

MEETING NOTES

Job Title	Proposed Installation of Sulphur Dioxide Abatement Equipment at Mortimer Smelter	
Project Number	31101	
Date	10 January 2017	
Time	10:00 – 11:00	
Venue	DMR North West	
Subject	Proposed Installation of Sulphur Dioxide Abatement Equipment at Mortimer Smelter – DMR Pre-Application Meeting	
Client	Anglo American Platinum Limited	
Present	See Attached Attendance Register (Appendix A)	
Apologies	None	
Distribution	As per the Attendance Register	

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ACTION

1.0 WELCOME AND INTRODUCTIONS

- 1.1 Anri Scheepers thanked the Department of Mineral Resources (DMR) for the opportunity to meet with them to discuss the Proposed Installation of Sulphur Dioxide Abatement Equipment at Mortimer Smelter.
- 1.2 A round of introductions was done, including:
 - DMR Phumudzo Nethwadzi, Tshilidzi Phalala and Lorraine Nobela
 - Anglo American Platinum Limited Gerrit van De Linde and Nishi Haripursad
 - → Hatch Gabriel le Roux
 - → WSP | Parsons Brinckerhoff, Environment & Energy, Africa (WSP | Parsons Brinckerhoff) Anri Scheepers
- 1.3 Anri Scheepers mentioned that the presentation (**Appendix B**) would be attached to the minutes together with the attendance register (**Appendix A**).

2.0 PROJECT BACKGROUND

- 2.1 Anglo American Platinum Limited (Anglo) owns and operates the Mortimer Smelter, which is located at the Union Mine Operations (RPM-UM). The Mortimer Smelter is an existing metallurgical industrial furnace where sulphide ores are smelted.
- 2.2 The off- gas from Mortimer Smelter is currently being treated via 3 electrostatic precipitators (ESPs); exhaust from the ESPs is vented into the atmosphere via a stack at 80m above the ground. The emissions include particulate matter (PM), SO₂, and nitrogen oxide (NOx).
- 2.3 The National Environmental Management Air Quality Act (No. 39 of 2004) (NEM:AQA) requires that furnaces at metallurgical industries be operated with efficient SO₂ abatement systems by 2015, however Mortimer Smelter has been given an extension until 2020. In order to comply with new South African legislation, and associated more stringent emission standards, an SO₂ abatement system must be installed at the Mortimer Smelter.
- 2.4 The proposed strategy to reduce SO_2 to achieve the Minimum Emission Standards (MES) is the installation of a Wet Gas Sulphuric Acid (WSA) Plant that will convert the SO_2 contained in the off-gas into commercial-grade concentrated sulphuric acid (H_2SO_4). The

ACTION

exhaust from the WSA plant (containing reduced SO₂ concentrations) will be vented into the atmosphere, and the commercial grade sulphuric acid will be temporarily stored before being despatched into the commercial market.

3.0 COMPETENT AUTHORITY

- 3.1 Under the One Environmental System, the Minister of Mineral Resources will issue environmental authorisations in terms of the NEMA for mining activities related to the primary extraction and/or primary processing of ore material. The Minister of Environmental Affairs will form the appeal authority
- 3.2 The DMR representatives indicated that the Provincial Department will be the competent authority for activities that Trigger in terms of Listing Notice 3 (GNR 985 of 2014).
- 3.3 The DMR representatives indicated that the District Municipality will be the competent authority for the amendment of the Atmospheric Emissions Licence (AEL).
- 3.4 The Water Use Licence Amendment Application must be submitted to the Department of Water Affairs. The timeframes however, have not been aligned to the EIA Regulations (GNR 982 of 2014).

4.0 APPLICATION FORM

- 4.1 It was agreed that the application form will be submitted to the DMR along with the Draft Scoping Report.
- 4.2 It was agreed that the application fee will be R 10 000.00 and that proof of payment must be attached to the application form.

5.0 STAKEHOLDER ENGAGEMENT

5.1 It was agreed that initial stakeholder engagement will be undertaken along with the distribution of the Draft Scoping Report for stakeholder review.

6.0 SPECIALIST STUDIES

- 6.1 It was agreed that the identified specialist studies are sufficient.
- 6.2 The DMR representative agreed that due to the location of the Mortimer Smelter within the Union Mine Complex a visual impact assessment will not be required.

7.0 DOCUMENTATION SUBMISSION

- 7.1 The DMR representatives indicated that the application and all documentation must be submitted manually.
- 7.2 It was agreed that 1 Hard copy of the Application Form, 1 Hard Copy of all Draft Reports and 2 Hard Copies of all Final Reports must be submitted to the DMR.

8.0 GENERAL
8.1 The DMR representatives requested that the application form and reports clearly stipulate that the environmental authorisation will be processed as a new project, however that the last step will be to amend the existing EMP for Union Mine.
8.2 There is a process under way for the divestment of Union Mine which may result in the change of competent for this Project and ongoing communication will take place with the

Appendix A – Attendance Register

ATTENDANCE REGISTER

Project:

Proposed Installation of Sulphur Dioxide Abatement Equipment at

Mortimer Smelter

Applicant:

Anglo American Platinum Limited

Meeting Title:

Pre- Application Authority Meeting (Department of Mineral Resources)

Venue:

North West DMR - Vaal University of Technology Building, c/o

Voortrekker and Margaretha Prinsloo Street, Klerksdorp

Date:

10 January 2017

Name	Company Name	Email	Tel	Signature
SEPPIT No Limbe SABRIEL LE ROUX Mishi Hanpurond Ishilidzi Phalah Phanyoho Jermandz Lorreine Mobela hri Scheepins	Hotch Anglo American BMR (MEM) bmr Dmr	gerritudi Q angloplat.com gebriel.leran@ha nishi.haripursed@o Bhildin phalala @) dmr. gov. 29 phanuckson phanuckson phanuckson correine. Mobela @ dmr. gov. Za Amri. Scheepers @workson.co.za	10h.com 0834552032 ingloamencan.com 018 487 4300	

Appendix B - Presentation





AGENDA

- 1. Welcome and Introduction
- 2. Role Players
- 3. Legislative Requirements
- 4. Project Location
- 5. Project Background
- 6. Project Description
- 7. Alternatives
- 8. Specialist Studies
- 9. Proposed Schedule
- 10. Questions and Discussions



WELCOME AND INTRODUCTION

Competent Authority

Department Mineral Resources

Under the One Environmental System, the Minister of Mineral Resources will issue environmental authorisations in terms of the NEMA for mining activities related to the primary extraction and/or primary processing of ore material. The Minister of Environmental Affairs will form the appeal authority

Applicant

Anglo American Platinum Limited

Environmental Assessment Practitioner

WSP | Parsons Brinckerhoff, Environment & Energy, Africa

National Environmental Management Act (No. 107 of 1998)

- → EIA Regulations (GNR 982)
- → Listing Notice 1 (GNR 983)
 - Activity 24

The development of –

(ii) a road with a reserve wider than 13,5 metres, or where no reserve exists where the road is wider than 8 metres;

New roads which will be wider than 8 metres but have a reserve of less than 30 metres will be constructed.



National Environmental Management Act (No. 107 of 1998)

→ Listing Notice 1 (GNR 983)

Activity 34

The expansion or changes to existing facilities for any process or activity where such expansion or changes will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions or pollution

The existing Atmospheric Emissions Licence (AEL) for Mortimer Smelter will have to be amended.



National Environmental Management Act (No. 107 of 1998)

→ Listing Notice 2 (GNR 984)

Activity 4

The development of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.

The facility will store in excess of 500 cubic metres of dangerous goods.

Scoping and Environmental Impact Reporting Process



National Environmental Management Act (No. 107 of 1998)

→ Listing Notice 3 (GNR 985)

Activity 4

The development of a road wider than 4 metres with a reserve less than 13,5 metres.

- (a) In Free State, Limpopo, Mpumalanga and Northern Cape provinces:
- ii. Outside urban areas, in:
- (aa) A protected area identified in terms of NEMPAA, excluding disturbed areas;
- (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas; or

A road wider than 4 metres will be developed in the Limpopo Province, outside an urban area. The site is situated within 5 kilometres of a protected area.



National Environmental Management Act (No. 107 of 1998)

→ Listing Notice 3 (GNR 985)

Activity 10

The development of facilities or infrastructure for the storage, or storage and handling of dangerous goods, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.

(e) In Limpopo i. All areas.

The facility will store in excess of 500 cubic metres of dangerous goods and will be situated outside an urban area in the North West.



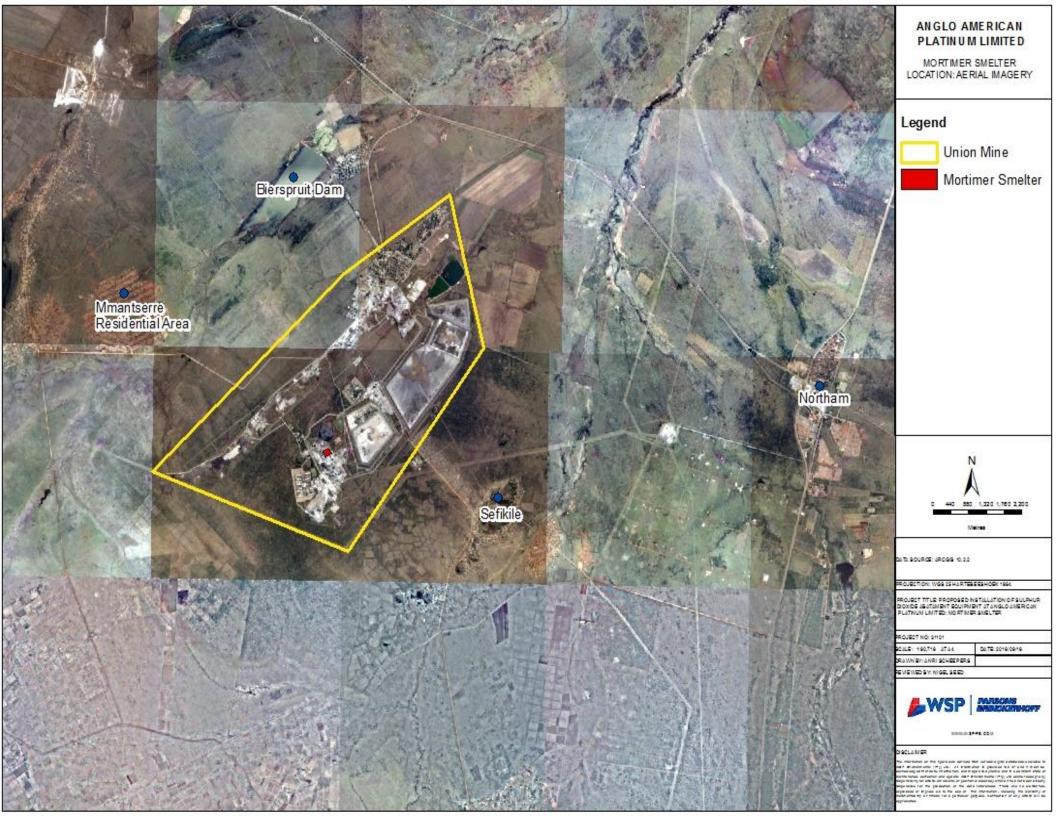
National Environmental Management Air Quality Act (No. 59 of 2008) Due to the changes in emissions (positive) from the Mortimer Smelter an amendment to the existing Atmospheric Emissions Licence as well as a revised emissions inventory will be required for the proposed project (once authorised)



National Water Act (No. 36 of 1998)

- → Union Mine Water Use Licence No: 03/A24D/ABCGIJ/18929
- → The Licence will have to be amended to cater for the storage of 2 500 m3 of water







PROJECT BACKGROUND

SO₂ postponement & related appeal

Government notice of Minimum Emission Standards (MES) are published in the Government Gazette: 1 April 2010, then amended for Parliamentary Portfolio Review, and finally revised 22 November 2013

MES: SO₂ for existing facility: 3500mg/Nm³

MES: SO₂ for new/all facility: 1200mg/Nm³

2020



Despite already achieving ~90% abatement (through furnace matte converting at ACP), ask for postponement on achieving site SO₂ limits for 2015. Commit to legal compliance targeting 2020 limit of **1200** mg/Nm³



20 Feb 2015: Postponement granted as from 1 April 2015 on regulatory limits of 30 000mg/Nm³ vs a requested 57 000mg/Nm³.



A "novel" technical solution for SO₂ abatement and control will be developed that produces "useful" acid instead of another solid waste.

AAP lodge an appeal against interim limit of 30 000 mg/Nm³ vs a requested 57 000mg/Nm³

16 March 2015

Appeal has been dismissed - AAP initiate legal process to get an interim relief order and to institute judicial review proceedings

Compliance date of 1 April 2020.

SO ₂ Compliance requirements	Mortimer Smelter	
Pre-2015 AEL condition	2500 mg/Nm ³	
1 April 2015 MES requirement	3500 mg/Nm ³	
1 April 2015 – 31 March 2020 postponement limit	30 000 mg/Nm³ (can comply with interim limit)	
1 April 2020 MES requirement (require abatement)	1200 mg/Nm ³	



PROJECT DESCRIPTION

- → Electric Furnace Primary Gas Cleaning (Existing)
- Secondary Gas Cleaning (new additional cleaning)
- → WSA Acid Plant
- Effluent Treatment Plant (204m3/day)
- → Acid Concentrating Plant
- → Acid Plant Cooling Water
- → Dangerous Goods Storage and Handling

Acid - 560m3

LPG – 22.5m3

Water Usage and Storage

Required - 468m3/day

Storage – 2 500m3

→ Roads





ALTERNATIVES

- → Location None
- → Type of activity None
- → Design or Layout of Activity
 - Contractor facilities
 - Operational
- → Technology
- → Operational Aspects None
- → No-Go
 - Legal non-compliance





SPECIALIST STUDIES

- → Air Quality Impact Assessment
- Noise Impact Assessment
- → Biodiversity Assessment
- → Climate Change Assessment
- → Major Hazard Assessment
- → Social Impact Assessment
- → Climate Change Assessment
- → Closure Assessment and Plan



PROJECT SCHEDULE

Task	Dates
Pre-Application Meeting - DMR	10 January 2017
Submission of Application Form	23 January 2017
Stakeholder Review of Draft Scoping Report	25 January 2017 – 23 February 2017 (30 days)
Submission and Review of WUL Amendment Application	13 March 2017 to 7 October 2017
Authority Approval of Scoping Phase	13 March 2017 – 24 April 2017 (43 days)
Stakeholder Review of Draft EIAR	26 April 2017 to 25 May 2017 (30 days)
Authority Approval of EIAR	10 June 2017 to 7 October 2017 (107 days)



QUESTIONS AND DISCUSSIONS

