

Our reference: SO-ENV-1337

29 November 2024

Your Ref: EA nr EM1/1(c) /00/81

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Attention: Deputy Director: Environmental Impact Assessment

ENVIRONMENTAL AUTHORISATION EXTERNAL REPORT SUBMISSION

The Environmental Authorisation applicable for Sasol South Africa Limited, Sasolburg Operations was externally audited during November 2022. The external audit was conducted to comply to the requirement contained in Chapter 5 part 3 of the Environmental Impact Assessment Regulations.

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

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

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 Coal-base to Gas-base Facility with reference EM1/1(c) /00/81 dated May 2023.

Sasolburg and Ekandustria Operations

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

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

No impact management outcome or impact management action requires amendment for the Coal-base to Gas-base Facility.

Yours faithfully Signed by: Johann Van Wyk Signed at:2024-11-29 12:43:10 +02:00 Reason:I approve

Johann Van Wyk

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Sasol South Africa Ltd

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT

Compliance Audit Report: November 2019 - October 2023



Sasol South Africa Ltd

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Sasol South Africa Ltd

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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) to undertake an external environmental compliance audit of the commitments contained in the Environmental Authorisation (EA) (reference number EM1/1(c)/00/81) of the conversion of Sasol Chemical Industries (SCI) from Coal-base to Gas-base facility and the Environmental Management Programme (EMPr), and to compile an audit report according to the requirements of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA).

The details of the EA (initially Record of Decision (RoD)), its amendment and the EMPr audited for compliance of the Coal-base to Gas-base facility at the Sasol One Site are provided below:

- EA for the conversion of the Coal-base to Gas-base facility unit located at the Sasol One site in Sasolburg (reference number: EM1/1(c)/00/81), dated 10 June 2002 and issued to Sasol by the then Department of Tourism, Environmental and Economic Affairs (now the Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA));
- The amendment of the EA for Coal-base to Gas-base facility located at the Sasol One site in Sasolburg (reference number: EM1/1(c)/00/81), dated 29 March 2018 and 14 August 2020 and issued to Sasol by the DESTEA. The amendments include:
 - Change of the brief description of the activity;
 - Change of location;
 - Change of the applicant details on the EA;
 - Owner of the EA
 - Contact details and address
 - Special Conditions
- EMPr for SCI Natural Gas project with unknown date.

1.2 SASOL SASOLBURG – CONVERSION FROM COAL-BASE TO GAS-BASE

The Sasol Chemical Industry (SCI) West plant in Sasolburg currently produces raw gas (consisting of predominantly hydrogen, carbon monoxide and carbon dioxide) from coal. The raw gas is purified to produce pure gas, which is used in the manufacture of a number of products including methanol, waxes, ammonia and various hydrocarbons. Sasol uses natural gas, which consists predominantly of methane, in place of coal in the SCI West plant. The natural gas is used to manufacture reformed gas, which is the equivalent of pure gas. The reformed gas would be used to manufacture of a number of products, including methanol, waxes, ammonia and various hydrocarbons.

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The conversion of SCI West, Sasolburg to natural gas involves discontinuing the plants responsible for producing raw gas, which is produced from coal. Several new plants were required to purify the natural gas and adjust its composition. The key raw material in the process is the change from coal to natural gas. The SCI Natural Gas Project intends to lead to a reduction in atmospheric emissions, solid waste and liquid effluent.

The natural gas to be used at SCI West would be extracted from gas-fields in Mozambique and transported to Sasolburg by underground pipelines. The SCI Natural Gas Project forms one of several components of Sasol's larger Natural Gas Programme, which will involve the extraction of gas from Mozambique and its transportation to Secunda, Gauteng and Sasolburg.

1.3 PROJECT TEAM

Tshepho Mamashela and Matilda Mbazo completed a site inspection of the Coal-base to Gas-base facility against the EA conditions (reference: EM1/1(c)/00/81) at the Sasol One on **24 October 2023**.

The draft external audit report was compiled in October 2023 and finalised in January 2024. This report was submitted to the DETSEA, by Sasol, in 2024.

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

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

Audit Team	Role	Experience	
Tshepho	Auditor	BSc Hons Environmental Management	
Mamashela		6 Years' Experience	
		Tshepho Mamashela is an Environmental Consultant currently working for WSP Group Africa at the Johannesburg, Waterfall office in the Environmental Planning and Advisory Department. She is an Environmental Management professional with over 5 years' experience in the private and public sector. Tshepho has experience in environmental management field with expertise in environmental impact assessment, environmental auditing, environmental management plans. She is registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1846) and the South African Council for Natural Scientific Professions (SACNASP: 120878).	
Matilda Mbazo	Auditor	BSc (Hons) Geography	
		Matilda graduated from the University of Witwatersrand with a BSc honours in Geography in 2023 and is currently completing her MSc in Environmental Science. She has over a year's experience in environmental management and currently provides technical and strategic input on a diverse range project in environmental management and environmental compliance audits. She is a registered Candidate Environmental Assessment Practitioner (EAP) with EAPASA (2023/6394).	
Anri Scheepers	Review	BA (Hons) Geography	
		15 Years' Experience	

Table 1-1 - Details of the Audit Team

Audit Team	Role	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 Coal-base operations to Gas-base operated facility at the Sasol One site, 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 **24 October 2023** at the Sasol One Site, Sasolburg Plant.

The objective of the audit was to:

- Assess the level of compliance with the commitments of the EA for the Coal-base operations to Gas-base operated facility;
- Assess the level of compliance with the commitments of the EMPr that was submitted as part of the Scoping Report for the licensing of the conversion of the Coal-base operations to Gas-base operated facility, as agreed and approved by DESTEA;
- Assess the extent to which the avoidance, management and mitigation measures provided for in the EMPr for the operation of the 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 Environmental Impact Assessment (EIA) Regulations of 2014 (as amended) are considered applicable to the Coal-base operations to Gas-base operated facility 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 of 2014 (as amended). **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 CVs provided in Appendix A
34(2)b	The environmental audit report must provide verifiable findings, in a structured and systematic manner, on:	Audit checklist tables provided in Section 4
	(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,	

Sub- Section	Requirement	Report Section Reference
	management and mitigation of environmental impacts associated with the undertaking of the activity;	
3(a)	The environmental audit report must determine	Section 4
	(a) the ability of the EMPr, and where applicable the closure plan, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis and to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and	
3(b)	The environmental audit report must determine the level of compliance with the provisions of environmental authorisation, EMPr and where applicable, the closure plan.	Section 4
4(a)	Where the findings of the environmental audit report indicate:	Section 4
	(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	
а	Details of-	Sub-section 1.3
	(i) the independent person who prepared the environmental audit report; and	CVs provided in Appendix A
	(ii) the expertise of independent person that compiled the environmental audit report.	
b	A declaration that the independent auditor is independent in a form as may be specified by the competent authority.	Sub-section 9
с	An indication of the scope of, and the purpose for which, the environmental audit report was prepared.	Sub-section 1.1 and Section 2
d	A description of the methodology adopted in preparing the environmental audit report.	Section 3
е	An indication of the ability of the EMPr, and where applicable, the closure plan to-	Section 4
	 (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.	

Sub- Section	Requirement Report Section Reference	
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.

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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 (24 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 **24 November 2023** where findings and observations were recorded and are summarised in **Section 4**. Key personnel interviewed during the audit included:

- Suyen Van Zyl
- Johan van Deventre

3.3 INFORMATION CONSIDERED

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

- Notification: To install Safety Signs at Monomers Plan (Ref: 30645718) dated 29 March 2023
- Amendments of an Environmental Authorisation (Ref no: EM1/1(c)/00/81) dated 18 October 2017 and 14 August 2020;
- Sasol Technology Pty Ltd: Proposed Sasol Chemical Industries (SCI) Natural Gas Project Final Scoping Report (ref no:260293/3) dated January 2001;
- Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1);
- Sasolburg and Ekandustria Operations Annual Emission Report (August 2022) to ensure compliance with the AEL conditions;
- Sasol Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022;
- Environmental Noise Survey for Sasol Sasolburg (ref no:24539 Rev 01 SR) BY Gijima dated 23,27 and 30 May 2019;
- Water Use Licence (WUL) (reference number: 14/C22K/FG/4958);
- Groundwater Quality Monitoring Report: WUL Compliance, Sasolburg Operations: February 2022 (WSP, May 2022);

- 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.
- Procedure for the management of waste on the Sasolburg Operations' Sites (document number: SSP-S-014) (Sasolburg Operations, January 2020);
- The reporting, investigation and recording of environmental incidents (SAP and Isometrix system);
- Waste Management and Disposal Registers; and
- 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 EMPr. 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.

Compliance Level	Definition	
Compliant (C)	When an activity or commitment has been implemented, completed, is on-schedule or is maintained on an ongoing basis.	
	Condition/mitigation measure/commitment has been achieved with evidence provided in the form of a document or site verification.	
	When an activity or commitment has not been complied with in its entirety/certain aspects thereof have not been addressed.	
	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:	
	— Short term: 0 – 6 months.	
	— Medium term: 6 – 12 months.	
	— Long term: 12 - 18 months	

Table 3-1 Levels of Compliance



Not applicable (N/A)	The condition, commitment and/or mitigation measure is not applicable or is to be revised in accordance with current practice.
	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.



4 AUDIT FINDINGS

4.1 ENVIRONMENTAL AUTHORISATION

Table 4-1 below provides the compliance of Sasol with the conditions within the EA and amendments to the EA.

Table 4-1 - Environmental Authorisation (reference: EM1/1(c)/00/81 dated 10 June 2002) and Amendment (reference: EM1/1(c)/00/81 dated 29 March 2018 and 14 August 2020) Audit Findings

Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
Brief d	escription of the Activity	1	'	·
	Sasol South Africa (Pty) Ltd, acting through its Sasolburg Operations produces raw gas (consisting predominantly of hydrogen, carbon monoxide and carbon dioxide) from coal. The raw gas is purified to produce pure gas, which is used in the manufacture of a number of products, including methanol, waxes ,ammonia and various hydrocarbons.	С	Sasol One personnel confirmed that the stated description of the activity is the exact processes at Coal to Gas facility. The scoping report was provided as evidence that further explains the description of the activity. <i>Evidence</i> :	None.
	The proponent proposes to convert the current coal-base production process to a gas-base production process. The proposal will use natural gas which is very similar in chemical composition to synthetic gas. The final products will not change.		 Sasol Technology Pty Ltd: Proposed Sasol Chemical Industries (SCI) Natural Gas Project Final Scoping Report (ref no:260293/3) dated January 2001. Onsite observation Verbal confirmation 	

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Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	
	Work will be done, within Sasol site (starting from the factory's battery limit) on the following farms or part portions of farms: Driefontein No. 2, Farm Infrachem 465, Portion O, Tweespruit 465, Parys RD; Portion O, Saltberry Plain 137, Parys RD; Portion 22, Antrim 923, Heilbron RD; Portion 3, Driefontein 2, Heilbron RD; Portion O, Coalplex 1808, Heilbron RD; Volschenk's dam 213, Heilbron RD Erf 8037, Sasolburg (in Parys); Portion 1, Donkerhoek 323, Parys RD; Portion 6, Herewaarde 409, Parys RD.	С	 The authorised activity is carried out at the amended property/site indicated within the EA location details below: Sasol One site on Farm Infrachem 465 <i>Evidence</i>: Amendment of an EA, location details (ref no: EM1/1(c)/00/81) dated 14 August 2020 Google Earth Onsite Observation 	None.	
pplio	cant				
	Mr. Louis Fourie	С	The applicant was amended to the following:	None.	
	SVP Sasolburg Operations		Mr. Rightwell Laxa		
	Sasol South Africa (Pty) Ltd acting through its Sasolburg Operations		SVP Sasolburg Operations		
	P.O. Box 1,		Sasol South Africa Ltd acting through its Sasolburg Operations		
	SASOLBURG, 1947		P.O. Box 1,		
	Tel: +27 16 960 8001		Sasolburg, 1947		
			Tel: +27 16 960 8001		
peci	al Conditions				
i.	Noise pollution: While noise generation equipment must be fitted with silencers, Sasol will comply with Health and Safety legislation that an overall noise rating level in	С	Sasol personnel confirmed that all operations meet noise standard requirements of less than 85 dB. Staff were	None.	

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Ref.	Ref. Condition		Findings	Recommendation, Timeframe and Responsible Person
	areas where more than one noise source is placed is less than 85 dB.		 required to wear required noise protection PPE when work was conducted in a noisy environment. <i>Evidence</i>: Environmental Noise Survey for Sasol Sasolburg (ref no:24539 Rev 01 SR) BY Gijima dated 23,27 and 30 May 2019. 	
iv.	Y. Safety standards will not be compromised to below current levels. The Health and Safety Act shall be observed.		 General precautionary/safety signages were identified on Coal to Gas site. Sasol Sasolburg has a dedicated Health and Safety department that ensures compliance with the Health and Safety Act. Annual Health and Safety Audits are conducted by internal and external auditors. <i>Evidence</i>: Onsite Observation Verbal Confirmation Training registers PPE registers Health and Safety reports 	None.
V.	v. Socio-economic issues - Job loss as a result of closure of some plants, should be compensated for by, preferential, appropriate placements in new plants like "The Butanol Complex" and "The Acrylates Complex".		Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	<i>OFI</i> : Given the historical nature of this condition, it is questionable if continual compliance to it is necessary. Therefore, it is recommended that Sasol applies for the amendment for the condition to be removed.
vi.	Cumulative Impacts: The results of the cumulative assessment should be provided to the Department of Tourism, Environmental and Economic Affairs	N/A	Noted. No cumulative impacts are associated with the operational phase therefore this condition was not audited.	<i>OFI</i> : Given the historical nature of this condition, it is questionable if continual compliance to it is

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Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
				necessary. Therefore, it is recommended that Sasol applies for the amendment for the condition to be removed.
Standa	ard Conditions			
i.	This authorisation is granted in terms of Section 22 of the environment Conservation Act, 1989 (Act No. 73 of 1989) and does not exempt the holder thereof from compliance with any other relevant legislation.	N/A	Noted.	None.
ii.	This record of decision does not exempt any person from the requirements of any other controlling authority or from any provision of any other law and does not purport to interfere with the rights of any person who may have an interest in the property.	N/A	Noted. This audit scope did not cover a legal review of compliance of the N-base removal unit and SSO with all statutory requirements and whether they were in possession and compliance of all the necessary permits, authorisations or any other official documents.	None.
iii.	One week's notice, in writing must be given to the relevant authority before commencement of construction activities.	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	None.
iv.	The Chief Directorate: Environmental Affairs and Conservation must be notified, within 30 days thereof, of any change of ownership and/or project developer. Conditions imposed on this record of decision must be made known to the new owner and/or developer and are binding on the new owner and/or developer.	N/A	Noted. No change of ownership/project developer has been noted in the audit period.	None.
V.	The Chief Directorate: Environmental Affairs and Conservation must be notified of any change of address of the owner and/or developer	С	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.	None.

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Ref.	Condition Image: Condition		Findings	Recommendation, Timeframe and Responsible Person
			Mr. Rightwell Laxa SVP Sasolburg Operations Sasol South Africa Ltd acting through its Sasolburg Operations P.O. Box 1 Sasolburg 1947	
vi.	 The applicant must, within five (5) calendar days of receipt of this Record of Decision: Inform all interested and affected parties registered during scoping and Impact Assessment processes, of the outcome of this application and, if requested, provide copies of this Record of Decision, including all the conditions attached thereto. Include the date on which the Record of Decision was issued to the applicant in terms of regulation 10(1) and date by which appeals must reach the MEC. 	N/A	Noted. The advertisement of the RoD was considered for the pre-construction and construction phase; this condition is outside the audit period and therefore was not audited.	None.
vii.	The conditions of the authorisation should be brought to the attention of all persons (employees, sub-contractors, etc.) associated with the undertaking of this activity and the applicant shall take such measures necessary to bind such persons to these conditions	С	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. <i>Evidence</i> :	None.

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Ref.	Ref. Condition		Findings	Recommendation, Timeframe and Responsible Person
			Verbal confirmationStaff and visitors training material and registers	
viii.	 All outdoor advertising associated with this activity, whether on or off the property concerned, shall comply with the South African Manual For Outdoor Advertising Control (SAMOAC) available from: The Director: Environmental Impact Management 		Noted. The advertisement of the RoD was considered for the pre-construction and construction phase; this condition is outside the audit period and therefore was not audited.	None.
	Department of Environmental Affairs and Tourism			
	Private Bag X447			
	Pretoria, 0001"			
ix.	The owner and/or the consultant must notify the relevant authority, in writing, if any condition of this authorisation is not adhered to.	N/A	Noted.	None.
x.	Proof of compliance with the conditions described in the RoD must be forwarded to the Chief Directorate: Environmental Affairs and Conservation one week prior to the commencement of construction or operation of the development (as appropriate).		Noted.	None.
xi.	If any condition imposed in terms of this authorization is not being complied with, the authorisation may be withdrawn after 30 days written notice to the applicant in terms of Section 22(4). Failure to comply with any of these conditions shall also be regarded as an offence and may be dealt with in terms of Sections 29, 30 and 31 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) as well as any other appropriate legal mechanism.	N/A	Noted.	None.

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Ref. Condition		Compliance Status	Findings	Recommendation, Timeframe and Responsible Person
xii.	ii. The applicant shall be responsible for all costs necessary to comply with the above conditions unless specified otherwise.		Noted	None.
	Provincial Government, Local Authority or committees appointed in terms of the conditions of the application or any other public authority or organisation shall not be held responsible for any damages or losses suffered by the developer or his successor in title in any instance where construction or operation subsequent to the construction be it temporarily or permanently stopped from reasons of non-compliance by the developer with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of approval.			
	In terms of Section 28A(4) and (5) of the aforesaid Act, any exemption granted may be reviewed and if necessary withdrawn.			
Key Fa	actors for the Decision			
i.	ey Factors for the Decision Unlike synthesis gas, natural gas combustion results in reduced atmospheric emissions of [SO2] sulphur dioxide and particulate matter (currently attributable to unacceptable pollution levels in Sasolburg).		Noted. Sasol acknowledges the noted difference in emissions between natural gas and synthesis gas combustion, specifically the reduced atmospheric emissions of sulphur dioxide (SO2) and particulate matter associated with natural gas.	None.
ii.	In comparison to other fuels, natural gas combustion results in reduced emissions of carbon monoxide, reactive hydrocarbons, nitrogen oxides and carbon dioxide.	N/A	Noted.	None.

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Ref.			Findings	Recommendation, Timeframe and Responsible Person	
iii.			The auditor observed that there is no solid waste generated from the use of natural gas. <i>Evidence</i> : Onsite Observation	None.	
iv.	Natural gas is the most energy efficient fossil fuel.	N/A	Noted.	None.	
V.	The use of natural gas, in place of coal, results in reduced emission of greenhouse gases.	С	 Sasol confirmed that the coal to gas facility has resulted in reduced emissions of greenhouse gases, as intended. <i>Evidence</i>: Sasol Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022. 	None.	
vi.	Environmental disturbance during the development will be minimised.	N/A	Noted. This condition is outside the audit period and refers to a requirement during construction and was therefore not audited.	None.	
vii.	 The proposed project will promote economic development in the region in that: (a) Natural gas will benefit the growth of gas industry in Mozambique, which in turn will promote job opportunities for the SADC region (b) Mozambique will benefit from this project since natural gas will become a significant export of the country, providing much needed revenue to its economy. 		Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited.	<i>OFI</i> : Given the historical nature of this condition, it is questionable if continual compliance to it is necessary. Therefore, it is recommended that Sasol applies for the amendment for the condition to be removed.	

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Ref.	Condition	Compliance Status	Findings	Recommendation, Timeframe and Responsible Person	
Durati	on and date of expiry		-	-	
	This permit is valid for as long as:-a) Development shall have started within 5 years from the date of issue of this Record of Decision	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited. The RoD was issued in 2002 and operation commenced in 2004.	None.	
	This permit is valid for as long as:- b) The development does not pose itself as an environmental hazard.		 The Auditor observed that the Coal to Gas facility does not pose an environmental hazard. <i>Evidence</i>: Verbal Confirmation Onsite Observation Incident register and complaints register. 	None.	
Appea	l				
	Should this record of decision be queried, an appeal under section 35(3) of the Act, may be done in writing within 30 (thirty) days from the date on which this record of decision was advertised and must be directed to: The MEC: Department of Environmental Affairs and Tourism	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited. The facility was operational.	None.	
	Free State Province				
	P. O. Box 264				
	Bloemfontein				
	9300"				

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4.2 ENVIRONMENTAL MANAGEMENT PROGRAMME

Table 4-2 below provides the compliance of Sasol with the conditions within the EMPr for the Conversion of SCI Coal-base to Gas-base project at the Sasol on the Sasol One site in Sasolburg, with unknown date.

Table 4-2 - Environmental Management Programme Audit Findings

Ref	Condition	Complian ce Status	Findings	Recommendati on, 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)
Air C	uality							
1.1	 Air Quality during start up and commissioning. Objective: To ensure that air quality is within legislated guidelines during the start-up and commissioning phase of the project. To minimise the impact of the start-up and commissioning phase of the project on air quality." 	N/A	Noted. This condition is outside the audit period and refers to a requirement prior to commencement and was therefore not audited. Compliance to air quality monitored according to the AEL"	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A

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Ref	Condition	Complian ce Status	Findings	Recommendati on, Timeframe and Responsible Person	Measures Implemented to Address Non- Compliance	Practicality of the EMPR Commitments	Is the Non- Compliance Administrative or will it have an impact	Historical/New Non- Compliance (Administrative measures)
	The CO levels, which would result from the SCI Natural Gas Project are well within guidelines and do not pose a health risk. No mitigation measures are required."	С	Sasol confirmed that no mitigation measures are required as the facility converted from coal to gas to reduce emissions of greenhouse gases. <i>Evidence</i> : • Verbal Confirmation	None.	N/A	N/A	N/A	N/A
1.3 S	02 Emissions	·		N	5	3	3	
	To ensure that ground level SO2 concentrations do not exceed DEAT's air quality guidelines.	С	No new coal burning facilities were added to date. Therefore, the SO2 footprint decreased from 2000s to date. Evidence: Sasol Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022	None.	N/A	N/A	N/A	N/A
	To reduce the health impact associated with SO2 levels	С	No new coal burning facilities were added to date. Therefore, there are little to no health impacts as SO2 footprint decreased from 2000s to date. <i>Evidence</i> :	None.	N/A	N/A	N/A	N/A

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Condition	Complian ce Status	Findings	Recommendati on, 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 Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022 Verbal Confirmation 					
IOX Concentrations			·	·	<u> </u>		·
The impact is positive, and no mitigation measures are required.	N/A	Noted.	None.	N/A	N/A	N/A	N/A
2S concentrations			*	•			•
The impact is positive, and no mitigation measures are required."	N/A	Noted.	None.	N/A	N/A	N/A	N/A
articulate matter from the waste a	ish dumps an	d VOCs from the tar pits	1	1	1		1
To minimise the emissions of particulate matter and VOCs from the tar pits and waste ash dumps at Sasol One."	N/A	Noted. Natural gas combustion results in virtually no atmospheric emissions of sulphur dioxide and particulate matter, therefore this condition is not auditable.	None.	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
	IOX Concentrations The impact is positive, and no mitigation measures are required. I2S concentrations The impact is positive, and no mitigation measures are required." Particulate matter from the waste and To minimise the emissions of particulate matter and VOCs from the tar pits and waste ash	Ce Status Cox Concentrations The impact is positive, and no mitigation measures are required. I2S concentrations The impact is positive, and no mitigation measures are required. I2S concentrations The impact is positive, and no mitigation measures are required. I2S concentrations The impact is positive, and no mitigation measures are required. I2S concentrations The impact is positive, and no mitigation measures are required. I2S concentrations N/A I2S concentrations I2S concentrations	ce Status - - Sasol Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022 - Verbal Confirmation IOX Concentrations N/A The impact is positive, and no mitigation measures are required. N/A I2S concentrations N/A The impact is positive, and no mitigation measures are required. N/A I2S concentrations N/A The impact is positive, and no mitigation measures are required." N/A To minimise the emissions of particulate matter from the waste ash dumps and VOCs from the tar pits To minimise the emissions of particulate matter and VOCs from the tar pits and waste ash dumps at Sasol One." N/A	ce Statuson, Timeframe and Responsible PersonImage: StatusSasol Ambient Air Quality Report (Ref no: AQR 02/22) dated December 2022 • Verbal ConfirmationImage: StatusImage: StatusImage: StatusN/ANoted.None.Image: StatusN/ANoted.None.Image: StatusN/AImage: StatusNoted.Image: StatusN/AImage: StatusNoted.Image: StatusN/AImage: StatusNoted.Image: StatusN/AImage: StatusNoted.Image: StatusNoted.<	ce Statuson, Timeframe and and MesponsibleImplemented to Address Non- ComplianceImplemented to StatusImplemented to Address Non- ComplianceImplemented to StatusNotedImplemented to Address Non- ComplianceImplemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusN/ANoted.Implemented to AddressN/ANoted.Implemented to StatusN/ANoted.Implemented to StatusNone.N/AImplemented to StatusNone.N/AImplemented to StatusNone.N/AImplemented to StatusNone.N/AImplemented to StatusNone.N/AImplemented to StatusNone. <td>ce Statusce Statusor, Timeframe and Responsible PersonImplemented to Address Non- Compliancethe EMPR' CommitmentsImplemented to Address Non- Complianceto Sasol Ambient Air Quality PersonImplemented to Address Non- Compliancethe EMPR' CommitmentsImplemented to PersonImplemented to ResponsibleImplemented to Address Non- ComplianceImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImpl</td> <td>ce Statusoror, Timeframe and mad ResponsibleImplemented to Address Non- Compliancethe EMPR' commitmentsCompliance Address Non- commitmentsCompliance Address Non- ComplianceCommitmentsCompliance address non- commitmentsComplianceImplemented to Address Non- ComplianceImplemented to Address Non- Complemented to Complemented to Complemented to Complemented to<br <="" td=""/></td>	ce Statusce Statusor, Timeframe and Responsible PersonImplemented to Address Non- Compliancethe EMPR' CommitmentsImplemented to Address Non- Complianceto Sasol Ambient Air Quality PersonImplemented to Address Non- Compliancethe EMPR' CommitmentsImplemented to PersonImplemented to ResponsibleImplemented to Address Non- ComplianceImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImplemented to Address Non- Complemented to N/AImpl	ce Statusoror, Timeframe and mad ResponsibleImplemented to Address Non- Compliancethe EMPR' commitmentsCompliance Address Non- commitmentsCompliance Address Non- ComplianceCommitmentsCompliance address non- commitmentsComplianceImplemented to Address Non- ComplianceImplemented to Address Non- Complemented to Complemented to Complemented to Complemented to

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Ref	Condition	Complian ce Status	Findings	Recommendati on, 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)
	To ensure that baseline air quality is measured reliably and regularly.	с	All air quality monitoring done in accordance with AEL conditions. Furthermore, additional monitoring is done on for example fugitive emissions.	None.	N/A	N/A	N/A	N/A
			Emissions monitoring protocol is established and implemented.					
			Evidence:					
			 Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1); 					
			 Sasol Technology Pty Ltd: Proposed Sasol Chemical Industries (SCI) Natural Gas Project Final Scoping Report (ref no:260293/3) dated January 2001 					
	To ensure that air quality data is readily available.	С	All air quality monitoring done in accordance with AEL conditions. Sasol stores all their data and reports on the SAP and Isometrix system. <i>Evidence</i> :	None.	N/A	N/A	N/A	N/A

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Ref	Condition	Complian ce Status	Findings	Recommendati on, 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)		
			 Air Emissions Licence (AEL) (reference number: FDDM-MET-2013-24-R1) Onsite Observation 							
1.8 C	Calculations of VOC emissions				*		*	3		
	To obtain an understanding of the VOC emissions from Sasol One."	С	At the time of the audit evidence of VOC emissions simulation was observed. The report indicated that the tanks simulator indicated that the total VOC losses associated with the tanks are 3.4 ton/a. These amounts shall be used in future environmental impact assessment to improve the accuracy of fugitive related emissions. <i>Evidence:</i> Simulation report for VOC emissions from tanks dated 8 November 2019	None.	N/A	N/A	N/A	N/A		
Wate	er quality and quantity									
2.1 lı	2.1 Increased water abstraction during the commissioning phase									

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Ref	Condition	Complian ce Status	Findings	Recommendati on, 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)
	To ensure that water intake during commissioning complies with Sasol One's water license from DWAF. "	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
2.2 D	Decreased water abstraction during	g the operatio	onal phase	1	1	I		1
	The impact is positive, and no mitigation measures are proposed.	С	Sasol confirms that the conversion from coal to gas has resulted to decreased water abstraction. Evidence: Verbal Confirmation	None	N/A	N/A	N/A	N/A
2.3 S	odium concentrations in effluent			·	·	·		
	To ensure that effluent complies with Sasol One's water license from DWAF, particularly with respect to Na concentrations."	С	Effluent for the entire Sasol One flows to the effluent control dam that is managed by the Utilities department against the water use licence requirement. Evidence: Verbal Confirmation Integrated Water and Waste Management Plan	None.	N/A	N/A	N/A	N/A

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			(IWWMP) Rev 1 – report number: SO-env-1075 (Sasolburg Operations, December 2022).					
2.4 R	educed probability and severity o	f unplanned e	effluent spillages on the Leeusp	ruit				
	The impact is positive and no mitigation measures are proposed."	С	Sasol confirms that no effluent spillage on the Leeuspruit dam have been recorded in the audit period. <i>Evidence:</i> Verbal Confirmation Incident and Complaints register	None.	N/A	N/A	N/A	N/A
2. 5 \$	Solid waste disposal during const	ruction						
	To minimise environmental impacts, such as water pollution, from solid waste disposal during the construction phase. "	N/A	Noted. This condition is outside the audit period and refers to a requirement during the construction phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
2.6 S	olid waste disposal during operat	ions						
	To minimise environmental impacts, such as water pollution,	С	There is no solid waste disposal or materials	None.	N/A	N/A	N/A	N/A

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L.	-							
Ref	Condition	Complian ce Status	Findings	Recommendati on, 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 (Administrativ measures)
	from solid waste disposal during the operational phase.		 stockpiling associated with the use of natural gas as a fuel. The domestic waste is disposed of through a registered waste service provider that selected on the Hub system. Evidence: Onsite Observation Verbal Confirmation Waste registers 					
2.7 G	round water specialist study			1	1	1	1	·
	To make publicly available the results of the ground water study.	N/A	Noted. This condition is outside the audit period and refers to a requirement pre- commencement phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
Noise	9			•	'		·	•
3.1 C	hange in noise levels beyond the	boundary of	Sasol One					
	To that the project will not increase noise levels beyond the Sasol One boundary.	С	Noise from the coal to gas facility does not increase beyond Sasol One boundary. Noise perimeter surveys are conducted biannually.	None.	N/A	N/A	N/A	N/A

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	Condition	Complian ce Status	Findings	Recommendati on, 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)
			 Evidence: Environmental Noise Survey for Sasol Sasolburg, Steam Station 2, SGEPP, Sasol One, Midlands & Bunsen Area (Ref no: 24539 Rev 01 SR) by Gijima dated 30 May 2019 					
Cum	ulative Impacts							1
4.1 (Cumulative impacts of the overall S	Sasol Natural	Gas Venture and the SCI Natura	al Gas Project				
	To identify and address cumulative impacts in support of informed decision-making"	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
1.2	cumulative impacts in support of		outside the audit period and refers to a requirement during the commissioning phase and	None	N/A	was not practical to the Coal to Gas	N/A	N/A

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5.1 H	luman resources							
	To ensure legal compliance with respect to possible retrenchments."	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
	To ensure human resources Best Practices are implemented.	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
5.3 J	lob Losses		-	·	·	·		
	To minimise the number of jobs lost.	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
	To assist retrenched employees, as far as possible, in securing an income	N/A	Noted. This condition is outside the audit period and refers to a requirement during	None	N/A	The condition was not practical to the	N/A	N/A

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Ref	Condition	Complian ce Status	Findings	Recommendati on, Timeframe and Responsible Person	Measures Implemented to Address Non- Compliance	Practicality of the EMPR Commitments	Is the Non- Compliance Administrative or will it have an impact	Historical/New Non- Compliance (Administrative measures)
			the commissioning phase and was therefore not audited.			Coal to Gas facility.		
	To minimise the psychological and related impacts associated with job losses.	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
5.4 S	ocio-economic baseline							
	To integrate management of the project impacts with SCI's planned initiatives to stimulate socio-economic development in Sasolburg.	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A
5.5 E	5.5 Existing SCI community relations exacerbated by the SCI Natural Gas Project							
	To build respectful relations between SCI and the greater Sasolburg communities	N/A	Noted. This condition is outside the audit period and refers to a requirement during the commissioning phase and was therefore not audited.	None	N/A	The condition was not practical to the Coal to Gas facility.	N/A	N/A

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT Project No.: 41106358 Sasol South Africa Ltd CONFIDENTIAL | WSP November 2023 Page 23 of 34

5 PROGRESS AGAINST PREVIOUS AUDIT FINDINGS

The previous compliance audit report against the consolidated EA and EMPr was compiled by the Northwest University CEM in 2019. A comparison in the change of compliance rating from the 2019 and 2023 audits are provided in **Figure 5-1** below and provides a summary of the audit findings for the previous and current audits (2019 and 2023). The 2023 audit identified zero non-compliant conditions.

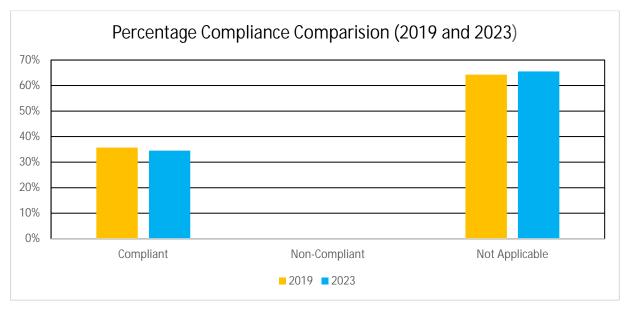


Figure 5-1 – Percentage comparison of Environmental Authorisation compliance levels from 2019 to 2022

6 SUMMARY OF THE AUDIT FINDINGS

6.1 SASOL SASOLBURG COAL TO GAS FACILITY 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.

Section of the EA	No. Commitments	С	NC	N/A
Brief description of the Activity	1	1	0	0
Location	1	1		0
Applicant	1	1		0
Special Conditions	4	2		2
Standard Conditions	12	2		10
Key Factors for the Decision	7	2		5
Duration and date of expiry	2	1		1
Appeal	1	0		1
Total	29	10		19
Total Percentage		34%	0%	66%
Percentage Compliance with Applicable Conditions	100%			

Table 6-1 - Summary of EA Compliance Audit Findings

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.

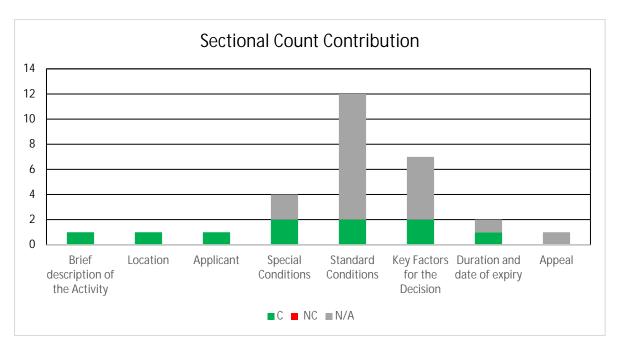


Figure 6-1 - Number/Count contribution of findings made to the EA conditions per section

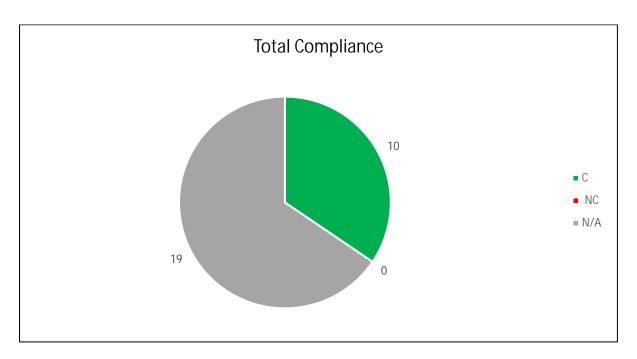


Figure 6-2 - Overall count findings on compliance to the EA commitments

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.

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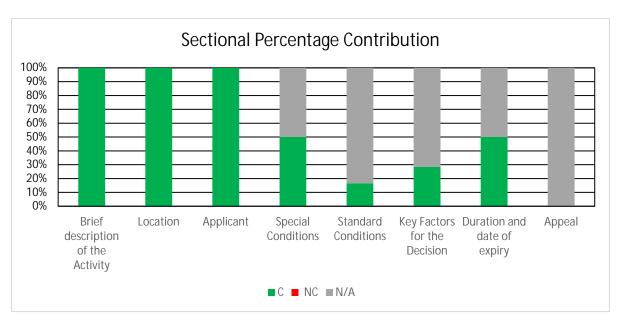


Figure 6-3 - Percentage contribution of findings made to the EA Commitments per Section

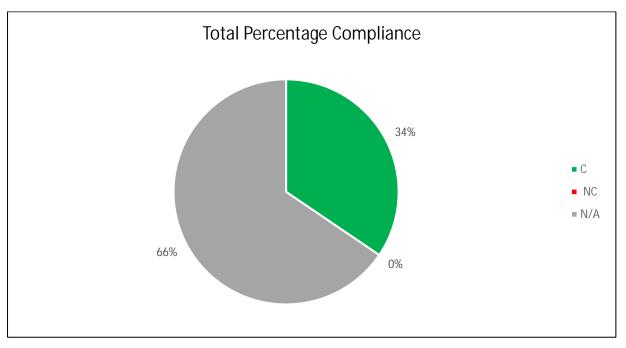


Figure 6-3 - Overall percentage findings on compliance to the EA Commitments

6.2 SASOL SASOLBURG COAL TO GAS FACILITY 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.

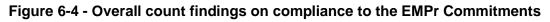
Section of the EMPr	No. Commitments	С	NC	N/A
Air Quality	1	0	0	1
CO Concentrations	1	1	0	0
SO2 Emissions	2	2	0	0
NOX Concentrations	1	0	0	1
H2S Concentrations	1	0	0	1
Particulate Matter	1	0	0	1
Baseline air quality data	2	2	0	0
Calculations of VOC emissions	1	1	0	0
Water quality and quantity	7	5	0	2
Noise	1	1	0	0
Cumulative Impacts	2	0	0	2
Socio-economic	7	0	0	7
Total	27	12	0	15
Total Percentage		44%	0%	56%
Percentage Compliance with Applicable Conditions	100%			

Table 6-2 - Summary of EMPr Compliance Audit Findings

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT Project No.: 41106358 Sasol South Africa Ltd Page 28 of 34

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.





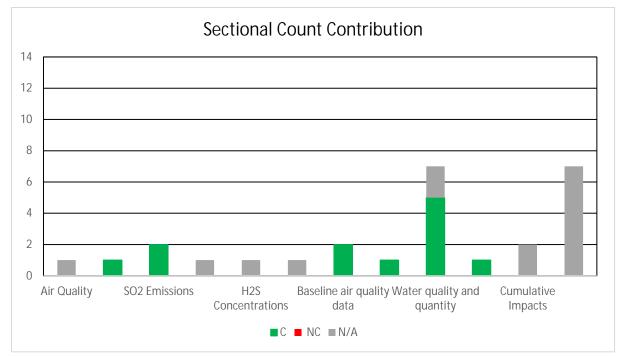


Figure 6-5 - Number/Count contribution of findings made to the EMPr Commitments per Section

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT Project No.: 41106358 Sasol South Africa Ltd November 2023 Page 29 of 34

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.

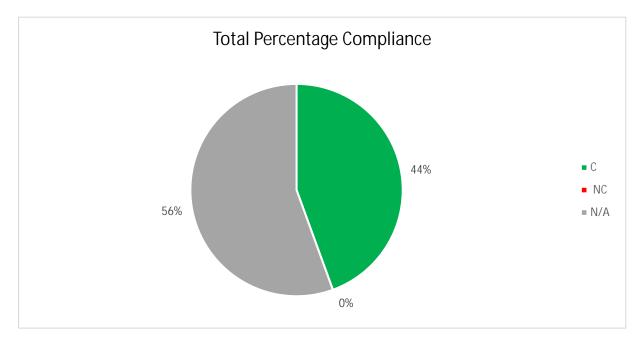


Figure 6-6 - Overall percentage findings on compliance to the EMPr Commitments

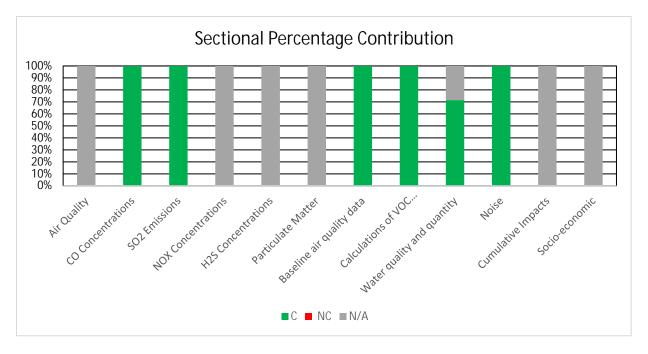


Figure 6-7 - Percentage contribution of findings made to the EMPr Commitments per Section

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT Project No.: 41106358 Sasol South Africa Ltd Page 30 of 34

7 RECOMMENDATIONS

Zero non-compliances of the EA and EMPr conditions was noted during the audit. Sasol is commended for achieving 100% compliance for the EA and EMPr audit and is urged to continue to implement the environmental mitigation measures within the EA and EMPr. 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 as part of the audit scope, as follows:

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

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

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

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

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 Sasol Coal to Gas Facility and compared the operations to the approved EMPr and compiled this report to the best of my knowledge. This section should be read with **Section 2.**

Signed at	Midrand	on this the 08 January	2024
Olgricu at .			2027

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

CONVERSION OF SASOL CHEMICAL INDUSTRIES FROM COAL OPERATIONS TO NATURAL GAS ENVIRONMENTAL AUTHORISATION (REF. NO: EM1/1(C)/00/81) AND ENVIRONMENTAL MANAGEMENT PROGRAMME AUDIT WSP Project No.: 41106358 | Our Ref No.: November 2023 Sasol South Africa Ltd

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	Language	
Environmental Management	English	
Environmental Impact Assessment		
Compliance Auditing		
EDUCATION		
Bachelor of Science (Honours), Environmental Mar	nagement, University of South Africa	2019
Bachelor of Science, Geography, University of Pret	oria	2017
ADDITIONAL TRAINING		
Esri ArcGIS Basic		2019
Esri ArcGIS Standard		2019
PROFESSIONAL MEMBERSHIPS		
EAPASA – Environmental Assessment Practitioner	Association of South Africa- Registration	n No. 2019/18 2022
SACNASP – South African Council for Natural Scie Registration No. 120878	entific Professional - Certified Natural Sci	entist – 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 Er	nvironment 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.

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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 Constrution, Gauteng, South Africa 2023

Environmental Control Officer

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

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

2023

Environmental Control Officer

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

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

Environmental Control Officer

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

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

Tshepho Mamashela

Earth & Environment - Environmental Consultant

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

Matilda Mbazo

Earth and Environment, Environmental Planning & Advisory, Intern

CAREER SUMMARY

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



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

vsp

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

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

November 2023

Environmental Auditor : EA and EMPr Compliance Audit

Dissertations and Research Projects

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

2023-2024

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

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

2022

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

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

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Environmental Aspect	Environmental Objective	Impact management Action
1. Water Quality and Quantity	1. 2. Decreased water abstraction during the OPERATIONAL phase The impact is positive and no mitigation measures are proposed.	Water abstraction is measured and monitored in accordance with approve existing water use
	1.2. Sodium concentrations in effluent To ensure that effluent complies with Sasol One's water license from DWAF, particularly with respect to Na concentrations.	Sasol operates with a valid Water Use lisence
	2. 3. Reduced probability and severity of unplanned effluent spillages on the Leeuspruit The impact is positive and no mitigation measures are proposed.	In Accordance with the current Water Use Lisence any unplanned spillages to the Leeuspruit must be reported to The Department of Water affairs
	2.4. Solid waste disposal during operations To minimise environmental impacts, such as water pollution, from solid waste disposal during the operational phase.	The small volumes of new catalyst waste produced by the SCI Natural Gas Project will either be recycled or disposed of off-site at a commercial hazardous waste disposal facility. Catalysts will be disposed of as per DWAF Minimum Requirements.

Annexure B – Coal-base to Gas-base Facility– ref (EM1/1(c) /00/81)

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.

Environmental Aspect	Environmental Objective	Impact management Action
1. Water Quality and Quantity	 2. Decreased water abstraction during the OPERATIONAL phase The impact is positive and no mitigation measures are proposed. 	Water abstraction is measured and monitored in accordance with approve existing water use
	1.2. Sodium concentrations in effluent To ensure that effluent complies with Sasol One's water license from DWAF, particularly with respect to Na concentrations.	Sasol operates with a valid Water Use lisence
	2. 3. Reduced probability and severity of unplanned effluent spillages on the Leeuspruit The impact is positive and no mitigation measures are proposed.	In Accordance with the current Water Use Lisence any unplanned spillages to the Leeuspruit must be reported to The Department of Water affairs
	2.4. Solid waste disposal during operations To minimise environmental impacts, such as water pollution, from solid waste disposal during the operational phase.	The small volumes of new catalyst waste produced by the SCI Natural Gas Project will either be recycled or disposed of off-site at a commercial hazardous waste disposal facility. Catalysts will be disposed of as per DWAF Minimum Requirements.