr for the operation of the propylene 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 Recommissioning of Boilers 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.	Sub-section 1.3 and CV's provided in Appendix A
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 Section 4
3(a)	The environmental audit report must determine (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	Section 4
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.	Section 4
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	Section 4
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.	Sub-section 1.3 CVs provided in Appendix A
b	A declaration that the independent auditor is independent in a form as may be specified by the competent authority.	Sub-section 9
c	An indication of the scope of, and the purpose for which, the environmental audit report was prepared.	Sub-section 1.1 and Section 2

Sub-Section	Requirement	Report Section Reference
d	A description of the methodology adopted in preparing the environmental audit report.	Section 3
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.	Section 4
f	A description of any assumptions made, and any uncertainties or gaps in knowledge.	Sub-sections 0 and 2.2
g	A description of any consultation process that was undertaken during the course of carrying out the environmental audit report.	Sub-section 3.2
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 cited was onsite observations and verbal confirmation, these findings were 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

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/EMPr 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
- Vicky Ngobese

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: 12/12/20/1549/AM1) and (Ref no: 12/12/20/1549/AM2) by DFFE dated 08 May 2018 and 28 May 2021;
- Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1) dated 01 April 2019;
- Sasolburg and Ekandustria Operations Annual Emission Report (August 2023) 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.
- Environmental Noise Survey for Sasol Sasolburg (ref no:24539 Rev 01 SR) BY Gijima dated 23,27 and 30 May 2019
- Waste Management and Disposal Registers;
- Basic Assessment Report: Recommissioning of Boilers dated 07 April 2009.
- Environmental Impact Assessment & Management Programmes: Recommissioning of Boilers at Steam Station one (EM/24(A)1(A)/08/114).
- Water Balance for Sasolburg Operations: Sasol One and Midland Site, Sasolburg dated April 2022.
- Environmental Standards;
- 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 EMPr 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
Compliant (C)	<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>
Non-compliant (NC)	<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"> — Short term: 0 – 6 months. — Medium term: 6 – 12 months. — Long term: 12 - 18 months
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: 12/12/20/1549/AM1 dated 04 August 2009) and Amendment (reference: 12/12/20/1549/AM1 dated 08 May 2018 and 28 May 2021) Audit Findings

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
Scope of Authorisation				
1.1	Authorisation of the activity is subject to the conditions contained in this document, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.	N/A	The Holder of the Authorisation and External Auditor noted this condition.	None.
1.2	The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, and agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.	C	<p>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 behalf is aware that they need to comply with the EA and the EMPr conditions. Induction training was provided to all staff, service provides, contractors and visitors.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal confirmation Staff and visitors training material 	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<ul style="list-style-type: none"> Onsite Observation of staff and visitors training 	
1.3	The activity which is authorised may only be carried out at the property indicated above.	C	<p>The authorised activity is carried out at the property/site indicated within the EA location details.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> EA location details (reference number 12/12/20/1549/AM1) Google Earth Onsite Observation 	None.
1.4	Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be affected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.	C	<p>The Department authorised two amendments to the EA to date.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Amendments of an Environmental Authorisation (Ref no: 12/12/20/1549/AM1) by DFFE dated 08 May 2018 and 28 May 2021 	None.
1.5	The activity must commence within a period of four (4) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.	N/A	<p>Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.</p> <p>The EA was issued in 2009 and the activity commenced within specified time.</p>	None.
1.6	This authorisation does not negate the holder of the authorisation's responsibility to comply with any other	N/A	<p>Noted. This audit did not cover a legal review of compliance of the Recommissioning of Boilers and SSO with all statutory requirements and whether they were in</p>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	statutory requirements that may be applicable to the undertaking of the activity.		possession of all the necessary permits, authorisations or any other official documents.	
Appeal of Authorisation				
1.7	The holder of the authorisation must notify all registered interested and affected party, in writing and within 10 (ten) calendar days of receiving notice of the Department's decision to authorise the activity.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
1.8	The notification referred to in 1.7 must:			
1.8.1	Specify the date on which the authorisation was issued	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited. The authorisation was issued on the 04 th of August 2009.	None.
1.8.2	Inform the interested and affected party of the appeal procedure provided for in Chapter 8 of the regulations; and	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
1.8.3	Advise the interested and affected party that a copy of the authorisation and reasons for decision will be furnished on request.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
Management of the activity				
1.9	The Operational Environmental Management Plan (EMP) for which fulfils the requirements of this			

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
	authorisation must be submitted prior to commencement with the proposed activity. It must be compliant with regulations and address (inter alia) the following:			
1.9.1	Measures to prevent contamination of storm water by any substance used either operational or decommissioning stage, e.g. PCB Oils.	C	<p>There are bunds to ensure that there is no contamination of storm water. The oil on the boiler floor has stationary drip trays that are regularly cleaned, and spill kits close by in case of a spillage. There is no use of PCB Oils during operational phase.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation Verbal Confirmation 	None.
1.9.2	Measures for minimizing air pollution during the operational phase.	C	<p>Particulate matter from the ash is minimised by the electrostatic precipitator (ESP) that acts like filter and abatement in all boilers. There is also water suppression in the ash box to make the ash chalky. Therefore, the measure taken are compliant with the AEL.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated 29 August 2023. 	None.
1.9.3	Measures for noise control during the operational phase to limit the nuisance factor for noise.	C	<p>Recommissioning of boilers is declared a high noise zone as steam exhausts and compressors have high noise levels that do not exceed the limit of 70 dB during daytime but exceeds the 60 dB level during nighttime. Therefore, noise surveys have been amended from biannually to request-based should there be a compliant</p>	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
			<p>or a new development e.g., restaurant, in close proximity. Moreover, double hearing is mandatory on site.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Environmental Noise Survey for Sasol Sasolburg (ref no:24539 Rev 01 SR) BY Gijima dated 23,27 and 30 May 2019. 	
1.9.4	All management and mitigation measures as proposed in the BAR must be implemented as part of the operational phase EMP.	C	<p>The proposed measures in the BAR are implemented as part of the operational EMP.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Basic Assessment Report: Recommissioning of Boilers dated 07 April 2009. Environmental Impact Assessment & Management Programmes: Recommissioning of Boilers at Steam Station one (EM/24(A)1(A)/08/114). 	None.
1.10	The EMP is seen as dynamic document. However, any changes to the approved EMP must be submitted to the authorities for approval before such changes could be affected.	N/A	Noted. No changes have been made to the current EMP.	None.
Commencement of the activity				
1.11	The authorised activity may not commence within thirty (30) days of the date of signature of the authorisation.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
1.11.1	Should you be notified by the minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity unless authorised by the minister in writing.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
1.11.2	Thirty (30) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
Operation of the activity				
1.12	Fourteen (14) days written notice must be given to the Department that the operational phase of the activity will commence.	N/A	Noted. This condition is outside the audit period as the Recommissioning of the boilers has been operational since 2011, therefore not audited.	None.
Site closure and decommissioning				
1.13	Site closure & Decommissioning: Should the use of the facility ever cease or become redundant, the applicant must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time	N/A	Noted. This condition is outside the audit period and refers to a requirement for the decommissioning phase was therefore not audited. Sasol does not plan to cease the SSO facility.	None.
Specific Conditions				
1.14	Changes in the proposal resulting in significant environmental impacts are only permissible if approved in writing by the Department.	N/A	Noted. No changes have been made to the proposal.	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
1.15	Non-compliance with the above conditions must immediately be reported to the Directorate: Environmental Impact Evaluation at the National Department of Environmental Affairs and Tourism.	N/A	Noted. No deviations from the stated conditions within the EA were noted during this audit.	None.
1.16	This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.	N/A	Noted. This audit did not cover a legal review of compliance of the Recommissioning of Boilers and SSO with all statutory requirements and whether they were in possession of all the necessary permits, authorisations or any other official documents.	None.
1.16.1	Relevant legislation that must be complied with by the holder of this authorisation include but is not limited to: a) All provisions of the Occupational Health and Safety Act 1993, (Act 85 of 1993) b) Relevant local authority bylaws and regulations	N/A	Noted.	None.
General				
1.17	A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.	C	Noted. The Auditor noted that the records were kept in good condition onsite, 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. <i>Evidence:</i> ■ Onsite Observation ■ Verbal Communication	None.

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
1.18	Where any of the applicants contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details; the applicant must notify the Department as soon as the applicant knows the detail	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. Mr. Rightwell Laxa Sasol South Africa Limited, operating through its Sasolburg and Ekandustria Operations P.O. Box 1 Sasolburg 1947	None.
1.19	The holder of the authorisation must notify the Department, in writing and within 24 (twenty-four) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act 1998 and the regulations.	N/A	Noted.	None
1.20	National Government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant 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 applicant with the conditions of authorisation as set out in this document or any or any other subsequent document emanating from these conditions of authorisation.	N/A	Noted.	None.



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 EIA and Management Program for the Recommissioning of Boilers Project at the Steam Station One on the Sasol One site in Sasolburg, unknown date.

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)
Operational Phase								
Electricity								
a.	Monitoring on stack emissions and reporting with regard to relevant legislative requirements	C	<p>There are dust monitors on every boiler to regulate and keep record of emissions with regard to relevant legislative AEL requirements. The AEL compliance monitoring is conducted annually.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none">Onsite ObservationAir Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1)	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"> Sasolburg & Ekandustria Operations: Ekandustria Site (AEL No: 9/16/1/2/10/R) Annual Emission Report dated 29 August 2023. 					
b.	Monitoring on effluent discharge / re-use and reporting with regard to relevant legislation	C	<p>Ash water which is treated as effluent discharge is sent to the effluent control dam. There is an ash plant at the Utilities facility where all Sasol's generated ash is recovered, and the water is re-used.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation Verbal Confirmation Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022). 	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)
c.	Noise surveys to be conducted - reduce noise impact were identified.	NC	<p>The perimeter noise survey for 2019 indicated that the SSO exceeds the 60 dB night levels. However, Sasol states that it might be influenced by passing traffic. Therefore, SSO does not conduct noise surveys unless there is an incident/complaint, or when a new development takes place e.g., restaurant. The only residential area close to Sasol One boundary is along the southern side of the factory. There is no residential area close to these measuring points, thus the measured boundary noise will not cause any annoyance or disturbance.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Environmental Noise Survey for Sasol Sasolburg, Steam Station 2, SGEPP, Sasol One, Midlands & Bunsen Area by Gijima (Ref no: 24539 Rev 01) 	<p>Sasol is recommended to amend this condition to reflect the frequency of conducted noise surveys.</p> <p><i>Timeframe:</i></p> <ul style="list-style-type: none"> Medium term: 6-12 months 	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)
			SR) dated 23,27 and 30 May 2019.					
d.	Fine waste to be kept contained/ wet to prevent dispersion into the atmosphere	C	<p>Ash water which is treated as effluent discharge is sent to the effluent control dam. There is an ash plant at the Utilities facility where all Sasol's generated ash is recovered, and the water is re-used.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation Verbal Confirmation Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022). 	None.	N/A	N/A	N/A	N/A
e.	Run-off water management to prevent contamination of storm drains - Contaminated runoff to approved facilities only	C	Effluent and potentially contaminated storm water from SSO eventually drains into the Clear Ash Effluent channels (CAE) leading into Mark 3 Dam (control effluent dam) which is an	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>approved facility within Sasol.</p> <p>Evidence:</p> <ul style="list-style-type: none"> Verbal Confirmation Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022). 					
	Energy output programme and usage by Sasol one complex to be compiled and monitored	C	<p>Sasolburg Operations energy footprint is monitored monthly.</p> <p>Evidence:</p> <ul style="list-style-type: none"> Sasolburg Operations Energy Footprint for financial year 2023. 	None.	N/A	N/A	N/A	N/A
Monitoring								
	Monitoring of emissions results - report against legislative requirements	C	Sasol is compliant with the emission concentration as per its AEL requirement, which is aligned with the Minimum Emission Standards. Monitoring	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>against the AEL is conducted annually.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> ■ Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1). ■ Sasolburg and Ekandustria Operations Annual Emission Report (August 2023) to ensure compliance with the AEL conditions. 					
	Scrubber/filter systems to be installed should it be determined by relevant results & risk assessment.	N/A	<p>Particulate matter from the ash is minimised by the electrostatic precipitator (ESP) that acts like filter and abatement in all boilers. There is also water suppression in the ash box to make the ash chalky. Therefore, the measure taken are compliant with the AEL and no risks are identified to recommend scrubber/filter systems.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> ■ Onsite Observation 	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"> Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated August 2023. 					
	Modulation of monitored results should non-conformance occur	C	<p>Annual sampling is conducted by independent third-party service providers Skyside Environmental Services. A modulation of sampling results is generated should a non-conformance occur.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated August 2023 	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)
	Operational procedures to clearly specify acceptable operational requirements and emissions	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore there is no need to monitor environmentally.	It is recommended that Sasol amends the EIA and Management Programme to remove this condition.	N/A	N/A	NA	N/A
	Maintenance schedule of equipment to be in place and monitored.	C	Statutory maintenance on the equipment is conducted every 3 to 4 years and closely monitored. <i>Evidence:</i> ■ Verbal Confirmation	None	N/A	N/A	N/A	N/A
	Training of operators and personnel on operational procedures, environmental degradation and emergency procedures.	C	Sasol has mandatory environmental and operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file	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>in the control room for each emergency.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 					
	Investigate quality of coal used in processes to determine sulfur compound emissions.	C	<p>The quality of coal differs from various service providers. The quality of coal is investigated through calculations to determine the sulphur content.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Sasol Sulphur in Coal calculations 	None.	N/A	N/A	N/A	N/A
Sampling								
.	Salt & water balance to be compiled and monitored.	C	<p>Salt and water balance monitoring is conducted as part of compliance with the integrated WUL (04/C22K/FG/3597).</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"> Water Balance for Sasolburg Operations: Sasol One and Midland Site, Sasolburg dated April 2022. 					
	Storm water drains to be clearly marked to prevent contamination.	C	<p>The stormwater drains are marked with green paints on drain covers for easy identification. However, the green paint is rapidly fading due to the nature of the plant as it works with coal and due to high traffic.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	<i>OFI:</i> It is recommended that Sasol explores tape marking or a different type of paint for the stormwater drains that can withstand the nature of the plant.	N/A	N/A	N/A	N/A
	Effluent water only to approved facility - investigate re-use of water in industrial process.	C	<p>Effluent and potentially contaminated storm water from SSO eventually drains into the Clear Ash Effluent channels (CAE) leading into Mark 3 Dam (control effluent dam) which is an approved facility within Sasol.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation 	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"> Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022). 					
	Training of operators & personnel on operational procedures, environmental degradation & emergency situations.	C	<p>Sasol has mandatory environmental and operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file in the control room for each emergency.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 	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)
	Monitor of quality and quantity of effluent - report against legislative requirements	C	<p>Monitoring of effluent is conducted by the Utilities department. Sasol has a written Site Procedure for sampling that was provided during the water use compliance audit against legislative requirement in the WUL.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Sasol South Africa - Sasolburg Operations Sasol South Africa (Pty) Ltd External Water Use Licence Audit Water Use Licence: 14/C22K/FG/4958 by MDT Environmental dated 01 June 2023. 	None.	N/A	N/A	N/A	N/A
	Clean & dirty water streams to be clearly marked & covered to prevent contamination & re-contamination.	C	<p>Stormwater streams are marked with green cover lid to separate and easily identify clean runoff from dirty runoff and prevent contamination.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	<i>OFI:</i> It is recommended that Sasol regularly paints the cover lids as the green marking appeared to fade.	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)
1. AIR Permit								
a.	Identification of applicable legislative requirements from government spheres.	C	<p>The AEL issued by Fezile Dabi District Municipality is per legislative requirements stipulated in terms of section 40 (as read with Section 47) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of listed activity No. 6.1 which are applicable to the Recommissioning of Boilers' EA.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1) dated 01 April 2019. 	None.	N/A	N/A	N/A	N/A
b.	Identification of applicable permit/licence/Environmental Authorization requirement.	C	The AEL issued by Fezile Dabi District Municipality is per legislative requirements stipulated in terms of section 40 (as read with Section 47) of the National Environmental	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>Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of listed activity No. 6.1 which are applicable to the Recommissioning of Boilers' EA.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> ■ Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1) dated 01 April 2019. 					
c.	Incorporation of identified applicable legislative into site specific legal register.	C	<p>The AEL issued by Fezile Dabi District Municipality is per legislative requirements stipulated in terms of section 40 (as read with Section 47) of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("the Act"), in respect of listed activity No. 6.1 which are applicable to the Recommissioning of Boilers' EA.</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"> Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1) dated 01 April 2019. 					
d.	Update as & when changes to legislative requirements occur	N/A	Noted. No changes have been made to the current AEL.	None.	N/A	N/A	N/A	N/A
e.	Evaluation of compliance to identified legislative requirements	C	This report serves an evaluation of compliance to identified legislative requirements.	None.	N/A	N/A	N/A	N/A
2. DWAF Permit								
b.	Identification of applicable permit/licence/Environmental Authorization requirement	C	<p>The WUL issued by DWAF is per legislative requirements which are applicable to the Recommissioning of Boilers' EA.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> WUL (Ref no : 14/C22K/FG/4958) dated January 2019 	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)
c.	Incorporation of identified applicable legislative into site specific legal register	C	<p>The WUL issued by DWAF is per legislative requirements which are applicable to the Recommissioning of Boilers' EA.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> WUL (Ref no : 14/C22K/FG/4958) dated January 2019. 	None.	N/A	N/A	N/A	N/A
d.	Update as & when changes to legislative requirements occur	N/A	Noted. No changes have been made to the current AEL.	None.	N/A	N/A	N/A	N/A
Relieve Valves								
a.	Monitoring of emissions results - report against legislative requirements.	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore there is no need to monitor environmentally.	It is recommended that Sasol amends the EIA and Management Programme to remove this condition.	N/A	N/A	NA	N/A
	Scrubber/filter systems to be installed should it be determined	N/A	Noted. The relieve valves at Steam Stations is steam	It is recommended	N/A	N/A	NA	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)
	by relevant results & risk assessments		related – no emissions other than water therefore there is no need to monitor environmentally.	that Sasol amends the EIA and Management Programme to remove this condition.				
	Modulation of monitored results should non-conformance occur	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore there is no need to monitor environmentally.	It is recommended that Sasol amends the EIA and Management Programme to remove this condition.	N/A	N/A	NA	N/A
	Operational procedures to clearly specify acceptable operational requirements and emissions	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore there is no need to monitor environmentally.	It is recommended that Sasol amends the EIA and Management Programme to remove this condition.	N/A	N/A	NA	N/A
	Maintenance schedule of equipment to be in place and monitored	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore	It is recommended that Sasol amends the EIA	N/A	N/A	NA	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)
			there is no need to monitor environmentally.	and Management Programme to remove this condition.				
Stacks								
	Training of operators and personnel on operational procedures, environmental degradation and emergency procedures	C	<p>Sasol has mandatory environmental and operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file in the control room for each emergency.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 	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)
g.	Investigate quality of coal used in processes to determine sulfur compound emissions.	C	<p>The quality of coal differs from various service providers. The quality of coal is investigated through calculations to determine the sulphur content.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Sasol Sulphur in Coal calculations 	None.	N/A	N/A	N/A	N/A
a.	Monitoring of emissions results - report against legislative requirements	C	<p>Sasol is compliant with the emission concentration as per its AEL requirement, which is aligned with the Minimum Emission Standards. Monitoring against the AEL is conducted annually.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1). Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL 	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)
			no: 9/16/1/2/10/R) Annual Emission Report dated August 2023.					
b.	Scrubber/filter systems to be installed should it be determined by relevant results & risk assessment	N/A	<p>Particulate matter from the ash is minimised by the electrostatic precipitator (ESP) that acts like filter and abatement in all boilers. There is also water suppression in the ash box to make the ash chalky. Therefore, the measure taken are compliant with the AEL and no risks are identified to recommend scrubber/filter systems.</p> <p>Evidence:</p> <ul style="list-style-type: none"> Onsite Observation Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated August 2023. 	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)
	Modulation of monitored results should non-conformance occur	C	<p>Annual sampling is conducted by independent third-party service providers Skyside Environmental Services. A modulation of sampling results is generated should a non-conformance occur.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated 29 August 2023. 	None.	N/A	N/A	N/A	N/A
	Operational procedures to clearly specify acceptable operational requirements and emissions	N/A	Noted. The relieve valves at Steam Stations is steam related – no emissions other than water therefore there is no need to monitor environmentally.	It is recommended that Sasol amends the EIA and Management Programme to remove this condition.	N/A	N/A	NA	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)
	Maintenance schedule of equipment to be in place and monitored	C	<p>Statutory maintenance on the equipment is conducted every 3 to 4 years and closely monitored.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation 	None.	N/A	N/A	N/A	N/A
	Training of operators and personnel on operational procedures, environmental degradation and emergency procedures	C	<p>Sasol has mandatory environmental and operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file in the control room for each emergency.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 	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)
	Investigate quality of coal used in processes to determine sulfur compound emissions.	C	<p>The quality of coal differs from various service providers. The quality of coal is investigated through calculations to determine the sulphur content.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Sasol Sulphur in Coal calculations 	None.	N/A	N/A	N/A	N/A
Hydraulic Test								
	Salt & water balance to be compiled and monitored on a monthly basis	C	<p>Salt and water balance monitoring are conducted as part of compliance with the integrated WUL (04/C22K/FG/3597).</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Water Balance for Sasolburg Operations: Sasol One and Midland Site, Sasolburg dated April 2022. 	None.	N/A	N/A	N/A	N/A
	Storm water drains to be clearly marked to prevent contamination	C	The stormwater drains are marked with green paints on drain covers for easy	OFI: It is recommended that Sasol	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>identification. However, the green paint is rapidly fading due to the nature of the plant as it works with coal and due to high traffic.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	explores tape marking or a different type of paint for the stormwater drains that can withstand the nature of the plant.				
c.	Effluent water only to approved facility - investigate re-use of water in industrial process	C	<p>Effluent and potentially contaminated storm water from SSO eventually drains into the Clear Ash Effluent channels (CAE) leading into Mark 3 Dam (control effluent dam) which is an approved facility within Sasol.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022). 	None.	N/A	N/A	N/A	N/A
d.	Training of operators & personnel on operational	C	Sasol has mandatory environmental and	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)
	procedures, environmental degradation & emergency situations		operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file in the control room for each emergency. <i>Evidence:</i> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 					
e.	Monitor of quality and quantity of effluent - report against legislative requirements	C	Monitoring of effluent is conducted by the Utilities department. Sasol has a written Site Procedure for sampling that was provided during the water use compliance audit against legislative requirement in the WUL. <i>Evidence:</i>	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"> Sasol South Africa - Sasolburg Operations Sasol South Africa (Pty) Ltd External Water Use Licence Audit Water Use Licence: 14/C22K/FG/4958 by MDT Environmental dated 01 June 2023. 					
	Clean & dirty water streams to be clearly marked & covered to prevent contamination & re-contamination.	C	<p>Stormwater streams are marked with green cover lid to separate and easily identify clean runoff from dirty runoff and prevent contamination.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	OF: It is recommended that Sasol regularly paints the cover lids as the green marking appeared to fade.	N/A	N/A	N/A	N/A
Liquid Effluent								
	Salt & water balance to be compiled and monitored on a monthly basis	C	<p>Salt and water balance monitoring are conducted as part of compliance with the integrated WUL (04/C22K/FG/3597).</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Water Balance for Sasolburg Operations: 	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)
			Sasol One and Midland Site, Sasolburg dated April 2022.					
b.	Storm water drains to be clearly marked to prevent contamination	C	<p>The stormwater drains are marked with green paints on drain covers for easy identification. However, the green paint is rapidly fading due to the nature of the plant as it works with coal and due to high traffic.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	<i>Of:</i> It is recommended that Sasol explores tape marking or a different type of paint for the stormwater drains that can withstand the nature of the plant.	N/A	N/A	N/A	N/A
c.	Effluent water only to approved facility - investigate re-use of water in industrial process	C	<p>Effluent and potentially contaminated storm water from SSO eventually drains into the Clear Ash Effluent channels (CAE) leading into Mark 3 Dam (control effluent dam) which is an approved facility within Sasol.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Integrated Water and Waste Management Plan (IWWMP) Rev 1 – 	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)
			report number: SO-env-1075 (Sasolburg Operations, December 2022).					
d.	Training of operators & personnel on operational procedures, environmental degradation & emergency situations	C	<p>Sasol has mandatory environmental and operational training and induction before commencement of any work by staff, contractors, service providers or entrance of visitors. An emergency preparedness and response plan were developed and kept on file in the control room for each emergency.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Online Induction Training Staff training material and registers. Onsite observation. 	None.	N/A	N/A	N/A	N/A
e.	Monitor of quality and quantity of effluent - report against legislative requirements	C	Monitoring of effluent is conducted by the Utilities department. Sasol has a written Site Procedure for	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>sampling that was provided during the water use compliance audit against legislative requirement in the WUL.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Sasol South Africa - Sasolburg Operations Sasol South Africa (Pty) Ltd External Water Use Licence Audit Water Use Licence: 14/C22K/FG/4958 by MDT Environmental dated 01 June 2023. 					
f	Clean & dirty water streams to be clearly marked & covered to prevent contamination & re-contamination.	C	<p>Stormwater streams are marked with green cover lids to separate and easily identify clean runoff from dirty runoff and prevent contamination.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 	OF: It is recommended that Sasol regularly paints the cover lids as the green marking appeared to fade.	N/A	N/A	N/A	N/A
Solid Waste								
	Demarcated & bunded areas provided where adequate clearly	C	The boilers at SSO have demarcated and bunded	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)
	marked waste containers with lids are provided		<p>areas with marked and colour coded waste containers with lids in close proximity.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation 					
	Classify waste according to waste class and ensure waste are disposed of correctly by register waste contractor	C	<p>The auditor identified that there are demarcated areas for different types of waste that are classified accordingly. All waste is disposed of through the Hub system by a registered waste contractor as per minimum requirements on Waste Disposal as published by DWAF.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Onsite Observation Verbal Confirmation Waste manifests and certificates. 	None.	N/A	N/A	N/A	N/A
c	Provide employee training in waste handling and disposal of spill response	C	Sasol has ensured that all staff working at the Recommissioning of Boilers facility received induction training that	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)
			include H&S and Environmental Management training inclusive of spill response. <i>Evidence:</i> <ul style="list-style-type: none"> Onsite Observation Staff training registers 					
Water Licence								
	Disposal of 5900 tons of ash per month.	C	The auditor was provided with the SAP Task Management for ash calculations. Sasol disposes over 800 tons which is less than the stipulated limit. <i>Evidence:</i> <ul style="list-style-type: none"> SAP Task Management for Ash Calculations for 2023. 	None.	N/A	N/A	N/A	N/A
	Liquid effluent a) Disposal of effluent that is regulated by Water Licence	C	Monitoring and handling of effluent is conducted by the Utilities and Water Works department at Sasol as per the WUL. <i>Evidence:</i>	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"> Sasol Operations Sasol South Africa- External Water Use Licence Audit (Ref no. 14/C22K/FG/4958) by MDT Environmental dated 01 June 2023. Integrated Water and Waste Management Plan (IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022) 					
AEL								
	Emissions into atmosphere.	C	Emissions for SSO operate within the AEL limit values for particulates, NOx and SO2. Legally required audit of the online monitoring system on Boilers 4 to 8 was performed by an accredited third-party laboratory, with parallel measurements taken to statistically evaluate the performance of the online monitoring system. The reports are being	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)
			consolidated and finalised by the Service Provider. <i>Evidence:</i> ■ Sasol South Africa Ltd Sasolburg & Ekandustria Operations: Ekandustria Site (AEL no: 9/16/1/2/10/R) Annual Emission Report dated 29 August 2023.					
Noise								
	The only residential area close to Sasol One boundaries is at the southern side. All calculated continuous daily noise levels were below 70 dB. There is no residential area close to these measuring points, thus no effect.	C	Recommissioning of boilers is declared a high noise zone as steam exhausts and compressors have high noise levels that do not exceed the limit of 70 dB during daytime but exceeds the 60 dB level during nighttime. Therefore, noise surveys have been amended from biannually to request-based should there be a compliant or a new development e.g., restaurant, in close	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>proximity as there is no effect on residential areas.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation Environmental Noise Survey for Sasol Sasolburg (ref no:24539 Rev 01 SR) BY Gijima dated 23,27 and 30 May 2019. 					
Water Use								
	The water permit from Department of Water Affairs and Forestry	C	<p>The recommissioning of Boilers facility operates their water use as per the WUL (Ref no: 14/c22k/FG/4958).</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> Verbal Confirmation WUL (Ref no: 14/c22k/FG/4958). 	None.	N/A	N/A	N/A	N/A

5 PROGRESS AGAINST PREVIOUS AUDIT FINDINGS

In the absence of any prior compliance audit report on the consolidated EA and EMP, this document assumes the role of a foundational benchmark for future comparisons of audit findings.

6 SUMMARY OF THE AUDIT FINDINGS

6.1 SASOL SASOLBURG RECOMMISSIONING OF BOILERS 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
Scope of Authorisation	6	3	0	3
Appeal of Authorisation	4	0	0	4
Management of the activity	5	4	0	1
Commencement of the activity	3	0	0	3
Operation of the activity	1	0	0	1
Site closure and decommissioning	1	0	0	1
Specific Conditions	4	0	0	4
General	4	2	0	2
Total	28	9	0	19
Total Percentage		32%	0%	68%
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.

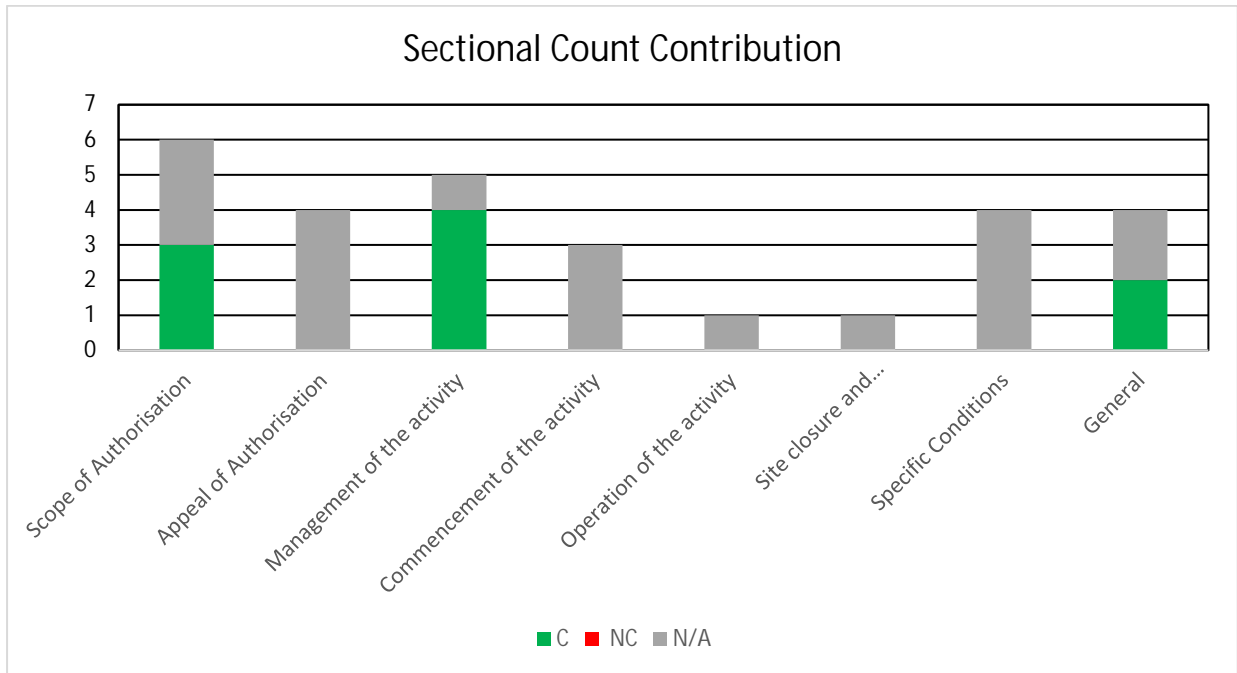


Figure 6-1 - Number/Count contribution of findings made to the EA conditions per section

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

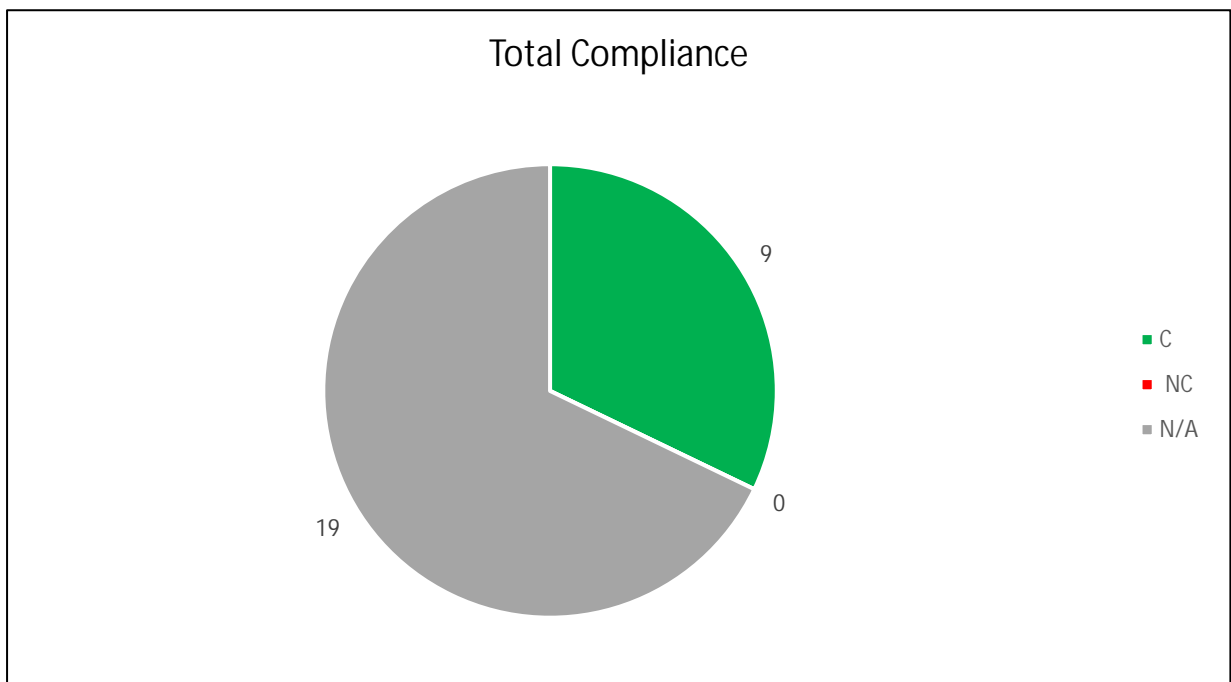


Figure 6-3 illustrates the percentage contribution of the findings of the EA commitments and **Figure 6-4** presents the total percentage compliance for the facility.

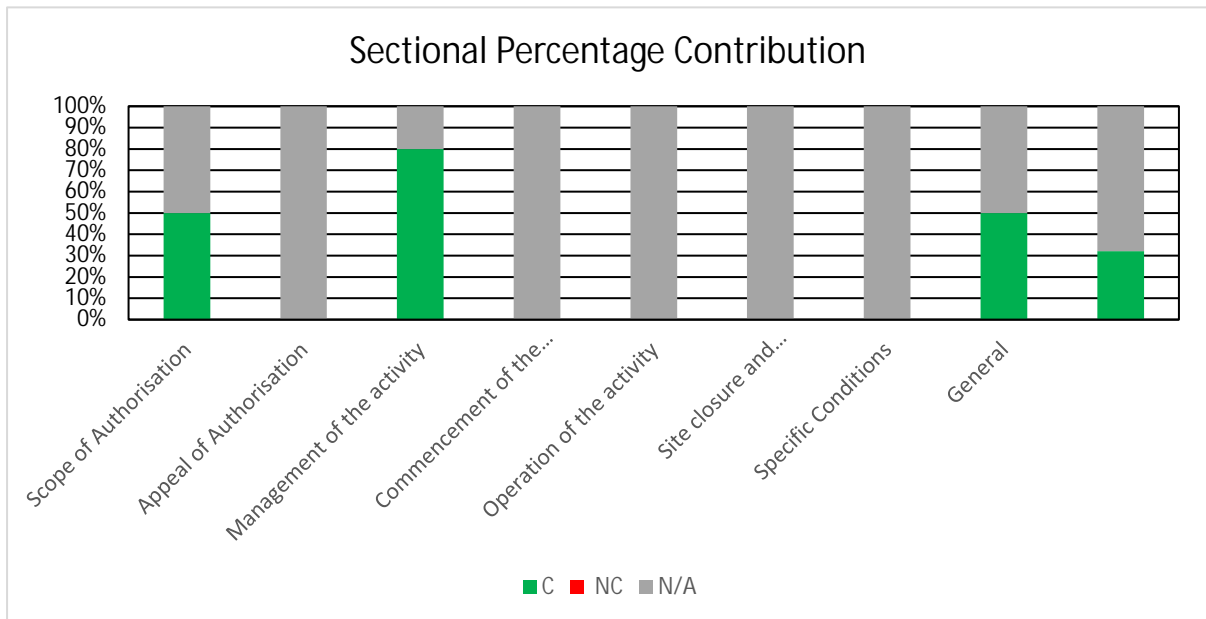


Figure 6-3 - Percentage contribution of findings made to the EA Commitments per Section

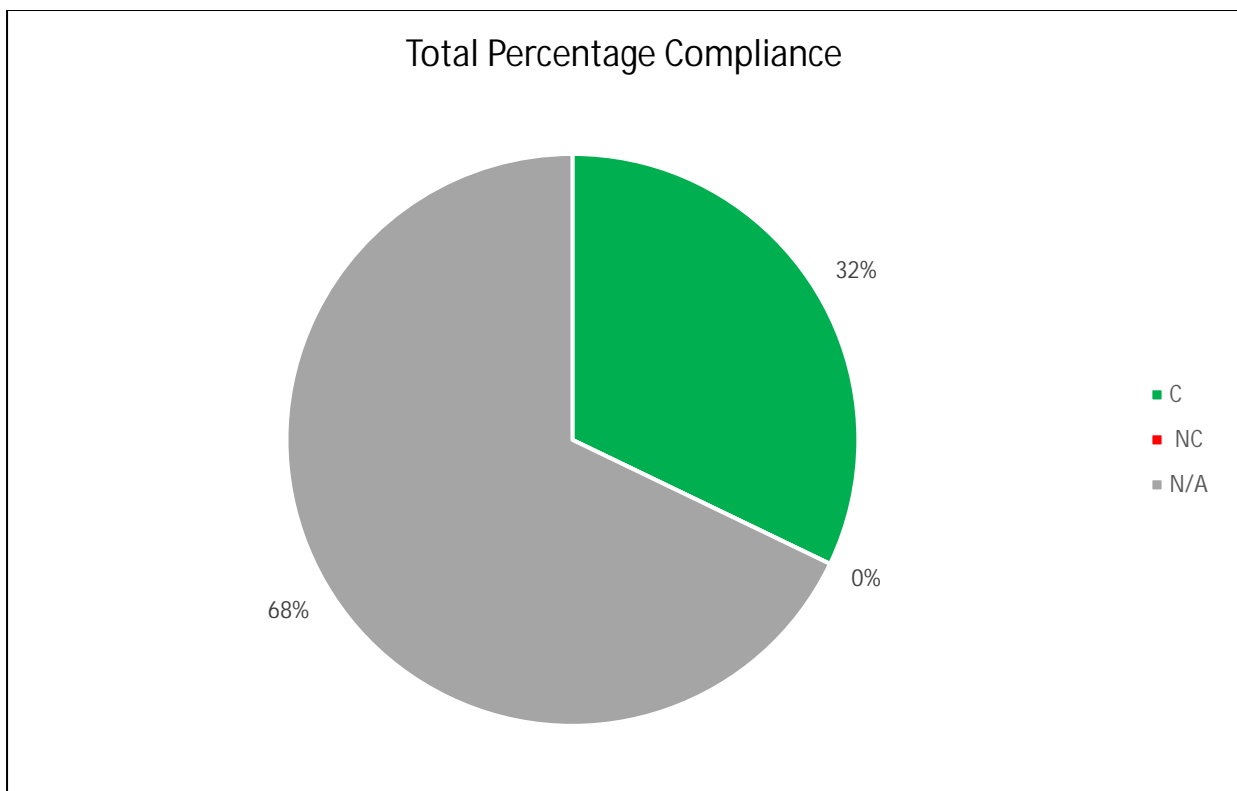


Figure 6-3 - Overall percentage findings on compliance to the EA Commitments

6.2 SASOL SASOLBURG RECOMMISSIONING OF BOILERS 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
Electricity	6	5	1	0
Monitoring	7	5	0	2
Sampling	6	6	0	0
AIR Permit	5	4	0	1
DWAF Permit	3	2	0	1
Relieve Valves	5	0	0	5
Stacks	4	2	0	2
Hydraulic Test	6	6	0	0
Liquid Effluent	6	6	0	0
Solid Waste	3	3	0	0
Water Licence	2	2	0	0
AEL	1	1	0	0
Noise	1	1	0	0
Water Use	1	1	0	0
Total	56	44	1	11
Total Percentage		79%	2%	20%
Percentage Compliance with Applicable Conditions	98%			

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.

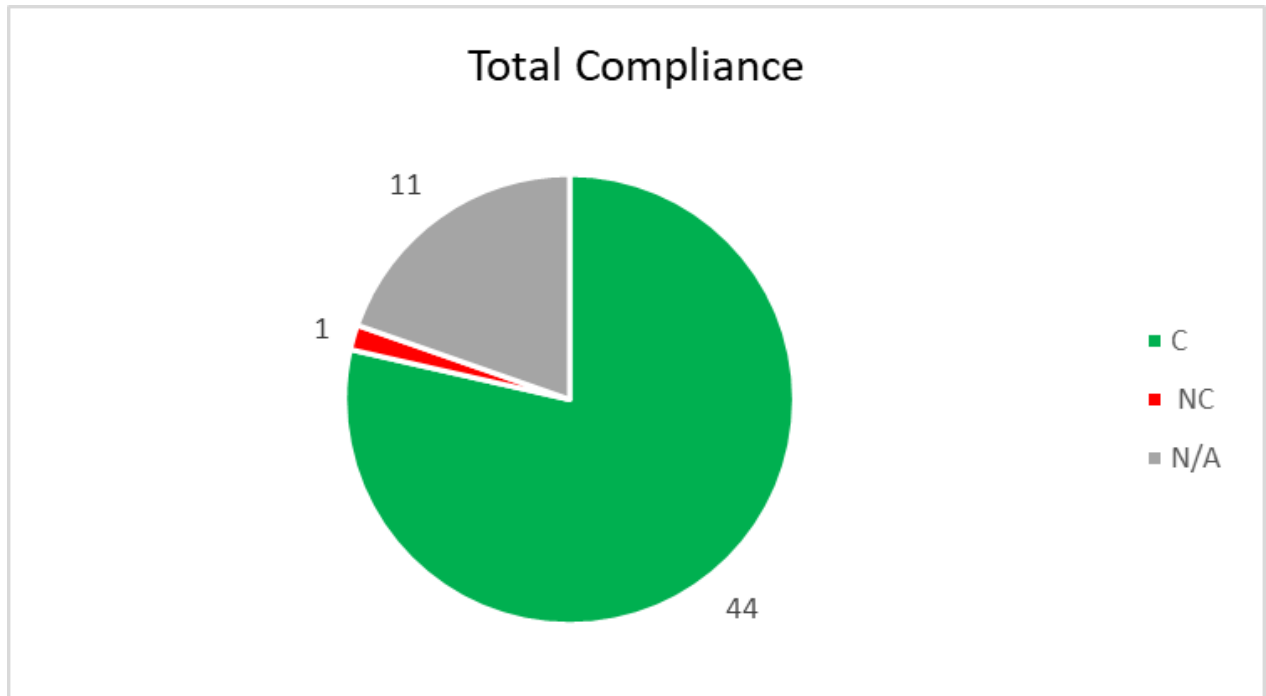


Figure 6-4 - Overall count findings on compliance to the EMPr Commitments

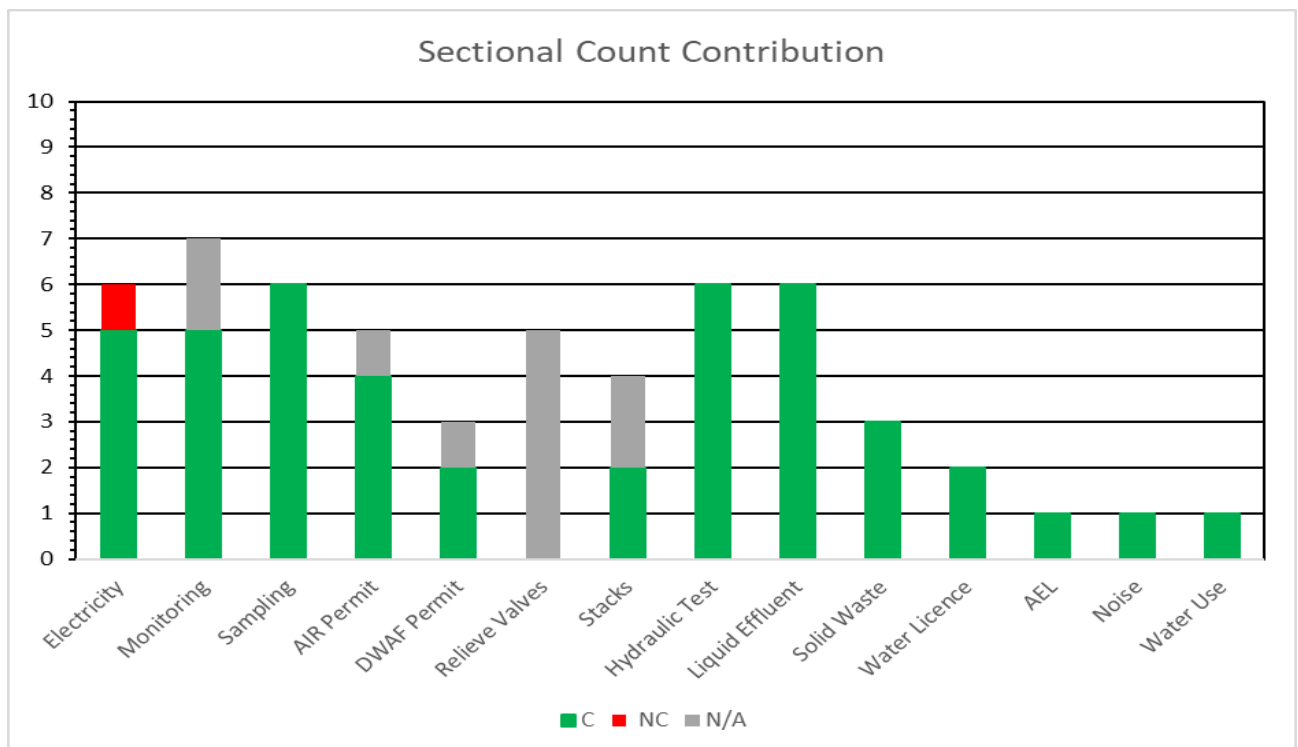


Figure 6-5 - Number/Count contribution of findings made to the EMPr Commitments per Section

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.

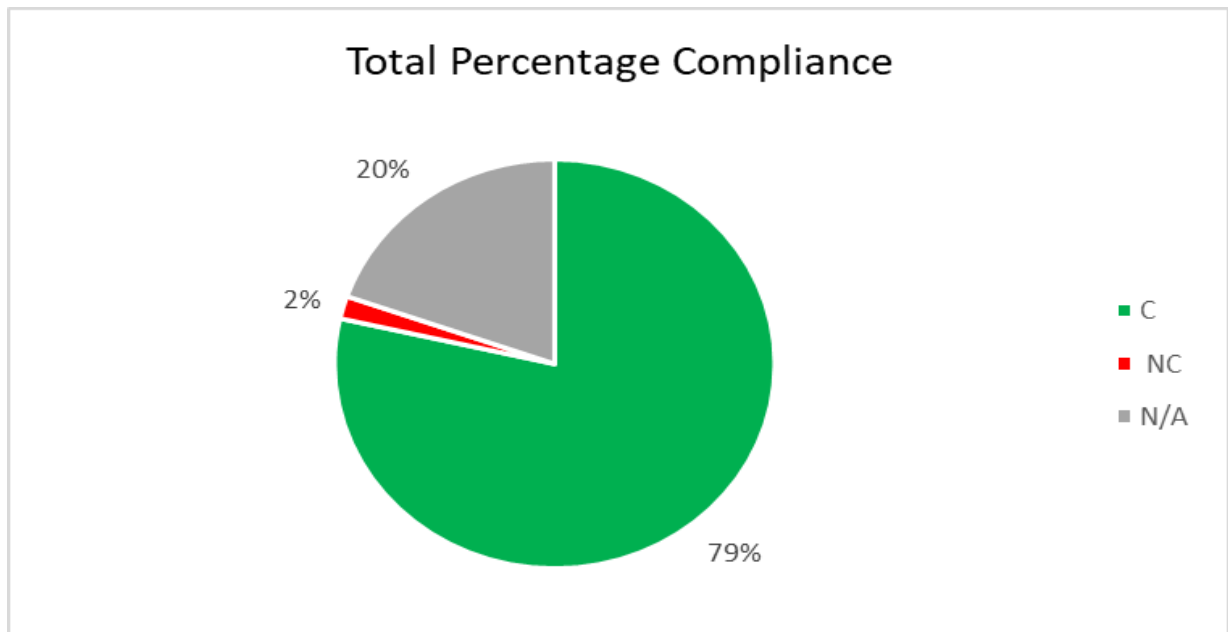


Figure 6-6 - Overall percentage findings on compliance to the EMPr Commitments

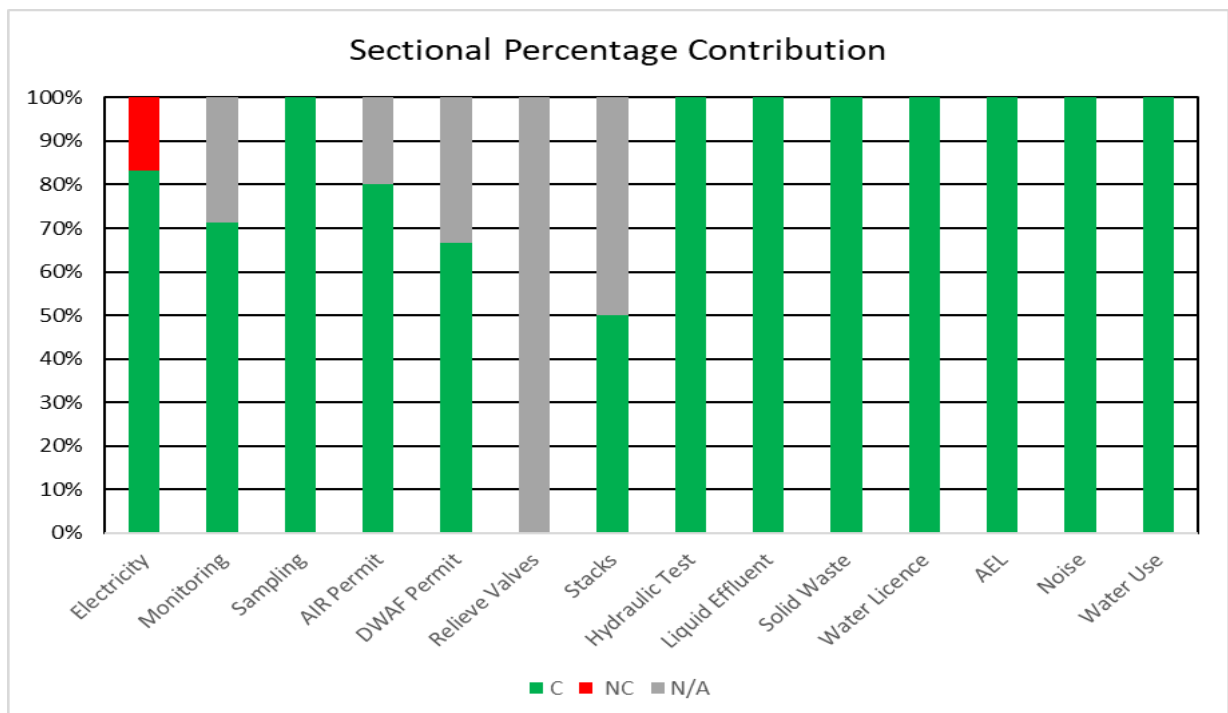


Figure 6-7 - Percentage contribution of findings made to the EMPr Commitments per Section

7 RECOMMENDATIONS

One non-compliance of the EA and EMP conditions was noted during the audit. The recommendation as outlined in **Table 4-1** and **Table 4-2** should be implemented as soon as practicable, and in line with the stated timeframes. Sasol is advised to adhere to implemented recommendations to achieve 100% 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

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

The EMPr compliance audit has identified that the EMPr commitments applicable to the operational phase of the activity (the operation of the boilers) remain applicable. The one non-compliance identified in the EMPr in Electricity should be addressed as per recommendation and within suggested timeframe.

Where applicable, stated recommendations and mitigation measures in the EA and EMPr should be amended based on any new processes and systems that are introduced by Sasol. The EMPr is effective to manage the environmental impacts at Steam Station One.

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 and EMPr audit. This includes implementation of the ISO 14001 standards and the annual audit of each business unit to meet these standards. In addition, the ISO 14001 standards promotes continuous improvement. The recommendations and amendments to the mitigation measures of the EMPr can be implemented through this standard as well.

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 entity to ensure that gaps are addressed through implementation of mitigation measures via the Integrated Management System. In conclusion, WSP considers that Sasol continues to operate each business and process unit under an Environmental Management System to meet its licence compliance conditions (EA, AEL, EMPr, WUL, etc). This is effective to regularly identify new impacts and risks and manage these adequately.

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9 DECLARATIONS

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 the operation of the Sasol Recommissioning of Boilers 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 _____19 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





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.



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.



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	2019
	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



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Annexure B – Recommissioning of Boilers at Steam Station One– ref (12/12/20/1549)

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.

OPERATIONAL PHASE	
ACTIVITY:	ELECTRICITY GENERATION AND BOILER OPERATION
ASPECT:	Environmental impacts affecting total environment resulting in industrial pollution
OBJECTIVE	ACTIONS FOR MITIGATION
Cleaner production through environmental engineering and management system implementation	Monitoring on stack emissions and reporting with regard to relevant legislative requirements
	Monitoring on effluent discharge / re-use and reporting with regard to relevant legislative requirements
	Noise surveys to be conducted when community noise complaints are received or when requested by new development near operations that could be sensitive to noise disturbances
	Fine wastes to be kept contained/wet to prevent dispersion into the atmosphere
	Run-off water management to prevent contamination of storm drains - Contaminated runoff to approved facilities only
ACTIVITY:	OTHER OPERATING ACTIVITIES: MONITORING
ASPECT:	Calibration of emission monitoring equipment
OBJECTIVE	ACTIONS FOR MITIGATION
Improving environmental performance	Monitoring of emission results - report against legislative requirements
	Scrubber/Filter systems to be installed should it be determined by relevant results and risk assessment
	Modulation of monitoring results should non-conformances occur
	Monitoring equipment to be calibrated, calibration register and done by an authorized person
	Operational procedures to clearly specify acceptable operational requirements and emissions
	Maintenance schedule of equipment to be in place and monitored
	Training of operators and personnel on operational procedures, environmental degradation and emergency procedures
	Investigate quality of coal used in processes to determine sulphur compound emission
ACTIVITY:	OTHER OPERATING ACTIVITIES: SAMPLING
ASPECT:	Liquid effluent generated in the process not disposed of correctly; vapour emissions from sampling
OBJECTIVE	ACTIONS FOR MITIGATION
Minimise vapour releases to atmosphere and prevent spillages	Salt and water balance to be compiled and monitored
	Storm water drains to be clearly marked to prevent contamination
	Effluent water only to approved facility - investigate re-use of water in industrial process
	Training of operators and personnel on operational procedures, environmental degradation and emergency situations
	Monitoring of quality and quantity of effluent - report against legislative requirements
	Clean and dirty water streams to be clearly marked and covered to prevent contamination and re-contamination

ACTIVITY:	PERMIT REQUIREMENTS
ASPECT:	(air permit)
OBJECTIVE	ACTIONS FOR MITIGATION
Ensure whether process is a scheduled process	Sasol Operations has a valid Air Emission licence and compliance there to is monitored and reported as per licence requirements
ASPECT:	DWS (Water permit)
OBJECTIVE	ACTIONS FOR MITIGATION
Comply to water permit requirements Process cooling water: Use, evaporation, make-up, blow down Ash water & blow downs to ash water Ash dumped (Coarse & fine ash) Steam, consumption & production Raw water consumption Storm water, oily water, conservation sewer water: Change in quality, quantity, routing and final destination Solid waste produced, quantity, toxicity and final disposal Liquid effluent produced, quantity, toxicity and final disposal Water from the process or rework Groundwater impacts	Sasol Operatins has a valid Water Use licence and compliance there to is monitored and reported as per licence requirements
ACTIVITY:	STACK
ASPECT:	Emissions to atmosphere
OBJECTIVE	ACTIONS FOR MITIGATION
Identify, evaluate, quantify and minimise	Monitoring of emission results - report against legislative requirements Scrubber/Filter systems to be installed should it be determined by relevant results and risk assessment Modulation of monitoring results should non-conformances occur Monitoring equipment to be calibrated, calibration register and done by an authorized person Operational procedures to clearly specify acceptable operational requirements and emissions Maintenance schedule of equipment to be in place and monitored Training of operators and personnel on operational procedures, environmental degradation and emergency procedures Investigate quality of coal used in processes to determine sulphur compound emission
ACTIVITY:	TESTING OF EQUIPMENT: HYDRAULIC TESTING
ASPECT:	Management of used water
OBJECTIVE	ACTIONS FOR MITIGATION
Determine volumes of water to be used Prevent incorrect disposal of effluents	Salt and water balance to be compiled and monitored on a monthly basis Storm water drains to be clearly marked and blocked to prevent contamination Effluent water only to approved facility - investigate re-use of water in industrial process Training of operators and personnel on operational procedures, environmental degradation and emergency situations Monitoring of quality and quantity of effluent - report against legislative requirements Clean and dirty water streams to be clearly marked and covered to prevent contamination and re-contamination
ACTIVITY:	WASTE GENERATED IN THE PROCESS: LIQUID EFFLUENT
ASPECT:	Liquid effluent generated in the process not disposed of correctly
OBJECTIVE	ACTIONS FOR MITIGATION
Identify, evaluate and dispose of responsibly	Salt and water balance to be compiled and monitored on a monthly basis Storm water drains to be clearly marked and blocked to prevent contamination Effluent water only to approved facility - investigate re-use of water in industrial process Training of operators and personnel on operational procedures, environmental degradation and emergency situations Monitoring of quality and quantity of effluent - report against legislative requirements Clean and dirty water streams to be clearly marked and covered to prevent contamination and re-contamination
ACTIVITY:	WASTE GENERATED IN THE PROCESS: SOLID WASTE
ASPECT:	Solid waste generated in the process not disposed of correctly
OBJECTIVE	ACTIONS FOR MITIGATION
Identify, evaluate, quantify and dispose of responsibly	Demarcated and banded areas provided where adequate clearly marked waste containers with lids are provided Classify waste according to waste class and ensure waste are disposed off correctly by registered waste contractor Provide employee training in waste handling and disposal and spill response Monthly inspections during construction on implementation of EMP Requirements - corrective action as required