

RSR SAFETY COMPLIANCE AUDIT REPORT			
RSR SAFETY COMPLIANCE REFERENCE NUMBER		RSR/CS/153/MWC766/04/02/21/ASP0005.02 NT	
OPERATOR		ASSMANG LIMITED IRON ORE T/A ASSMANG LIMITED IRON BEESHOEK MINE	
PERMIT NUMBER		ASP0005.02 NT	
AUDIT ABSTRACT		The Railway Safety Regulator conducted a Safety Management System compliance audit for Assmang Limited Iron Ore T/A Assmang Limited Iron Beeshoek Mine in Postmasburg, Northern Cape.	
DATE OF AUDIT		04 February 2021	
COMPILED BY (RAILWAY SAFETY INSPECTOR)		Tabang Mgijima	
AUDIT TEAM MEMBER		Hlengiwe Mdlalose	
RECOMMENDED	PRINCIPAL INSPECTOR	Mncedisi Peter	
APPROVED	REGIONAL TECHNICAL MANAGER	Nomathamsanqa Sopotela	
DATE OF AUDIT REPORT		05 March 2021	

This document relates only to the conditions prevailing at the time of the Audit. It may only be published or reproduced in full or in part with the prior permission of the CEO of the Railway Safety Regulator.



Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

Table of Contents


1.	LEGEND	4
2.	EXECUTIVE SUMMARY	5
3.	MANDATE	5
4.	OVERVIEW OF THE OPERATOR	6
5.	DESCRIPTION OF THE AUDIT PROCESS	7
6.	AUDIT RESULTS – FINDINGS AND CORRECTIVE ACTIONS	8
7.	RECOMMENDATIONS	10
8.	CONCLUSION	10
9.	ANNEXURES	10

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

1. LEGEND

Abbreviations used in this report include the following:

The Act	National Railway Safety Regulator Act, 2002 (Act 16 of 2002 as amended)
CAP	Common Audit Practice
ER	Evidence Register
Km	Kilometre
RSR	Railway Safety Regulator
SOP	Safe Operating Procedure
SANS	South African National Standard
SMS	Safety Management System
SMSR	Safety Management System Report
TFR	Transnet Freight Rail
T/A	Trading As
NC	Northern Cape

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

2. EXECUTIVE SUMMARY

2.1 Purpose of the Audit

The audit was carried out at Assmang Limited Iron Beeshoek Mine on 04 February 2021 to verify whether the operator's Safety Management System (SMS) is in place and complies with the SMS Determination and other legislations.

2.2 Scope covered by the Audit

The scope of this audit put specific emphasis on those elements of SMS Determination which are Risk Management (8.2), Monitoring (8.3), Corrective Action Development (8.4.1), Document Management (9.4.3) as well as Safety Standards for Engineering and Operational Systems (10.1).

2.3 Key Findings

There were no findings issued as part of this audit.


2.4 Notices and Directives Issued

No notices and /or directives were issued as part of this audit.

3. MANDATE

As mandated by the Railway Safety Regulator, an audit was conducted for Assmang Limited Iron Beeshoek Mine in Postmasburg in the Northern Cape (NC), to report on the degree of compliance with:

- The National Railway Safety Regulator Act, 2002 (Act 16 of 2002 as amended),
- The SMS Determination as Gazetted in May 2018.


Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

- The South African National Standard 3000-2-1:2008: Railway Safety Management Part 2-1: Technical requirements for engineering and operational standards – General,
- The South African National Standard 3000-2-2:2008: Railway Safety Management Part 2-2: Technical requirements for engineering and operational standards - Track, civil and electrical infrastructure,
- The South African National Standard 3000-2-3-1:2016: Railway Safety Management Part 2-3: Technical requirements for systemic engineering and operational standards – Rolling Stock: Wheels, axles, and bearings.
- The Safety Management System Report (SMSR) submitted by the Operator.

The objective of the audit was to measure the level of implementation as well as the adequacy and effectiveness of the Operator’s SMS. Compliance of the SMS with the SMS Determination was assessed by reviewing evidence presented as well as interviewing the Nominated Manager through Microsoft Teams.

4. OVERVIEW OF THE OPERATOR

The Beeshoek mine is a large iron mine located near Postmasburg in the Northern Cape. Assmang Limited Iron Beeshoek Mine owns railway siding no. 242799 situated in Postmasburg. There are seven railway lines for siding no. 242799 Only the loading process takes place at this railway siding. This railway siding has 3 internal crossings in which the speed limit for the siding is between 10 to 15 km/h. The railway siding section is electrified for approximately 4,5 km in which the remaining half is non-electrified. The siding can accommodate 104 wagons at a time. The method of dispatching commodity is by both road and rail in which rail now is the major mode of transportation. The length of the siding is approximately 9 km and the number of shunts per day in the siding is two. Transnet Freight Rail (TFR) place’s wagons in the siding (at the hand over point) where Assmang Limited Iron Beeshoek

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

Mine shunts the rolling stock fleet into the premises and weigh the trucks, load, sample the contents, weigh again, and place the wagons in the correct order in the siding for TFR to cart away. Shunting methods used in siding is by means of a diesel funky locomotive. Infrastructure maintenance of the railway track and structures is the responsibility of the owner through a contractor. Total number of employees employed by the Operator(site) are between 70 and 80 which all are employed for railway safety critical work. The employees work two rotational shifts.

5. DESCRIPTION OF THE AUDIT PROCESS

5.1 Methodology

This audit was conducted systematically by verification, achieved through interviews on Microsoft Teams, as well as collection and validation of documentary evidence. The validity of evidence submitted by the operator, both verbally and by way of the SMS report was tested and verified by the audit team by scrutinizing paper evidence and through interviews. See detailed list of documents contained in the Evidence Register (ER) in Annexure A.

5.2 Areas Visited


There were no areas visited as part of this audit.

5.3 Interviews

Interviews were conducted with personnel of the Operator listed below.

RSR staff who attended the audit are also listed.

NAME	DESIGNATION	E-MAIL
Assmang Limited Iron Beeshoek Mine Representative		
Andre Lategan	Nominated Manager	Andre.Lategan@assmang.co.za
RSR Representative		

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

Hlengiwe Mdlalose	Safety Inspector	hlengiwem@rsr.org.za
Tabang Mgijima	Safety Inspector	tabangm@rsr.org.za

5.4 Audit Protocol Used


For this audit, the applicable RSR protocol was used. This protocol is based on the applicable elements of SMS Determination and other SANS standards and contains elements of the Accredited CAP Auditing Techniques.

6. AUDIT RESULTS – FINDINGS AND CORRECTIVE ACTIONS

This audit report does not confirm all the conformances to the Act, its regulations, and SANS series of standards, which are substantiated by documentation contained in the evidence register (Annexure A) but reports on the identified non-conformances as listed.

6.1 Auditor's Notes

Assmang Limited Iron Beeshoek Mine in Postmasburg in the Northern Cape has procedures put into place to identify risks associated with railway operations, including those directly arising from work activities, and the activities of other interface operators. A risk registers of the Operator and that of the interface with TFR were reviewed and found compliant with the requirement of the SMS Determination. Corrective action procedure of the Operator is in place, all previous RSR findings including directives have been implemented and closed. Other procedures like Document and Data Control management are implemented accordingly, general procedures are revised and approved appropriately as well as for maintenance documents are signed by authorized personnel. Maintenances of the track is adhered with as per the maintenance plan, several maintenance records including job cards, inspection records were assessed and found to be in line with the maintenance requirements. Several Safe Operating Procedures (SOP) of the Operator were assessed and found adequate to safe railway operation.

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

6.2 Commendations

Assmang Limited Iron Beeshoek Mine in Postmasburg in the Northern Cape is commended for achieving a clean audit and ensuring safe railway operations.

6.3 Prohibition Directives Issued

Prohibition Directive Number	SMS Determination Ref No.	Description of Immediate Threat	Suggested Corrective Action
None			

6.4 Improvement Directives Issued


Improvement Directive Number	SMS Determination Ref No.	Description of Threat	Suggested Corrective Action
None			

6.5 Non-Compliance Notices Issued

Non-Compliance Number	SMS Determination Ref No.	Description of Non-Compliance	Suggested Corrective Action
None			

6.6 Non-Conformances Identified

Non-Conformance Number	SMS Determination Ref No.	Description of Non-Conformance	Suggested Corrective Action
None			

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

7. RECOMMENDATIONS

None.

8. CONCLUSION


Based on the assessed evidence and interviews held with the Operator it could be ascertained that the level of implementation as well as the adequacy and effectiveness of the Operator’s SMS is in an acceptable state for safe railway operations. Assmang Limited Iron Beeshoek Mine in Postmasburg in the Northern Cape complied to the minimum requirements of SMS Determination for Risk Management, Monitoring, Corrective Action Development, Document Management as well as requirements for Safety Standards for Engineering and Operational Systems.

RSR would like to thank the Operator for their assistance in facilitating the audit.

9. ANNEXURES

Annexure A – Evidence Register

Document Reference	Document Description	SMS Determination Ref No
ER1	Risk Management procedure	8.2.1
ER2	<ul style="list-style-type: none"> • Interface Risk Assessment between TFR and Assmang at Beeshoek 15 July 2020 Final • Baseline Loading operation • Baseline Locomotive maintenance 	8.2.2

Document Type	SMS Audit Report – Assmang Limited Iron Ore T/A Assamang Limited Iron Beeshoek Mine, Northern Cape	
File Reference	RSR/CS/153/MWC766/04/04/21/ ASP0005.02 NT	
Date of Report	05 March 2021	
Classification	Confidential	
Version	Final	

	<ul style="list-style-type: none"> • Baseline Rail maintenance • RA BowTie Railway Infrastructure damage or failure • RA BowTie Railway Collisions, Derailments, Fire and Equipment Failure • Occupation Task Risk Assessment List for _Track Maintenance and Loading Operations 	
ER3	SHERQ NCR Reporting Procedure	8.3.2.1
ER4	Fransrail_RSR Reporting Procedure_20190401	8.3.2.2
ER5	Persons appointed by the operator to investigate occurrences have the necessary competence and independence, both in relation to the nature and seriousness of the occurrence, and the scope and level of the investigation.	8.3.2.4
ER6	SHERQ NCR Reporting Procedure	8.3.2. & 8.4.1
ER7	SHERQ NCR Reporting Procedure	8.4.1
ER8	Work order scheduling procedure	10.1.2.1
ER9	Track Inspection reports and test records	10.1.2.3
ER10	<ul style="list-style-type: none"> • Gauge calibration PM 2019 • Gauge calibration PM 2020 • Calibration certificates for loco gauges 	10.1.2.4
ER11	<ul style="list-style-type: none"> • Documented Information procedure • Policy Manual 	9.4.3
ER12	<ul style="list-style-type: none"> • Maintenance Plans • Internal maintenance strategies procedure • Planned Maintenance procedure • Loco service 250Hours PM • Shutdown maintenance procedure 	10.1.2.5