

APPENDIX B

**CV of Environmental Assessment
Practitioner**



Education

*B.Sc. Biological Science
Botany and Biochemistry,
North West University,
Potchefstroom, 2003*

*B.Sc. (Hons)
Environmental Sciences
and Development, North
West University,
Potchefstroom, 2008*

*B.Sc. (Hons)
Environmental
Management, University
of South Africa, Nelspruit,
2010*

*AVCASA Crop Protection
Diploma, Tshwane
University of Technology,
Pretoria, 2004*

Certifications

Professional Natural
Scientist (Pri. Sci. Nat.
400107/17) - South
African Council for Natural
Scientific Professions
(SACNASP), 17 July 2017

Languages

English – Fluent

Afrikaans – Fluent

Golder Associates Africa (Pty) Ltd. – Johannesburg

Environmental Consultant

Mariëtte has worked in environmental consultancy for over eight years. She joined Golder in 2011 in the Mine Environment Division, gaining work experience in Environmental Management, specialising in Environmental Performance and Legal Compliance auditing, Environmental and Social Impact Assessments (ESIAs), Basic Assessments (BAs), Environmental Management Programme reports (EMPRs) for mining and industry, Section 24G applications, the Public Participation Processes, and Mine Closure Planning. Mariëtte has experience with Southern African legislation as well as IFC Performance Standards and Equator Principles.

Mariëtte has successfully completed the SAATCA approved EMA Lead Auditors examination through the completion of the ISO 14001:2015 Environmental Management Systems Auditing course.

Employment History

Golder Associates Africa (Pty) Ltd – Johannesburg, South Africa

Environmental Consultant: Mine Environment

September 2011 - current

Ocean Agriculture (Pty) Ltd – Johannesburg, South Africa

Agronomist

November 2009 to August 2011

Ocean Agriculture (Pty) Ltd – Nelspruit, South Africa

Technical and Sales Advisor

September 2007 to October 2009

MGK Obaro (Pty) Ltd – Brits South Africa

Assistant Technical Advisor

February 2007 to August 2007

Training

ISO 14001:2015 Environmental Management Systems Lead Auditors course based on ISO 19011 and 17021 Requirements

South African Bureau of Standards (SABS), 12-16 November 2018

Implementation and Facilitation of Environmental Management Systems based on ISO 14001:2015 Requirements

South African Certification and Auditing Services (SACAS), 27-29 March 2017

Planning for Effective Public Participation

International Association for Public Participation, September 2011

Communications for Effective Public Participation

International Association for Public Participation, September 2011

Project Management Fundamentals

Internal Training, 16-19 October 2013

Environmental Law for Environmental Managers

Centre for Environmental Management (CEM), Potchefstroom, July 2013

Isometrix

Internal Training, 2012

Microsoft Project 2007 Essentials

Bytes Technology Group, 29-30 November 2011

Professional Affiliations

International Association for Impact Assessment, South Africa (IAIASa)

South African Council for Natural Scientific Professionals (SACNASP)

APPENDIX C

Stakeholder Database

Glencore Operations South Africa (Pty) Ltd: iMpunzi South Pit Coarse Discard Dump and Venture Co-disposal Facility Project - Full Stakeholder Database

Title	Situation	Surname	Stakeholder Category	Organization	Job Title	E-mail	Mobile Phone	Phone	Postal Address 1	Postal Address 2	City	Postcode	Property 1	
Mr		Andriani	Agri-Link and Looop Irrigation Board	Agri-Link and Looop Irrigation Board	Director	andriani@dlc.co.za	0827009000	011292208			GRANDDORAL			
Ms	Sibongile	Ntosi	Union	Association of Mineworkers and Construction Union	Administrator	enikanglangan.m@amcu.co.za		013656511	198 corner Rhodes and Botha Street, Hi-Tech House		EMALAHLENI	1039		
Mr	V	Lefau	Community Based Organisation	Bangang Youth Development Group		ju.l@uab.bencom.co.za	0725470175		5773 Lifero Street		ACKERVILLE	1059		
Ms	T	Mokone	Community Based Organisation	Bangang Youth Development Group					5896 Modia Street		ACKERVILLE	1039		
Ms	Elise	Tempehoff	Media	Beldt Newspaper	Senior Environmental Reporter	elise@beldt.com	0833091192	011313918 011789211	P O Box 333		AUCKLAND PARK	2006		
Mrs	Carolyn	Shane Verdoorn	Non Government Organisation	BirdLife South Africa	Policy and Advocacy Manager	advocacy@birdlife.org.za	078768333	2	P O Box 515		HANDBURG	2123		
Mr	A	Kobus and Mphahlele	Non Government Association	Botswa Environmental Club					P O Box 1433		EMALAHLENI	1059		
Mr & Mrs	Arvanine	Divelege	Farmers Association	Bushbucklerstep and Wilge River Association		adivi@bwa@wrc.org.za	082465284		P O Box 491		BRONKHORSTSPRUIT	1035		
Mrs	A	Aucamp	Non Government Organisation	Centre for Environmental Rights	Head: Pollution and Climate Change Programme	rhughes@cer.org.za	082389437		BA Siesse Road		LABRANTSPONTEN	7925		
Mr	Ched	Ntshaba	Research Institute	Chirilika Maatsigaliga Road Mpumalanga Council for Geoscience	Supervisor	u@cm@geoscience.org.za	0827502961		P O Box 12778		Hans Strijdom Laan, NG Church Klooffontein	1038		
Mr	Sam	Sally	Interested and Affected Party	Department of Agriculture, Rural Development, Land and Environmental Affairs	Chief Director: Environmental Affairs	smalls@mr.gov.za			Private Bag X11291		No. 7 Government Boulevard, Building No. 2 Riverside Park, Extension 2	NELSPRUIT	1200	
Mr	Mark	Gordon	Interested and Affected Party	Department of Environmental Affairs	Deputy Director General	mgordon@environment.gov.za	0728115751	017766485	P O Box 283		PRETORIA	0001		
Mr	Lucas	Mahlanga	Interested and Affected Party	Department of Environmental Affairs	Regional Manager	lmahlanga@environment.gov.za	012310353		Private Bag 4447		PRETORIA	0001		
Ms	Ndibhni	Ramulu	Interested and Affected Party	Department of Environmental Affairs	Environmental Officer	nrmlulu@environment.gov.za	012310302		Private Bag 4447		PRETORIA	0001		
Ms	Nobole	Khanyile	Interested and Affected Party	Department of Mineral Resources and Energy	Regional Manager	mnobole@mrm.gov.za	012303550		Sawegays Crescent Centre, Mandela Drive		EMALAHLENI	1059		
Ms	Leila	Maphahla	Interested and Affected Party	Department of Mineral Resources and Energy	Regional Manager	leila.maphahla@mrm.gov.za	012303550		Private Bag 959		ACADIA	0007		
Ms	Helen	Mtshali	Interested and Affected Party	Department of Mineral Resources and Energy	Mine Environmental Management Officer	helen.mtshali@mrm.gov.za	0731263823	013653050	Private Bag X2729		Sawegays Crescent Centre, Mandela Drive	EMALAHLENI	1059	
Mr	Victor	Moshapo	Interested and Affected Party	Department of Mineral Resources and Energy	Mine Environmental Management Officer	vmoshapo@mrm.gov.za	083488068		Private Bag X2729		EMALAHLENI	1059		
Mr	Aubrey	Tshahandlano	Interested and Affected Party	Department of Mineral Resources and Energy	Regional Manager	aubrey.tshahandlano@mrm.gov.za	013653050		Private Bag X2729		Sawegays Crescent Centre, Mandela Drive	EMALAHLENI	1059	
Mr	Pat	Machana	Interested and Affected Party	Department of Public Works	Regional Manager	pat.machana@dpw.gov.za	083768764	013753638	Private Bag X11280		30 Brown Street, Nedbank Building, 09th Floor	NELSPRUIT	1000	
Mr	Clay	Bempe	Interested and Affected Party	Department of Rural Development and Land Reform	Chief Land Claims Commissioner	clay.bempe@dlr.gov.za	012312944		Private Bag 903		No. 9 Bailey Lane, Arcadia	PRETORIA	0007	
Mr	Lebano	Maphahla	Interested and Affected Party	Department of Rural Development and Land Reform	Regional Land Claims Commissioner	lebano.maphahla@dlr.gov.za	012312944		Private Bag 903		266 Pretorius Street, Centre Walk Building (West Block)	PRETORIA	0001	
Mr	Sam	Nkomo	Interested and Affected Party	Department of Rural Development and Land Reform	Chief Director: Land Restoration Support	sam.nkomo@dlr.gov.za	012756509		Private Bag X11330		Restitution House, 20 Samora Machel Drive	NELSPRUIT	1200	
Mr	Harald	Shabane	Interested and Affected Party	Department of Rural Development and Land Reform	Director: Land Reform	harald.shabane@dlr.gov.za	083695084		18 Bull Street		Newquay Central	NELSPRUIT	1200	
Mr	Stanford	Makwale	Interested and Affected Party	Department of Water and Sanitation	Deputy Director Water Quality	stanford@dw.gov.za	082603187	012922026	Private Bag X11259		NELSPRUIT	1200		
Ms	Dumant	Makwale	Interested and Affected Party	Department of Water and Sanitation		makwale@dw.gov.za	073303523		Private Bag 933		PRETORIA	0001		
Mr	Makaza	Mulandu	Interested and Affected Party	Department of Water and Sanitation	Acting Chief Director: Mpumalanga	Makaza@dw.gov.za	012957930		Proton Building, c/o Brown & Paul Kruger		PRETORIA	1200		
Mr	Bandana	Ndlovu	Interested and Affected Party	Department of Water and Sanitation	Control Environmental Officer	bandana@dw.gov.za	073368316		Private Bag X313		PRETORIA	0001		
Ms	Tshufulu	Nemzathani	Interested and Affected Party	Department of Water and Sanitation	Environmental Control Officer	nemzathani@dw.gov.za	082895570		Private Bag X313		PRETORIA	0001		
Mr	Johann	van der Waagden	Interested and Affected Party	Department of Water and Sanitation	Regional Director: Mpumalanga	van.der.waagden@dw.gov.za	082807198		Private Bag X10580		BRONKHORSTSPRUIT	1035		
Mr	Dries	Corjee	Landowner	Driscoll Family Trust	Farm Owner	klipp@vodmail.co.za	082825042		P O Box 241		OGIES	2301		
Mr	Arjen	Burns	Non Government Organisation	Ekanga Ground Trust		arjen@ecotrust.co.za	084400124				PRETORIA	0001		
Mr	Gwen	Malaza	Non Government Organisation	Enablement Environmental and Waste Management	Committee	emalaza@gwenmalaza.com	082954035		1751 Mphahla Street		KWAGULUQA	1059		
Mr	Thamba	Gudaba	Interested and Affected Party	Enablement Local Municipality	Ward 19 Councillor	thamba@eml.gov.za	062736021		228 Mphahla Village		EMALAHLENI	1059		
Mr	Magguy	Magguy	Interested and Affected Party	Enablement Local Municipality	Ward 25 Councillor	magguy@magguy.com	075644737		P O Box 2630		KHEIL	2271		
Mr	Sowee	Masela	Interested and Affected Party	Enablement Local Municipality	Municipal Manager	sowee@eml.gov.za	012600620		P O Box 3		WITBANK	1035		
Ms	Leranne	Masela	Interested and Affected Party	Enablement Local Municipality	Office of the Speaker	leranne@eml.gov.za	012600644		P O Box 3		WITBANK	1035		
Ms	Nontokiso	Mthombeni	Interested and Affected Party	Enablement Local Municipality	Environmental Management and Waste	nontokiso@mthombeni.com	012600640		P O Box 3		WITBANK	1035		
Ms	Nontokiso	Mthombeni	Interested and Affected Party	Enablement Local Municipality	IP Manager	nontokiso@mthombeni.com	012600673		P O Box 3		WITBANK	1035		
Mr	Erard	Ndabide	Interested and Affected Party	Enablement Local Municipality	Head of Department: Environmental and Waste Management	erard@eml.gov.za	012600655		P O Box 3		WITBANK	1035		
Mr	Orlando	Riba	Interested and Affected Party	Enablement Local Municipality	Control Environmental Officer	orlando@eml.gov.za	079119705	012600673			PRETORIA	0001		
Mr	Thambi	Shabalala	Interested and Affected Party	Enablement Local Municipality	Office of the Speaker	thambi@eml.gov.za	074139988				PRETORIA	0001		
Mr	Andile	Shabalala	Interested and Affected Party	Enablement Local Municipality	Ward 32 Councillor	andile@eml.gov.za	082962735		Private Bag X11		MODDERSPONTEN	2187		
Ms	Karyn	Morrison	Non Government Organisation	Endangered Wildlife Trust	Manager: Birds of Prey Working Group	karyn@ewt.org.za	082872126		Private Bag X11		PRETORIA	0001		
Mr	Raymond	Misimang	Community Based Organisation	Environmental Life for You					755 Extension 12		KWAGULUQA	1073		
Mr	Walter	Herrant	Community Based Organisation	Environmental Trust Club					P O Box 3744		EMALAHLENI	1039		
Mrs	Mariette	Luffertik	Non Government Organisation	Federation for a Sustainable Environment	Chief Executive Officer	mariette@pea.org.za	0732314893	011787796	Private Bag 9033		RVONIA	2188		
Ms	Tobago	Chauke	Client	Glencore Operations South Africa (Pty) Ltd		tobago.chauke@glencore.co.za	073760999	015887829			EMALAHLENI	1039		
Mr	Deon	Gowder	Client	Glencore Operations South Africa (Pty) Ltd		deon.gowder@glencore.co.za	073760999	015887829			EMALAHLENI	1039		
Ms	Mashauw	Matsela	Industry and Commerce	Industrial Development Corporations	Regional Manager	mashauw@idc.co.za	013752772		P O Box 1494		23 Botha Avenue cnr Rhodes Street, Hi-Tech House	EMALAHLENI	1039	
Ms	Larisa	Lapine	Directly Affected Landowner	Ingev Surface Holdings (Holdings) (Pty) Ltd	Non Executive Director	larisa@ingev.com	073752772		P O Box 6129		Marshalltown	2187	Klipfont 462 15	
Ms	Sufyan	Sarang	Directly Affected Landowner	Ingev Surface Holdings (Holdings) (Pty) Ltd	Director	sufyan@ingev.com	073752772		P O Box 6129		Marshalltown	2187	Klipfont 462 15	
Mr	Abel	Kheca	Community Based Organisation	Initiative for Youth Development					951 Zone 14	Extension 3	KWAGULUQA	1073		
Ms	Lekoto	Khalo	Parastatal	Ikomaliso Usuthu Catchment Management Agency		lekoto@ikoma.co.za	013753000		Private Bag X11214		NELSPRUIT	1200		
Ms	Sipha	Nkomo	Parastatal	Ikomaliso Usuthu Catchment Management Agency		sipha@ikoma.co.za	013753000		Private Bag X11214		NELSPRUIT	1200		
Mr	Marcus	Selape	Parastatal	Ikomaliso Usuthu Catchment Management Agency	Manager: Resource Protection and Waste	marcus@ikoma.co.za	078800244	013753000	Private Bag X11214		NELSPRUIT	1200		
Mr	Arthursomashe	Ramaboa	Community Based Organisation	KwaGushu Environmental Forum	Chairperson				P O Box 1433		EMALAHLENI	1039		
Mr	Victor	Ramaboa	Community Based Organisation	KWEEF Youth for Environmental Justice					P O Box 1455		EMALAHLENI	1039		
Ms	Michael	Clemente	Non Government Organisation	Lawyers for Human Rights	Head: Environmental Rights Programme	michael@lhr.org.za	011339196	357 Vleugel St			PRETORIA	0002		
Ms	Jessica	Lewis	Non Government Organisation	Lawyers for Human Rights	Candidate attorney: Environmental Rights	jessica@lhr.org.za	011339196	357 Vleugel St			PRETORIA CENTRAL	0002		
Ms	Anne-Marit	OTT	Industry and Commerce	Middleburg Chamber of Commerce	Chief Executive Officer	anne@middleburgchc.com	012343215		292 Walter Siulu St		MIDDELBURG	1050		
Mr	Herbert	Modupi	Industry and Commerce	Mineral Council of South Africa	Collaborations Director	hmodupi@mineralscouncil.org.za	082560229		Private Bag X12115		MSOMBELA	1200		
Mr	PS	Mothlala	Interested and Affected Party	Mpumalanga Department of Economic Development	Director: Local Economic Development	psmothlala@mp.gov.za	0824641259				EMALAHLENI	1039		
Miss	Felicia	Lannox	Community Based Organisation	Mpumalanga Youth Against Climate Change		felicia.lannox@gmail.com	0731989053		8097/14 Bambata Street		KWAGULUQA	1039		
Miss	Nomnobo	Makhele	Community Based Organisation	Mpumalanga Youth Against Climate Change		nomnobo@myacc.org.za	0721202426		P O Box 3612		WITBANK	1039		
Ms	Leranne	Mantshali	Resident	National Union of Mineworkers		leranne@num.org.za	012600128	238 Hag Avenue			EMALAHLENI	1039		
Mr	Peter	Mahlanga	Interested and Affected Party	Nangata District Municipality	LED Manager	peter@nangata.gov.za	012492416		P O Box 437		2A Walter Siulu Street	MIDDELBURG	1050	
Mr	Vusi	Mahlanga	Interested and Affected Party	Nangata District Municipality	Deputy Director: Social Services and Environmental	vusi@nangata.gov.za	012492416		P O Box 437		2A Walter Siulu Street	MIDDELBURG	1050	
Mr	Johan	Mashauw	Interested and Affected Party	Nangata District Municipality	Town Planner	johan@nangata.gov.za	012492416		P O Box 437		2A Walter Siulu Street	MIDDELBURG	1050	
Mr	Boetie	Mathe	Interested and Affected Party	Nangata District Municipality	IDP Manager	boetie@nangata.gov.za	012492416		P O Box 437		2A Walter Siulu Street	MIDDELBURG	1050	
Ms	Mpho	Nembi	Interested and Affected Party	Nangata District Municipality	Air Quality Officer	mpho@nangata.gov.za	012492416		Private Bag X1291		No.7 Government Boulevard, Building No. 2 Riverside Park, Extension 2	NELSPRUIT	1200	
Ms	Maggie	Skeana	Interested and Affected Party	Nangata District Municipality	Municipal Manager	maggie@nangata.gov.za	082949820	012492000	P O Box 437		2A Walter Siulu Street	MIDDELBURG	1050	
Mr	Norman	Mokelona	Community Based Organisation	OGIES Town Council			083586232		P O Box 148		OGIES	2230		
Mr	Lucky	Mahlanga	Community Based Organisation	Outragous Courage Youth		lucky@ocyouth.com	072994417	013688055			KWAGULUQA	1073		
Ms	Ola	Schumacker	Industry and Commerce	Pau Van Wyk Economics and Planners cc	Manager	ola@schumacker.com	012990009		P O Box 4015		PRETORIA	0028		
Ms	Dorine	Schumacker	Non Government Organisation	South African National Roads Agency SOC Ltd	Secretary/Typist	dorine@schumacker.com	012990009		P O Box 4015		WITBANK	1035		
Ms	Ra	Barkhuizen	Parastatal	South African National Roads Agency SOC Ltd	Secretary/Typist	ra@barkhuizen.com	012426202				WITBANK	1035		
Ms	Thabizile	Masela	National Government	Transvaal LTD	Environmental Specialist	thabizile.masela@transnet.net	0827971392	013603234			SILVERTON	0184		
Mr	Bennie	Van Zyl	Agri-culture	Transvaal Agricultural Union of South Africa	General Manager	benzie@tausa.co.za	012804803		194 James Drive		PRETORIA	0184		
Mr	Bennie	Van Zyl	Agri-culture	Transvaal Agricultural Union of South Africa	General Manager	benzie@tausa.co.za	012804803		194 James Drive, Silvertown		PRETORIA	0184		
Mr	Christina	Tsilo	Trust	Trustee		christina@tsilo.com	082650298	013648300			PRETORIA	0184		
Dr	Stanley	Lipshitz	Parastatal	Water Research Commission	Farm Owner	stanley@wrc.org.za	072416793	014435960			PRETORIA	0184		
Ms	Morgan	Grimbs	Non Government Organisation	Wildlife and Environment Society of South Africa	Environmental Governance Programme Manager	morgan.grimbs@wesasa.co.za	083630782		22 Hofmeier Street		EMALAHLENI	1039		
Ms	Ricky	Potts	Non Government Organisation	Wildlife and Environment Society of South Africa	Regional Representative & Chair	ricky@wesasa.co.za	083630782		Private Bag X4		BRANFBONTEN	2017		
Ms	Dudu	Zulu	Industry and Commerce	Witbank Chamber of Commerce and Industry	Chair Operating Officer	dudu@witbankchamber.co.za	011339115		Postnet Suite 1, Private Bag X4		EMALAHLENI	1039		
Ms	Melinda	Napah	Non Government Organisation	World Wildlife Fund South Africa	SASO Project Officer	melinda@wwf.org.za	011339115		Postnet Suite 1, Private Bag X4		EMALAHLENI	1039		
Golden	Shanes	Dreyer	Directly Affected Landowner	Xstrata Char Group (Pty) Ltd	Director				P O Box 2131		44			

APPENDIX D

**Stakeholder Letter, Registration
and Comment Sheet**

08 November 2019

Project No.1788674

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

- **Draft Scoping Report available for comment and invitation to register as interested and affected party**

Dear Stakeholder

This letter serves to notify interested and affected parties (I&APs) that Glencore Operations South Africa Pty Ltd. (GOSA) are applying for an Environmental Authorisation (EA), Water Use Licence (WUL) and Waste Management Licence (WML) for the proposed iMpunzi South Pit Coarse Discard Dump and Venture Co-Disposal facility project on the farms of Kromfontein 30 IS and Klipplaat 14 IS, near the towns of Ogies and Kriel in Mpumalanga.

The letter also provides more information about the proposed project, regulatory requirements that GOSA must comply with and invites I&APs to contribute comments.

Background

GOSA manage several coal mining operations including the iMpunzi Mine Complex.

GOSA have appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent Environmental Assessment Practitioner (EAP) to undertake the regulatory authorisation processes associated with the proposed Venture Co-Disposal facility, and coarse discard facility at the South Pit of the iMpunzi Complex.

Project location

The iMpunzi Complex is located 27 km south-east of eMalahleni in the Mpumalanga Province, near Ogies and Kriel towns and forms part of both the eMalahleni and Steve Tshwete Local Municipalities of the Nkangala District Municipality (see map enclosed).

Project description

The iMpunzi Complex comprises four collieries or sub-sections, namely: Arthur Taylor Colliery (ATC), Phoenix Colliery (decommissioned), Arthur Taylor Colliery Opencast Mine (ATCOM), and ATCOM East. Coal mining within the complex was initiated at the Phoenix Colliery in 1936. Operations at all four collieries historically have been underground, however all underground operations ceased in 2008 and all remaining operations are opencast.

All opencast mining is undertaken using the strip-mining method using draglines, and truck-and-shovel at the smaller open pits. All hard overburden (shale/sandstone) and coal are blasted using bulk explosives. The coal is taken by a truck fleet to the Crushing and Pillar Screening Plant (Golder, 2016b).

The physical extent of the entire iMpunzi Complex for which there is a mining right extends over approximately 6 835 ha.

The remaining Life of Mine (LoM) for the entire iMpunzi is approximately 17 years, and production is anticipated to cease in 2036. The LoM schedule is governed by qualitative and quantitative requirements in the market, and future amendments to the overall mining schedule may be included in the LoM plan.

iMpunzi wishes to undertake the following activities:

- (i) extend its current Venture coarse discard dump into a co-disposal facility, and establish a new return water dam; and
- (ii) establish a coarse discard facility at its South Pit operations.

These proposed activities are described in the next sections.

(i) Proposed Venture Co-Disposal Facility

The existing Venture discard dump is expanding at a faster rate than initially anticipated and will need to accommodate additional volumes of discard. The existing Venture discard dump receives coal discard from the coal processing plant at ATC. The proposed venture co-disposal facility will consist of coarse discard from ATC plant as well as slurry, that is also generated at the ATC plant and currently disposed of into the underground workings at the ATC mine. The current Venture discard dump is authorised in terms of an approved EMPr (under the Mineral and Petroleum Resources Development Act).

As part of the design of the proposed co-disposal facility, a Return Water Dam (RWD) will need to be constructed to handle the expected flow rates as well as accept contaminated runoff from the facility. The new RWD is proposed to be located to the north west of the Venture co-disposal facility.

The proposed expansion will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. The proposed expansion and RWD will also trigger listed activities in terms of GN R. 327 and GN R. 325, which also requires an application for an EA supported by an EIA process. The applications for EA and WML will be submitted to the Department of Mineral Resources and Energy (DMRE).

The water uses associated with the proposed extension include section 21 (g), (c) and (i) of the National Water Act 36 of 1998 (NWA), and hence an application for a WUL will be submitted to the Department of Human Settlements, Water and Sanitation (DHSWS).

(ii) Proposed South Pit Coarse Discard Dump

A coarse discard facility will be established at iMpunzi's old semi-rehabilitated South Pit area to provide for additional coarse discard disposal capacity for ongoing mining operations at iMpunzi. The coarse discard is generated at Central plant. Placement of coarse discard will be completed in a phased manner during which clean and dirty water separation will be managed.

The proposed dump will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. A WUL will be applied for a section 21 (g) water use in terms of the NWA.

A single regulatory and public participation process will be followed for both the proposed Venture co-disposal facility and South Pit coarse discard dump projects.

Your comment is important, please

We would like to invite stakeholders to register as I&APs and to comment on the applications for an EA, WUL and WML, and the EIA process in any of the following ways:

- By completing the Registration and Comment Sheet enclosed with this letter;
- By writing a letter or providing additional written submissions; and
- By email, fax or telephone to the Public Participation Office.

Printed copies of the draft Scoping Report are available at the public places listed below. The documents also can be downloaded from the following website: <https://www.golder.com/global-locations/africa/south-africa-public-documents/>.

Name of Public Place	Contact Person	Contact Number
Ogies Public Library	Librarian	013 643 1027
Emalahleni Public Library	Ms Maria Rozmiarek	013 690 6232
Ogies Clinic	Sister Choko Motau	013 643 2037
Golder Associates website	Mabel Qinisile/Ursula Papé	(011) 254 4800

Comment periods

We would like to draw I&APs attention to the following comment periods:

- **Draft Scoping Report: Friday, 8 November 2019 to Monday 9 December 2019** (30-day comment period).
- **Water Use Licence Application: Friday, 8 November to Friday, 31 January 2020** (60-day comment period).

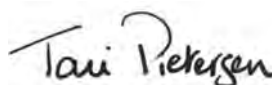
We would like to encourage you to actively participate in the authorisation application processes. We would be happy to respond to any questions you may have or to provide you with more information. Should you wish to obtain more information or wish to comment, please contact me at (011) 254 4805, fax 086 582 1561 or email: ppoffice@golder.co.za.

Sincerely,

Golder Associates Africa (Pty) Ltd.



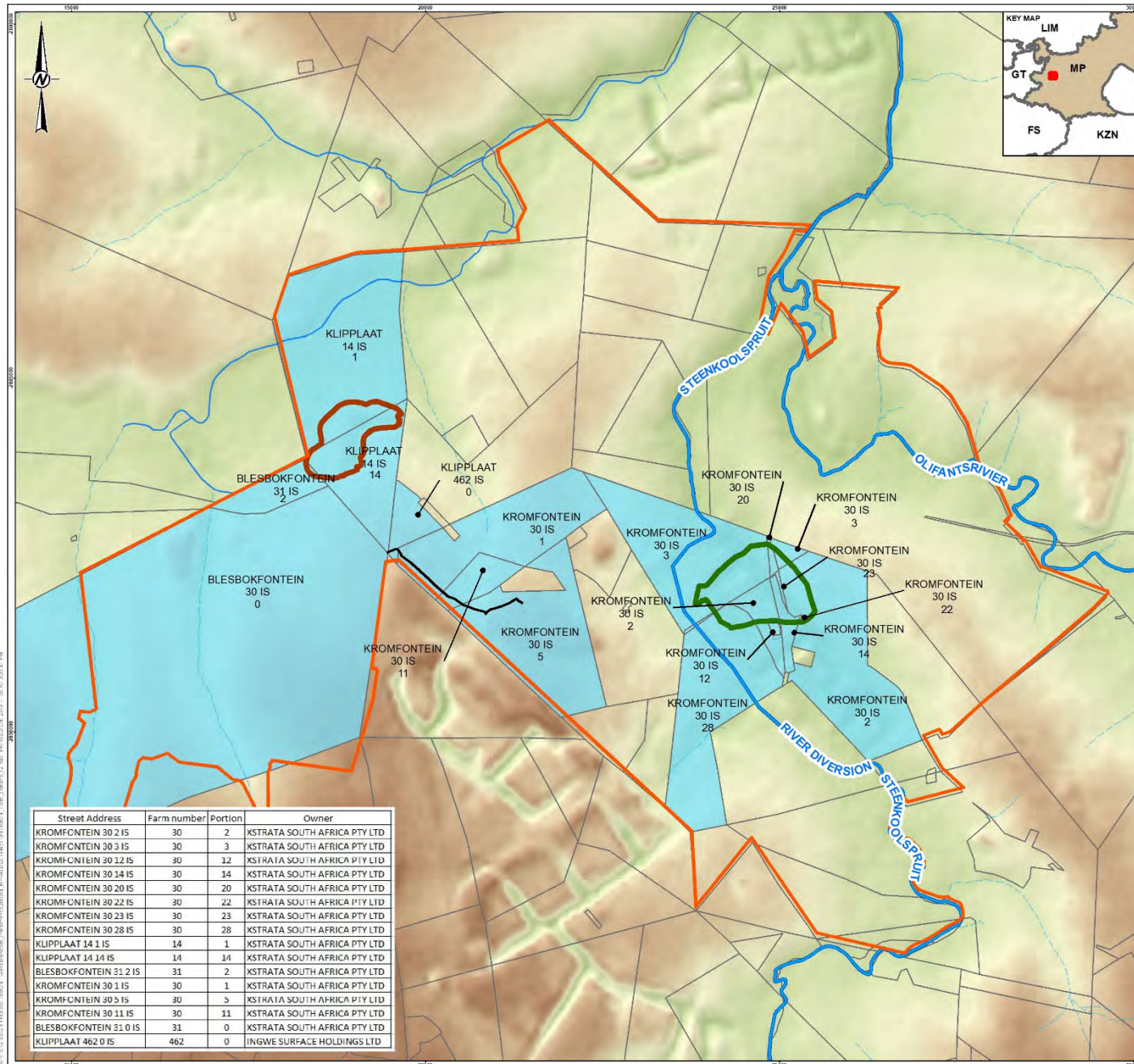
Mabel Qinisile
Public Participation Task Lead



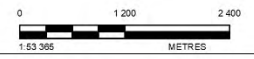
Antoinette Pietersen
Social Management Services Group Lead

MQ/AP

Attachments: Locality Map
Registration and Comment Sheet



- LEGEND**
- Proposed Haul Road Expansion
 - Diversion
 - ▭ iMpunzi Complex Mining Rights Area (MRA)
 - ▭ Proposed South Pit Coarse Discard Dump
 - ▭ Proposed Venture Co-disposal Facility
 - ▭ Farm Portions 2018



NOTE(S)

REFERENCE(S)
1. COORDINATE SYSTEM: CAPE LO29

CLIENT
GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD

PROJECT
IMPUNZI IRP

TITLE
FARM PORTIONS

CONSULTANT	YYYY-MM-DD	2019/11/06
	DESIGNED	MW
	REVIEWED	MW
	APPROVED	MW

PROJECT NO. 1788674 **CONTROL** **REV.** **FIGURE**

Street Address	Farm number	Portion	Owner
KROMFONTEIN 30 2 IS	30	2	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 3 IS	30	3	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 12 IS	30	12	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 14 IS	30	14	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 20 IS	30	20	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 22 IS	30	22	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 23 IS	30	23	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 28 IS	30	28	XSTRATA SOUTH AFRICA PTY LTD
KLIPLAAT 14 1 IS	14	1	XSTRATA SOUTH AFRICA PTY LTD
KLIPLAAT 14 14 IS	14	14	XSTRATA SOUTH AFRICA PTY LTD
BLESBOKFONTEIN 31 2 IS	31	2	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 1 IS	30	1	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 5 IS	30	5	XSTRATA SOUTH AFRICA PTY LTD
KROMFONTEIN 30 11 IS	30	11	XSTRATA SOUTH AFRICA PTY LTD
BLESBOKFONTEIN 31 0 IS	31	0	XSTRATA SOUTH AFRICA PTY LTD
KLIPLAAT 462 0 IS	462	0	INGWE SURFACE HOLDINGS LTD

1906-10-10 10:52:17 Project: IMPUNZI - Environmental Impact Assessment Report (EIR) for the Impunzi Iron Ore Project, located in the Middelburg area of the Mpumalanga province, South Africa.

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE



Registration and Comment Sheet

**Draft Scoping Report: Friday 8 November to Monday 9 December 2019
Water Use Licence Application: Friday 8 November until Friday, 31 January 2020**

Your comments are an important contribution into this permitting process. We would like to interact directly with you and encourage you to register as an interested and affected party so that we can keep you updated as this project moves forward and respond to any questions or concerns that you may wish to raise.

PERSONAL DETAILS			
Name	Surname	Title	Organisation / Department <i>(If applicable)</i>
CONTACT INFORMATION			
Mobile Number	Land Line Contact Number		Fax Number
		Office	
		Home	
Email	Postal Address		Postal code
LANDOWNERS			
If your property falls within the boundary of the water use licence and waste management licence application area, please tell us your farm name and erf/portion number			
WOULD YOU LIKE TO REGISTER AS AN INTERESTED AND AFFECTED PARTY?			
Please register me as an interested and affected party (I&AP) for this project so that I may receive further information and notifications as the project develops			YES
			NO
Preferred Method of Communication <i>(Mark with an X)</i>	Post	Email	Fax
I hereby disclose below any direct business, financial, personal or other interest that I may have in the approval or refusal of the application:	Date		
	Signature		

For internal use to confirm capture of stakeholder details into the stakeholder database	
Stakeholder database reference number	
	Signature of data capturer

COMMENT(S)

You are welcome to use different pages should you so wish.

I have the following comments to make regarding the Draft Scoping Report and/or the public consultation process:

I have the following comments to make regarding the WULA and/or the public consultation process:

Please ask the following of my colleagues / friends to register as Interested and Affected Persons for this iMpunzi regulatory authorisation processes:

NAME	CONTACT DETAILS

PLEASE RETURN THE REGISTRATION AND COMMENT SHEET TO:

If you are commenting on the Draft Scoping Report, return your comments: **Monday 9 December 2019**

If you are commenting on the WULA, return your comments: **Friday 31 January 2020**

Golder Associates Africa (Pty) Ltd

PUBLIC PARTICIPATION OFFICE

Mabel Qinisile/Ursula Papé

PO Box 6001, Halfway House, 1685

Tel: (011) 254 4800; Fax: (086) 582 1561

E-mail: ppoffice@golder.co.za

THANK YOU

Mrs Aucamp A	Christelike Maatskaplike Raad Mpumalanga	
Contact Details: sekrm@cmroos.co.za	P O Box 12778 LERAATSFONTEIN 1038	
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms Barkhuizen Ria	South African National Roads Agency SOC Ltd	
Contact Details: nrstat@nra.co.za		
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Date **Time** **Regarding**

2019/12/04

Email from Ria Barkhuizen

Good day
Please find attached SANRAL's comments.
Please note for any new applications and request for comments, use NRStat@nra.co.za email address.

Regards
Ria

2019/11/11

Email response from Ria Barkhuizen

Good day
This email is an acknowledgement of receipt for your enquiry.
Please note that your enquiry will be evaluated and a response provided within 30 days, in line with requirements of Section 29 of the Spatial Planning and Land Use management Act (Act No.16 of 2013) read with Section 3 of the Promotion of Administrative Justice Act (Act No.3 of 2000).
Should you not receive any response within 30 days, kindly follow up on the enquiry by responding to Jan Oliver who will be dealing with it and will convert back to you.
He can be contacted on (012) 426-6200 / 6242.

Tx and Regards

Ms Benyane Cindy Department of Rural Development and Land Reform

Contact Details:

Cindy.Benyane@drdlr.gov.za

Private Bag X03

ARCADIA

0007

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Bladwell Ken

Contact Details:

are kbladwell@hotmail.com

0825298596

P O Box 12581

LERAATSFONTEIN

1038

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Botha André

Endangered Wildlife Trust

Contact Details:

andreb@ewt.org.za

0829625725

Private Bag X11

MODDERFONTEIN

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

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2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Breet Nico

Contact Details:

enjeboer@mweb.co.za

0824964811

P O Box 2993

KRIEL

2270

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>
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2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Ms	Burns	Angus	Ekangala Grassland Trust
Contact Details:			
egtproject@mweb.co.za			0844001234
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mrs	Chauke	Tebogo	Glencore Operations South Africa (Pty) Ltd
Contact Details:			
Tebogo.Chauke@glencore.co.za			0737650999
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.	

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Claasen Guillam Jacobus

Contact Details:

0828099967 P O Box 201 KRIEL 2270

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Claasen Phil

Contact Details:

P O Box 201 KRIEL 2270

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Clements	Michael	Lawyers for Human Rights
Contact Details:			
michael@lhr.org.za		357 Visagie St	PRETORIA 0002
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Collett	Bill	Agri SA Loskop and Loskop Irrigation Board
Contact Details:			
billcollett@ctec.co.za		0828703691 P O Box 235	GROBLERSDAL 0470
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr

Cronje

Dries

Dries Cronje Familie Trust

Contact Details:

Klipo@vodamail.co.za

0828255042

P O Box 241

OGIES

2230

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

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SMS - Sent

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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr

De Lange

Izak Daniel

Contact Details:

idelange@global.co.za

0829208004

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr De Wet Daniel Jacobus

Contact Details:

0825458661 P O Box 592 OGIES 2230

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
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2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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Mr De Wet Daniel Jacobus Steyn

Contact Details:

0824901542 P O Box 592 OGIES 2230

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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Ms Dlodlu Linda Zimele Coummunity Fund Hub: Phola (Ogies)

Contact Details:

linda.dlodlu@angloamerican.com 0715732327 Shop 28, Van Riebek Street OGIES 2230

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>
2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Dreyer Gideon Johannes Xstrata Char Group (Pty) Ltd

Contact Details:

P O Box 2131 RUSTENBURG 0300

Date/Time Result Regarding & Details

2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>
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Mr & Mrs Duvenage Kobus and Annamie Bronkhorstspruit and Wilge River Association

Contact Details:

admin@bhswilgeconserv.co.za 0824662384 P O Box 691 BRONKHORSTSPRUIT 1020

Date/Time Result Regarding & Details

2019/12/09 13:31:00	SMS - Sent	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>
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2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Gordon Mark Department of Environmental Affairs

Contact Details:

mgordon@environment.gov.za

Private Bag X447

PRETORIA

0001

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Govender Devon Glencore Operations South Africa (Pty) Ltd

Contact Details:

Devon.Govender@glencore.co.za

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Griffiths	Morgan	Wildlife and Environment Society of South Africa
Contact Details:			
Morgan.Griffiths@wessa.co.za			0724175793
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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Ms	Grobler	Anika	
Contact Details:			
anikgrob@mweb.co.za			0823227568
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Cllr	Gulube	Themba	Emalahleni Local Municipality
Contact Details:			
tpgulube900@gmail.com			0603768021 C186 Masakhane Village EMALAHLENI 1039
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Hermann	Walter	Environmental Youth Club
Contact Details:			
			P O Box 3744 EMALAHLENI 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Hlatshwayo Selby Department of Economic Development, Environment, Conservation and Tourism

Contact Details:

shlatshwayo@mpg.gov.za

0722811751

P O Box 383

WITBANK

1035

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms Hugo Robyn Centre for Environmental Rights

Contact Details:

rhugo@cer.org.za

0823894357

8A Sussex Road

OBSERVATORY

7925

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Khaile	Leketso	Inkomati Usuthu Catchement Management Agency	
Contact Details: khaile@iucma.co.za			Private Bag X11214	NELSPRUIT 1200
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>		
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province		
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province		

Ms	Khanyile	Nqobile	Department of Mineral Resources and Energy	
Contact Details: MpumalangaRM@dmr.gov.za			Saveways Crescent Centre, Mandela Drive	EMALAHLENI 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>		

2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Khoza Abel Initiative for Youth Development

Contact Details:

951 Zone 14 KWAGUQA 1073

Date/Time Result Regarding & Details

2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
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Ms Lawrence Jessica Lawyers for Human Rights

Contact Details:

jessical@lhr.org.za 357 Visagie St PRETORIA CENTRAL 0002

Date/Time Result Regarding & Details

2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Legong	Lerato	Ingwe Surface Holdings Holdings (Pty) Ltd		
Contact Details:			P O Box 61829	MARSHALLTOWN	2107
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>			
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province			

Miss	Lennox	Felicia	Mpumalanga Youth Against Climate Change		
Contact Details:			0731989053	8097/14 Bambata Street	KWAGUQA
lenonyanemf@gmail.com					1039
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>			
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.			
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.			
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2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province			

Mr	Letau	V	Bangani Youth Development Group
Contact Details:			
	<i>jv.letau@benicon.co.za</i>		0725470175 5773 Lifero Street ACKERVILLE 1039
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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Mrs	Liefferink	Mariette	Federation for a Sustainable Environment
Contact Details:			
	<i>mariette@pea.org.za</i>		0732314893 Private Bag X033 RIVONIA 2128
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	

2019/11/08 12:42:00	SMS - Sent	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>
2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Dr Liphadzi Stanley Water Research Commission

Contact Details:
stanleyl@wrc.org.za

Date/Time Result Regarding & Details

2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>
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Mr Macevele Stanford Department of Water and Sanitation

Contact Details:
MaceveleS@dws.gov.za 0826039187 Private Bag X11259 NELSPRUIT 1200

Date/Time Result Regarding & Details

2019/12/09 13:31:00	SMS - Sent	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>
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2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms Machimana Sylvia Inkomati Usuthu Catchement Management Agency

Contact Details:

sylviam@iucma.co.za

Private Bag X11214

NELSPRUIT

1200

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Cllr Magagula Maggy Emalahleni Local Municipality

Contact Details:

0725644737

P O Box 2630

KRIEL

2271

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

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2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Mahlangu Lucas Department of Environmental Affairs

Contact Details:
 Imahlangu@environment.gov.za Private Bag X447 PRETORIA 0001

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>
2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Mahlangu Peter Nkangala District Municipality

Contact Details:
 mahlangupb@nkangaladm.gov.za P O Box 437 MIDDELBURG 1050

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Mahlangu Vusi Nkangala District Municipality

Contact Details:

mahlangumv@nkangaladm.gov.za

P O Box 437

MIDDELBURG

1050

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Maisanye Lucky Outrageous Courage Youth

Contact Details:

luckymaisanye@gmail.com

0782994417

P O Box 46015

KWAGUQA

1073

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Cllr Maisela Sizwe Emalahleni Local Municipality

Contact Details:

officeofimm@emalahleni.gov.za

P O Box 3

WITBANK

1035

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Miss Makhubelo Nomcebo Mpumalanga Youth Against Climate Change

Contact Details:

thandekamakhubelo@webmail.co.za

0721201626

P O Box 3612

WITBANK

1035

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

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Mr Makunyane A Botsana Environmental Club

Contact Details:

P O Box 1433 EMALAHLENI 1035

Date/Time Result Regarding & Details

2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
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Mr Malaza Given Emalahleni Environmental and Waste Management Committee

Contact Details:

emalahleniyp@gmail.com 0829254035 1735 Mlotshwa Street KWAGUQA 1039

Date/Time Result Regarding & Details

2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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Mr Maluleka Sam Department of Agriculture, Rural Development, Land and Environmental Affairs

Contact Details:
smaluleka@mpg.gov.za

Private Bag X11291 NELSPRUIT 1200

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
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Ms Maluleke Dunisani Department of Water and Sanitation

Contact Details:
maluleked@dws.gov.za

0732035623 Private Bag X313 PRETORIA 0001

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
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2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms

Manchidi

Linnah

National Union of Mineworkers

Contact Details:

lmanchidi@num.org.za

25B Haig Avenue

EMALAHLENI

1035

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Mangani	Johan	Nkangala District Municipality
Contact Details:			
	manganijp@nkangaladm.gov.za		P O Box 437 MIDDELBURG 1050
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
Ms	Maphopha	Lydia	Department of Mineral Resources and Energy
Contact Details:			
	Lydia.maphopha@dmr.gov.za		Private Bag X59 ARCADIA 0007
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Maphutha	Lebjane	Department of Rural Development and Land Reform
Contact Details:			
<i>Lebjane.Maphutha@drdlr.gov.za</i>		<i>Private Bag X833</i>	<i>PRETORIA 0001</i>
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/11/08 12:33:00</i>	<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	
<i>2019/11/08 09:10:00</i>	<i>Letter Sent</i>	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

Mr	Masalesa	Tshilidzi	Transnet LTD
Contact Details:			
<i>tshilidzi.masalesa@transnet.net</i>		<i>0837971392</i>	
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/12/09 13:31:00</i>	<i>SMS - Sent</i>	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>	
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<i>2019/11/08 12:33:00</i>	<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

Ms	Maseko	Lorraine	Emalahleni Local Municipality
Contact Details:			
officeofspeaker@emalahleni.gov.za		P O Box 3	WITBANK 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Mashiane	Pat	Department of Public Works
Contact Details:			
pat.mashiane@dpw.Gov.za		0836765764 Private Bag X 11280	NELSPRUIT 1200
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Mashiyane Simon Yarona Environmental Club

Contact Details:

P O Box 1433

EMALAHLENI

1035

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Mathe Boetie Nkangala District Municipality

Contact Details:

mathebl@nkangaladm.gov.za

P O Box 437

MIDDELBURG

1050

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Matsiela	Mashweu	Industrial Development Corporations
Contact Details:			
<i>mashweum@idc.co.za</i>		<i>P O Box 1494</i>	<i>EMALAHLENI 1035</i>
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/11/08 12:33:00</i>	<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	
<i>2019/11/08 09:10:00</i>	<i>Letter Sent</i>	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

Ms	Maumela	Helen	Department of Mineral Resources and Energy
Contact Details:			
<i>Helen.maumela@dmr.gov.za</i>		<i>0732163822 Private Bag X7279</i>	<i>EMALAHLENI 1035</i>
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/12/09 13:31:00</i>	<i>SMS - Sent</i>	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>	
<i>2019/11/08 12:42:00</i>	<i>SMS - Sent</i>	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>	
<i>2019/11/08 12:33:00</i>	<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr

Merwe

Anton

Contact Details:

antonvdm@nhsa.co.za

0828508275

P O Box 247

OGIES

2230

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr

Modupi

Herbert

Minerals Council of South Africa

Contact Details:

hmodupi@mineralscouncil.org.za

0825602297

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Mohlala PS Mpumalanga Department of Economic Development and Tourism

Contact Details:

smohlala@mpg.gov.za

0824641259

Private Bag X11215

MBOMBELA

1200

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Mokoena	Norman	Ogies Town Council
Contact Details:			
		0835386232	P O Box 148 OGIES 2230
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Mokone	T	Bangani Youth Development Group
Contact Details:			
		5896 Moela Street	ACKERVILLE 1039
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Morrison	Karryn	Endangered Wildlife Trust
Contact Details:			
kerrynm@ewt.org.za			0828775126
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Moshapo	Victor	Department of Mineral Resources and Energy
Contact Details:			
victoria.moshapo@dmr.gov.za		0834368068	Private Bag X7279 EMALAHLENI 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Msimango	Raymond	Environmental Life for You
Contact Details:			
		7151 Extension 12	KWAGUQA 1073
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mrs	Mthombeni	Nonkululeko	Emalahleni Local Municipality
Contact Details:			
	mthombenine@emalahleni.gov.za	P O Box 3	WITBANK 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Mtshabe	Nonkululeko	Emalahleni Local Municipality
Contact Details: mtshaben@emalahleni.gov.za		P O Box 3	WITBANK 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Mulaudzi	Masala	Department of Water and Sanitation
Contact Details: MulaudziM@dws.gov.za		Prorum Building, c/o Brown & Paul Kruger Streets	NELSPRUIT 1200
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Nagiah	Melisha	World Wildlife Fund South Africa
Contact Details:			
mnagiah@wwf.org.za			Postnet Suite 1, Private Bag X4 BRAAMFONTEIN 2017
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
Mr	Ndou	Rendani	Department of Water and Sanitation
Contact Details:			
ndour@dws.gov.za		0723683816	Private Bag X313 PRETORIA 0001
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Nemataheni	Thivhafuni	Department of Water and Sanitation
Contact Details:			
	nematahenit@dws.gov.za	0828950570	Private Bag X313 PRETORIA 0001
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Nembilwi	Mpho	Nkangala District Municipality
Contact Details:			
	nembilwim@nkangaladm.gov.za	Private Bag X11291	NELSPRUIT 1200
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Nkabinde Erald Emalahleni Local Municipality

Contact Details:

nkabindeej@emalahleni.gov.za

P O Box 3

WITBANK

1035

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Nkosi Sam Department of Rural Development and Land Reform

Contact Details:

Sam.Nkosi@drdlr.gov.za

Private Bag X11330

NELSPRUIT

1200

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Nkosi	Sibongile	Association of Mineworkers and Construction Union
Contact Details:			
enkangalargn.mp@amcu.co.za			198 corner Rhodes and Botha Street, Hi-Tech House EMALAHLENI 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Nortije	Denise	South African National Council on Alcoholism and Drug Dependence
Contact Details:			
sancawitbank@telkomsa.net			24 Jellicoe Street WITBANK 1035
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Novhe	Obed	Council for Geoscience
Contact Details:			
onovhe@geoscience.org.za			0827562961
<u>Date/Time</u>		<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00		SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
2019/11/08 12:42:00		SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.
2019/11/08 12:33:00		E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Ott	Anna-Marth	Middelburg Chamber of Commerce
Contact Details:			
ceo@middelburginfo.com		292 Walter Sisulu St	MIDDELBURG 1050
<u>Date/Time</u>		<u>Result</u>	<u>Regarding & Details</u>
2019/11/08 12:33:00		E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province
2019/11/08 09:10:00		Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Potgieter Willem Abram Nel Xstrata Char Group (Pty) Ltd

Contact Details:

Suite 19, Private Bag X1 MELROSE ARCH 2076

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Potts Ricky Wildlife and Environment Society of South Africa

Contact Details:

rpott@mweb.co.za 0836301782

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Poya	Nkululeko	
Contact Details:			
			0834098722
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
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Mr	Prinsloo	P.J.	
Contact Details:			
		P O Box 225	OGIES 2230
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Ramaube	Arthurnaseous	KwaGuqa Environmental Forum
Contact Details:			
		P O Box 1433	EMALAHLENI 1035

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Ramaube Victor KYEEF Youth for Environmental Justice

Contact Details:

P O Box 1433

EMALAHLENI

1035

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms Ramuhulu Nditsheni Department of Environmental Affairs

Contact Details:

nramuhulu@environment.gov.za

Private Bag X447

PRETORIA

0001

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Riba Ordain Emalahleni Local Municipality

Contact Details:
ordain.riba@yahoo.com

0791195705

<u>Date</u>	<u>Time</u>	<u>Regarding</u>
2019/12/06		Email from Mr Ordain Riba Good afternoon Please find attached I &APs registration form from eMalahlani Local Municipality which serves as our request to be included in the WULA PP process.

Mr Roux George Dierderick Frederic

Contact Details:
gdfroux@worldonline.co.za

0832278356

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Sarang	Sufyaan	Ingwe Surface Holdings Holdings (Pty) Ltd
Contact Details:			
		P O Box 61829	MARSHALLTOWN 2107
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Ms	Schumacker	Ola	Paul Van Wyk Economists and Planners cc
Contact Details:			
	airtaxi@mweb.co.za	P O Box 11522	PRETORIA 0028
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Selepe	Marcus	Inkomati Usuthu Catchement Management Agency
Contact Details:			
	selepem@iucma.co.za	0788005244 Private Bag X11214	NELSPRUIT 1200

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Cllr Shabalala Thembi Emalahleni Local Municipality

Contact Details:

thembishabalala54@gmail.com

0714139898

<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.
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2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mrs Shene-Verdoorn Carolyn

Birdlife South Africa

Contact Details:

advocacy@birdlife.org.za

0827768333

P O Box 515

RANDBURG

2125

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Skhosana Harold

Department of Rural Development and Land Reform

Contact Details:

Harold.Skhosana@drdlr.gov.za

18 Bell Street

NELSPRUIT

1201

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms	Skosana	Maggie Millicent	Nkangala District Municipality
Contact Details:			
	skosanamm@nkangaladm.gov.za	0829498620	P O Box 437 MIDDELBURG 1050
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	
2019/11/08 12:42:00	SMS - Sent	Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.	
2019/11/08 12:33:00	E-mail Sent	Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	
2019/11/08 09:10:00	Letter Sent	Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province	

Mr	Smith	Gert	
Contact Details:			
	gert@smithfarm.co.za	0823883387	
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
2019/12/09 13:31:00	SMS - Sent	REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.	

2019/11/08 12:42:00	SMS - Sent	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>
2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Steenkamp A.N.

Contact Details:

0833256973 P O Box 246 OGIES 2230

Date/Time Result Regarding & Details

2019/12/09 13:31:00	SMS - Sent	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>
2019/11/08 12:42:00	SMS - Sent	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>
2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Ms Steenkamp Jacoba Magdalena

Contact Details:

P O Box 373 OGIES 2230

Date/Time Result Regarding & Details

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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Ms Tempelhoff Elise

Beeld Newspaper

Contact Details:

eliset@beeld.com

0833091192

P O Box 333

AUCKLAND PARK

2006

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Toit Du

Contact Details:

0834776641

P O Box 554

OGIES

2230

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00	SMS - Sent	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>
2019/11/08 09:10:00	Letter Sent	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>

Mr Truter Christie Truter Boerdery Trust

Contact Details:

0828509298

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00	SMS - Sent	<i>REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.</i>
2019/11/08 12:42:00	SMS - Sent	<i>Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.</i>

Mr Tshivhandekano Aubrey Department of Mineral Resources and Energy

Contact Details:

Aubrey.Tshivhandekano@dmr.gov.za

Private Bag X7279

EMALAHLENI

1035

Date/Time

Result

Regarding & Details

2019/11/08 12:33:00	E-mail Sent	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>
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2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr van Aswegen Johann

Department of Water and Sanitation

Contact Details:

Vanaswegenj@dws.gov.za

0828074198

Private Bag X10580

BRONKHORSPRUIT

1029

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Van der Merwe A.T.

Contact Details:

P O Box 247

OGIES

2230

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Van Rensberg

Contact Details:

stabilis@mweb.co.za

0828964196

P O Box 22

OGIES

2230

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 12:33:00

E-mail Sent

Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Van Rensberg F.U.J

Contact Details:

P O Box 373

OGIES

2230

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr Van Rensberg Janse Gregory

Contact Details:

0824657618

P O Box 373

OGIES

2230

Date/Time

Result

Regarding & Details

2019/12/09 13:31:00

SMS - Sent

REMINDER - COMMENT PERIOD ENDS TODAY: EA and WULA for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project, Mpumalanga. DSR Comment period ends Monday 9 December 2019.

2019/11/08 12:42:00

SMS - Sent

Environmental Authorisation and Water Use Licence Application process for Glencore Operations South Africa Pty Ltd for the proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility project. Draft Scoping Report available for comment.

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr van Rensburg Armand

Xstrata Char Group (Pty) Ltd

Contact Details:

P O Box 17070

WITBANK

1035

Date/Time

Result

Regarding & Details

2019/11/08 09:10:00

Letter Sent

Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province

Mr	Van Zyl	Bennie	Transvaal Agricultural Union of South Africa	
Contact Details:				
<i>hb@tlu.co.za</i>			<i>194 James Drive</i>	<i>SILVERTON</i>
				<i>0184</i>
<u>Date/Time</u>		<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/11/08 12:33:00</i>		<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	
<i>2019/11/08 09:10:00</i>		<i>Letter Sent</i>	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

Mr	Van Zyl	Bennie	Transvaal Agricultural Union of South Africa	
Contact Details:				
<i>hb@tlu.co.za</i>			<i>194 James Drive, Silverton</i>	<i>PRETORIA</i>
				<i>0184</i>
<u>Date/Time</u>		<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/11/08 12:33:00</i>		<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	
<i>2019/11/08 09:10:00</i>		<i>Letter Sent</i>	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

Ms	Zulu	Dudu	Witbank Chamber of Commerce and Industry
Contact Details:			
	<i>info@witbankchamber.co.za</i>		<i>22 Hofmeyer Street EMALAHLENI 1039</i>
<u>Date/Time</u>	<u>Result</u>	<u>Regarding & Details</u>	
<i>2019/11/08 12:33:00</i>	<i>E-mail Sent</i>	<i>Subject:Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	
<i>2019/11/08 09:10:00</i>	<i>Letter Sent</i>	<i>Notification of Draft Scoping Report and Water Use Licence Application for Impunzi South Pit Coarse discard Dump and Venture Co-Disposal Facility, Mpumalanga Province</i>	

APPENDIX E

**Newspaper Advert and Site
Notice**

NOTICE

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

DRAFT SCOPING REPORT AVAILABLE FOR COMMENT AND INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Notice issued in terms of section 40 and 41(4) of the National Water Act 36 of 1998 (NWA) and the requirements of Government Notice (GN) 40713, Regulation R.267, and National Environmental Management: Waste Act 59 of 2008 (NEM: WA) and the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended), GN R.324 – GN R. 327.

Glencore Operations South Africa Pty Ltd (GOSA) manage several coal mining operations including the iMpunzi Mine Complex, located 27 km south-east of eMalahleni in the Mpumalanga Province, near Ogies and Kriel towns and which forms part of both the eMalahleni and Steve Tshwete Local Municipalities of the Nkangala District Municipality. GOSA are applying for an Environmental Authorisation (EA), Water Use Licence (WUL) and Waste Management Licence (WML) for the proposed iMpunzi South Pit Coarse Discard Dump and Venture Co-Disposal facility project on the farms of Kromfontein 30 IS and Klipplaats 14 IS.

GOSA have appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent Environmental Assessment Practitioner (EAP) to undertake the regulatory authorisation processes associated with the abovementioned activities.

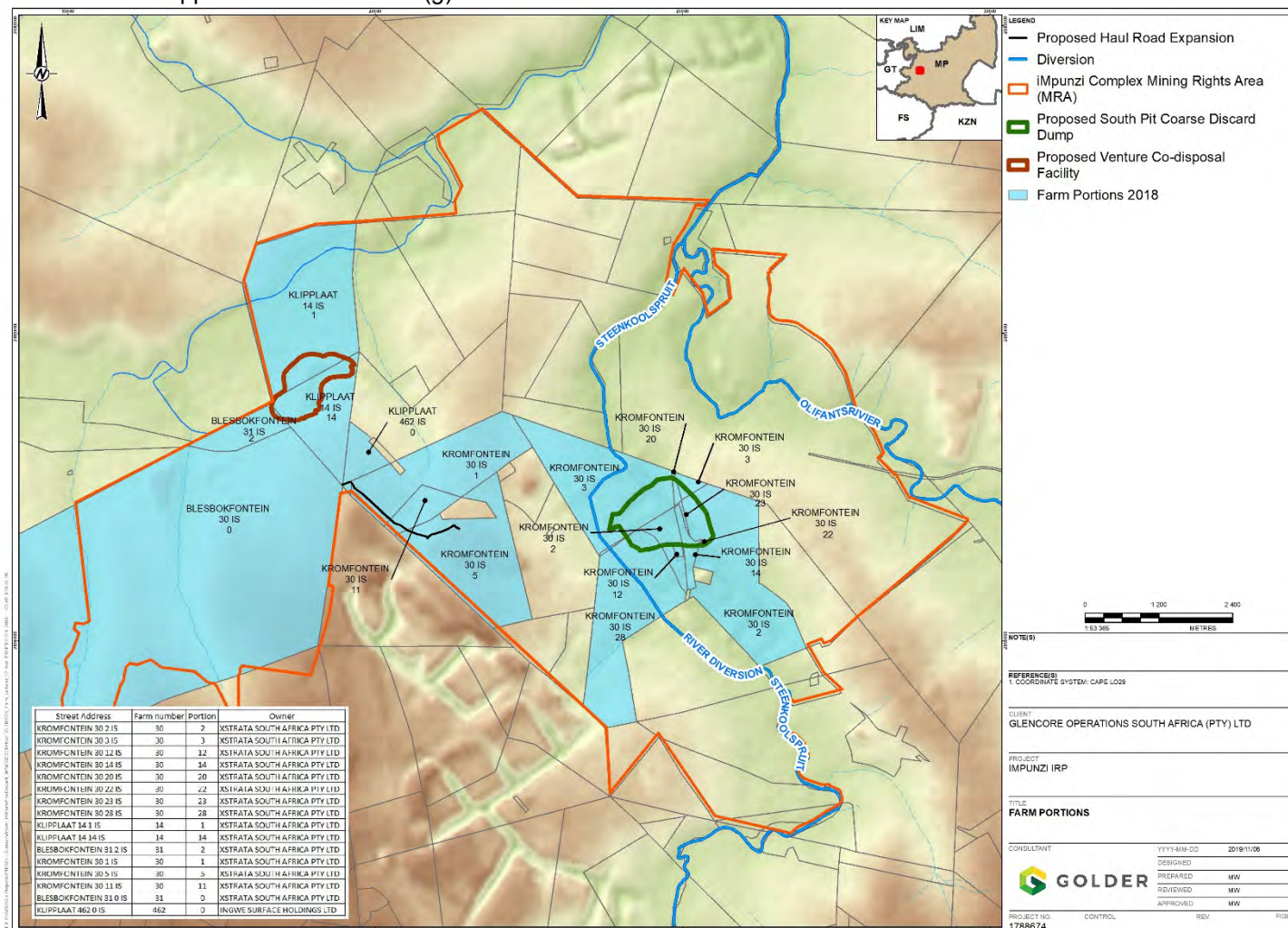
The iMpunzi Complex comprises four collieries or sub-sections, namely: Arthur Taylor Colliery (ATC), Phoenix Colliery (decommissioned), Arthur Taylor Colliery Opencast Mine (ATCOM), and ATCOM East. The iMpunzi Complex has an existing mining right covering the mine's footprint of approximately 6 835 ha.

iMpunzi wishes to extend its current Venture coarse discard dump into a co-disposal facility and establish a new return water dam; and establish a coarse discard facility at its South Pit operations.

The existing Venture discard dump is expanding at a faster rate than initially anticipated and will need to accommodate additional volumes of discard. The existing Venture discard dump receives coal discard from the coal processing plant at ATC. The proposed venture co-disposal facility will consist of coarse discard from ATC plant as well as slurry, that is also generated at the ATC plant and currently disposed of into the underground workings at the ATC mine. The current Venture discard dump is authorised in terms of an approved EMPr (under the Mineral and Petroleum Resources Development Act). As part of the design of the proposed co-disposal facility, a Return Water Dam (RWD) will need to be constructed to handle the expected flow rates as well as accept contaminated runoff from the facility. The new RWD is proposed to be located to the north west of the Venture co-disposal facility.

The proposed expansion will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. The proposed expansion and RWD will also trigger listed activities in terms of GN R. 327 and GN R. 325, which also requires an application for an EA supported by an EIA process. The applications for EA and WML will be submitted to the Department of Mineral Resources and Energy. The water uses associated with the proposed extension include section 21 (g), (c) and (i) of the National Water Act 36 of 1998 (NWA), and hence an application for a WUL will be submitted to the Department of Human Settlements, Water and Sanitation.

A coarse discard facility will be established at iMpunzi's old semi-rehabilitated South Pit area to provide for additional coarse discard disposal capacity for ongoing mining operations at iMpunzi. The coarse discard is generated at Central plant. Placement of coarse discard will be completed in a phased manner during which clean and dirty water separation will be managed. The proposed dump will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. A WUL will be applied for a section 21 (g) water use in terms of the NWA.



PUBLIC COMMENT INVITED

We would like to draw I&APs' attention to the following comment periods:

- Draft Scoping Report: Friday, 8 November to Monday 9 December 2019**
(30-day comment period)
- Water Use Licence Application: Friday, 8 November until Friday, 31 January 2020**
(60-day comment period)

Stakeholders are invited to register as Interested and Affected Parties and to lodge written comments regarding the proposed project.

Printed copies of the Draft Scoping Report are available at the public places listed below. The documents also can be downloaded from the following website: <https://www.golder.com/global-locations/africa/south-africa-public-documents/>.


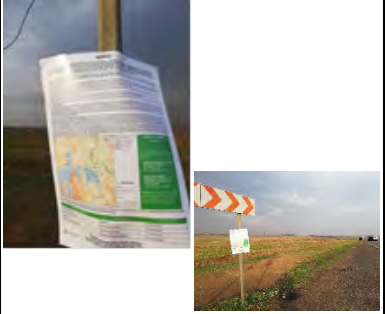



Name of Public Place	Contact Person	Contact Number
Ogies Public Library	Librarian	013 643 1027
Emalahleni Public Library	Ms Maria Rozmiarek	013 690 6232
Ogies Clinic	Sister Choko Motau	013 643 2037
Golder Associates website	Mabel Qinisile/Ursula Papé	(011) 254 4800


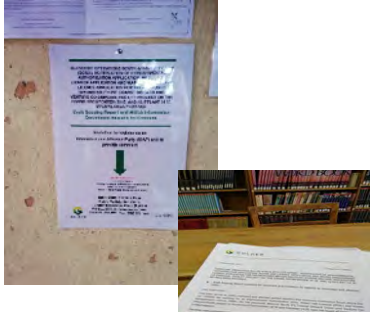
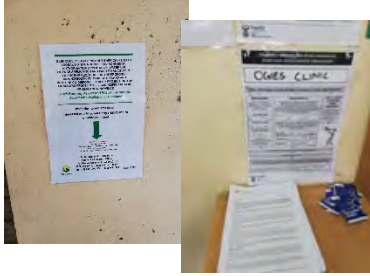
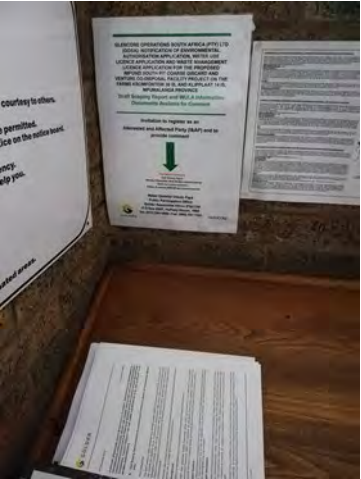
FOR MORE INFORMATION, PLEASE CONTACT:

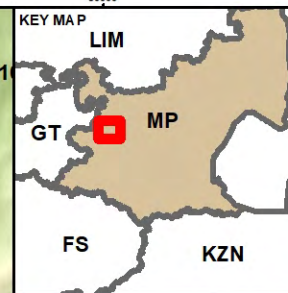
Mabel Qinisile/Ursula Papé, Public Participation Office
Golder Associates Africa (Pty) Ltd; PO Box 6001, Halfway House, 1685
Tel: (011) 254 4800; Fax: (086) 582 1561, E-mail: ppoffice@golder.co.za



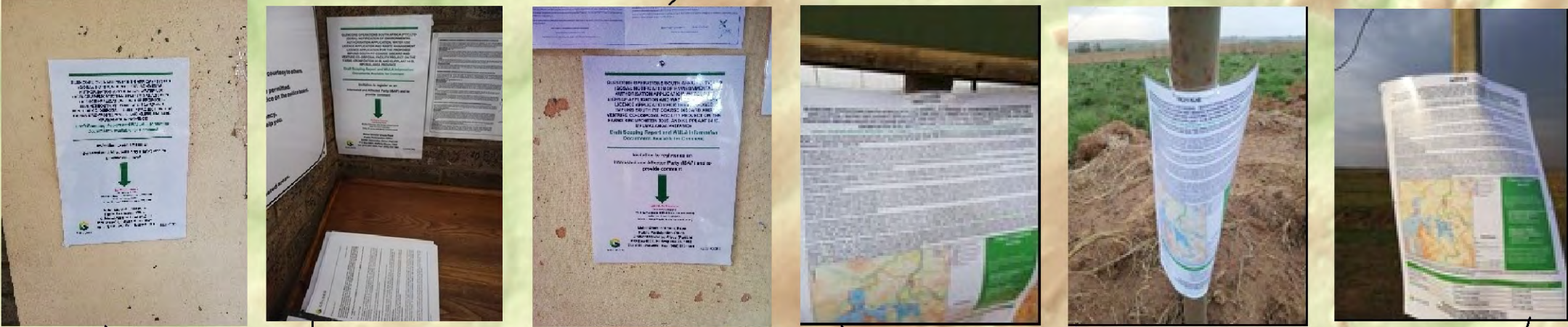
Site Notices and public places locations photographs and Coordinates

Map Reference	Description	Photos	GPs Coordinates
1	R547 (iMpunzi entrance)		26° 8'11.99"S 29°13'34.27"E
2	Cnr R547 (Frischgewaagd sign)		26° 8'11.99"S 29°15'54.54"E
3	R547 (Long Gate)		26° 5'50.98"S 29°12'59.29"E
4			26° 6'2.95"S 29°11'38.20"E
5	R547 (Bethal/ Blackhill)		26° 4'25.03"S 29°12'8.85"E

Map Reference	Description	Photos	GPs Coordinates
6	Ogies		<p>26° 3'7.87"S</p> <p>29° 2'51.31"E</p>
7	Emalahleni Public Library		<p>25°52'20.94"S</p> <p>29°12'5 9.72"E</p>
8	Ogies Clinic		<p>26° 3'1.54"S</p> <p>29° 3'19.62"E</p>
9	Ogies Public Library		<p>26° 2'58.14"S</p> <p>29° 3'20.43"E</p>

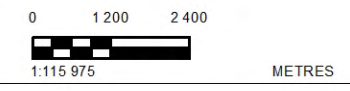


- LEGEND**
- ★ Site Notices
 - iMpunzi Complex Mining Rights Area (MRA)
 - ▭ Proposed South Pit Coarse Discard Dump
 - ▭ Proposed Venture Co-disposal Facility



Ogies(-26,052186 ; 29,047586)
 Ogies Public Library(-26,049483 ; 29,055675)
 Ogies Clinic(-26,050428 ; 29,05545)

R547 (Bethal/ Blackhill)(-26,073619 ; 29,202458)
 R547 (Long Gate)(-26,097494 ; 29,216469)
 R547 (iMpunzi entrance)(-26,136664 ; 29,226186)
 Cnr R547 (Frischgewaagd sign)(-26,136664 ; 29,26515)



NOTE(S)

REFERENCE(S)
 1. COORDINATE SYSTEM: CAPE LO29

CLIENT
 GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD

PROJECT
 IMPUNZI IRP

TITLE
 SITE NOTICE LOCATIONS

CONSULTANT	YYYY-MM-DD	2019/11/20
	DESIGNED	
	PREPARED	MW
	REVIEWED	MW
	APPROVED	MW

PROJECT NO. 1788674 **CONTROL** **REV.** **FIGURE**

PATH: S:\GIS\GIS Projects\1788674 - Glencore\GIS\Impunzi_IRP\MapDocs\19Nov19\1788674_Site_NoticeLocations_PRINTED_ON_2019-11-20_AT_1:55:43 PM

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN ADJUSTED FROM 150 X 250mm

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

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iMpunzi wishes to extend its current Venture coarse discard dump into a co-disposal facility and establish a new return water dam; and establish a coarse discard facility at its South Pit operations.

The existing Venture discard dump is expanding at a faster rate than initially anticipated and will need to accommodate additional volumes of discard. The existing Venture discard dump receives coal discard from the coal processing plant at ATC. The proposed venture co-disposal facility will consist of coarse discard from ATC plant as well as slurry, that is also generated at the ATC plant and currently disposed of into the underground workings at the ATC mine. The current Venture discard dump is authorised in terms of an approved EMPr (under the Mineral and Petroleum Resources Development Act). As part of the design of the proposed co-disposal facility, a Return Water Dam (RWD) will need to be constructed to handle the expected flow rates as well as accept contaminated runoff from the facility. The new RWD is proposed to be located to the north west of the Venture co-disposal facility.

The proposed expansion will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. The proposed expansion and RWD will also trigger listed activities in terms of GN R. 327 and GN R. 325, which also requires an application for an EA supported by an EIA process. The applications for EA and WML will be submitted to the Department of Mineral Resources and Energy. The water uses associated with the proposed extension include section 21 (g), (c) and (i) of the National Water Act 36 of 1998 (NWA), and hence an application for a WUL will be submitted to the Department of Human Settlements, Water and Sanitation.

A coarse discard facility will be established at iMpunzi's old semi-rehabilitated South Pit area to provide for additional coarse discard disposal capacity for ongoing mining operations at iMpunzi. The coarse discard is generated at Central plant. Placement of coarse discard will be completed in a phased manner during which clean and dirty water separation will be managed. The proposed dump will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. A WUL will be applied for a section 21 (g) water use in terms of the NWA.

PUBLIC COMMENT INVITED

We would like to draw I&APs' attention to the following comment periods:

- **Draft Scoping Report: Friday, 8 November 2019 to Monday 9 December 2019** (30-day comment period).
- **Water Use Licence Application: Friday, 8 November to Friday, 31 January 2020** (60-day comment period).

Printed copies of the Draft Scoping Report are available at the public places listed below. The documents also can be downloaded from the following website: <https://www.golder.com/global-locations/africa/south-africa-public-documents/>.

Name of Public Place	Contact Person	Contact Number
Ogies Public Library	Librarian	(013) 643 1027
Emalahleni Public Library	Ms Maria Rozmiarek	(013) 690 6232
Ogies Clinic	Sister Choko Motau	(013) 643 2037
Golder Associates website	Mabel Qinisile/Ursula Papé	(011) 254 4800

FOR MORE INFORMATION, PLEASE CONTACT:
Mabel Qinisile/Ursula Papé, Public Participation Office
Golder Associates Africa (Pty) Ltd
PO Box 6001, Halfway House, 1685
Tel: (011) 254 4800; Fax: (086) 582 1561
E-mail: ppoffice@golder.co.za



NOTICE OF SALE IN EXECUTION IN THE MAGISTRATE'S COURT FOR THE DISTRICT OF STEVE TSHWETE HELD AT MIDDELBURG Case No: 1681/2019
 In the matter between: **ANDRIES HERKLAAS PRINSLOO PLAINTIFF and GUSTAV JOHANNES TOLKEN 1st DEFENDANT RUZANE TOLKEN 2nd DEFENDANT**
IN TERMS OF a judgement in the above-mentioned matter as well as a Warrant of Execution issued by the Above Honourable Court and dated 28 July 2019, the undermentioned movable property will be sold by way of Public Auction on **6 December 2019 at 11:00 at 3 Joubert Street, Middelburg,**

Mpumalanga. DESCRIPTION:
 1 x Wooden Table
 2 X Loose Chairs
 1 X Glass Top Desk
 1 X HP Printer
 1 X Samsung Copier
 1 X Computer System Complete
 1 X Office Chair
 1 X Book Shelf
 1 X Brown Couch
 1 X Samsung Flatscreen TV Set
 3 X Wooden Shelves
 1 X 7 Piece Dining Room Suite
 1 X Wooden Cabinet
 1 X White Corner - Type Lounge Suite
 1 X TV Set
 1 X TV Cabinet
 1 X Sony Surround Sound Entertainment System
 1 X Coffee Table
 1 X Defy Fridge/Freezer Combo
 1 X Samsung Microwave oven
 1 X LG Tumble Dryer

1 X Speed queen Washing Machine
 1 X Whirlpool Dishwasher
TERMS:
 Cash Strictly Signed at Middelburg on this the 28th day of October 2019.
Kruger & Bekker Attorneys
 Attorneys for Plaintiff
 32 Walter Sisulu Street MIDDELBURG
 Ref: G KRUGER/ mr /CA1625
 SR096095

**Classifieds
 Classifieds
 Classifieds
 Classifieds**

NOTICE OF SALE IN EXECUTION OF MOVABLE PROPERTY BY WAY OF PUBLIC AUCTION IN THE MAGISTRATE'S COURT FOR THE DISTRICT OF STEVE TSHWETE (HELD AT MIDDELBURG) CASE NO: 3444/18
 In the matter between: **MNOTHO WAPHAKADE HOLDINGS EXECUTION CREDITOR and MERISMA (PTY) LTD EXECUTION DEBTOR**
 Pursuant to a judgment of the MAGISTRATE COURT, MIDDELBURG given on the 22nd of February 2019, the undermentioned goods will be sold at 12h00 on the 23rd November 2019 by public auction to be held at the offices of the Execution Debtor at 57 Zuid Street, Middelburg, by the Sheriff for the Magistrate's Court, to the highest bidder for cash.
 Goods offered for sale are:
1. 1 X UD TRUCK
 Signed at Middelburg on this the 30th day of October 2019.
 (sgd)
MAPHANGA & ASSOCIATES INC (ATTORNEYS FOR EXECUTION CREDITOR)
 73 WALTER SISULU STREET P.O. BOX 22273 MIDDELBURG
 Ref: MR MAPHANGA/ M02275/MM
 OS010017

NOTICES

**Classifieds
 Classifieds
 Classifieds
 Classifieds**

UNIVERSITY OF MPUMALANGA
 Creating Opportunities

Tender Notice and Invitation to Tender
Construction of new buildings at University of Mpumalanga

The University of Mpumalanga invites tenders for the construction of two new buildings at the University of Mpumalanga, Mbombela Campus. The contract will be based on the NEC3 Engineering and Construction Contract (Option B- Bills of Quantities) Only tenderers who demonstrate suitable experience and have suitably qualified personnel and comply with the criteria stated in the Tender Data are eligible to submit tenders. Documents may be downloaded from the Employer's website www.ump.ac.za from 10:00 on Wednesday 6 November 2019.

Tender Number	NIT0083	NIT0084
Building to be constructed	ICT and Security Building on the Lower Campus	Irrigation Laboratory Building on the South Campus
It is estimated that tenderers should have a CIDB contractor grading designation of	7GB or higher	6GB or higher
Prequalification criteria for preferential procurement as per the PPPFA Regulations 2017	The pre-qualification criteria for preferential procurement are that only tenderers who are B-BBEE status level 1,2,3 or 4 contributors may respond to this tender notice and invitation.	
	Only tenderers who undertake to subcontract a minimum of 30% of the contract value to an EME or QSE which is at least 51% owned by black people and operate from premises within the Mpumalanga provincial boundaries are eligible to submit tenders.	
There will be a Compulsory Briefing Meeting held at University of Mpumalanga Mbombela Campus Main Entrance (Directions will be provided from there)	Thursday 14 November 2019 10h00-11h00	Thursday 14 November 2019 11h30-12h30
The closing time for receipt of tenders	12h00 (Noon) Thursday 5 December 2019	12h00 (Noon) Thursday 5 December 2019

Queries relating to the issue of these documents may be submitted through the form on the tenders website, or addressed in writing to Mr Lucky Khoza, Fax: 086 527 9201, E-mail Lucky.Khoza@ump.ac.za. The closing time for receipt of tenders is 12h00 hrs on Thursday 5 December 2019. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. Tenders may only be submitted on the tender documentation that is issued. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.
 Human Communications 148821

EXPRESSION OF INTEREST (EOI) – COAL MARKETING & LOGISTICS PARTNER MORUPULE COAL MINE (MCM) IS A COAL MINING COMPANY IN BOTSWANA SITUATED 14 KILOMETRES WEST OF PALAPYE ALONG THE SEROWE/PALAPYE ROAD (THE A14 HIGHWAY) AND MINES COAL PRIMARILY FOR GENERATION OF ELECTRICITY IN BOTSWANA

MCM is currently undertaking an expansion project that is aimed at increasing production from a newly established opencast mine, delivering washed coal to markets in the SADC countries.

MCM invites reputable coal marketing and/or trading companies to submit proposals to be invited partners with MCM on marketing and selling coal in the region and other markets. MCM will consider expressions of interest by experienced bulk coal marketing companies, with proven track record of coal marketing and provision of logistics solutions in the RSA markets, which support competitive delivered prices to the consumer. MCM shall provide coal to such partners on a Free On Truck (FOT) and/ or Free On Rail (FOR) basis, and will work closely with the trading and logistics partners to deliver a competitive landed price at the consumer. The following are typical attributes (but are not exhaustive) of the envisaged partners:

- Coal or bulk commodity trading company
- Active with existing supply contracts and potential customers in the above mentioned markets or further afield
- Rail and road transportation partnerships

Submissions should include the following as a minimum:

- Background information on the company, including its shareholding; geographic area of activity;
- Evidence of ability to finance the working capital for the required FOT/FOR transactions and deliver product to the end customer, including latest audited financial statements;
- Method statement indicating how the works will be carried out;
- Company's SHEQ Plan and performance records;
- The number of active coal supply contracts currently undertaken by the company and their tenure;
- Evidence of existing and/or proposed road and rail partnerships;
- Any major litigation in the last 5 years.

The closing date and time for EOI submissions (with a soft copy version on a CD/USB) is 15 November 2019, no later than 12h00 by hand to the following:
 Expression of Interest - Morupule Coal Mine (Coal Trading & Logistics Partner)
 Tender Box – Security Office, Morupule Coal Mine
 Palapye (along the A14 Highway)
 Botswana

Submissions received after the closing date and time shall not be considered. Telegraphic, telephonic, telex, facsimile or emailed submissions will also not be considered. Morupule Coal Mine reserves the right to reject or accept any submission. Acceptance thereof is not binding on the company until confirmed through official notification. MCM is not obliged to reply to all respondents nor to debrief rejected applications and/or reserves the rights to reject applicants without having to give reasons.

Interested companies are invited to contact the Strategic Sourcing Specialist at kmotsumi@mcm.co.bw or Tel: 013 494 1205 for any queries or clarifications.

Morupule Coal Mine
 ISO 14001 certified OHSAS 18001 certified

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

DRAFT SCOPING REPORT AVAILABLE FOR COMMENT AND INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Notice issued in terms of section 40 and 41(4) of the National Water Act 36 of 1998 (NWA) and the requirements of Government Notice (GN) 40713, Regulation R.267, and National Environmental Management: Waste Act 59 of 2008 (NEM: WA), the National Environmental Management Act 107 of 1989, as amended, and the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended), GN R.324 – GN R. 327.

Glencore Operations South Africa Pty Ltd (GOSA) manage several coal mining operations including the iMpunzi Mine Complex, located 27 km south-east of eMalahleni in the Mpumalanga Province, near Ogies and Kriel towns and which forms part of both the eMalahleni and Steve Tshwete Local Municipalities of the Nkangala District Municipality. GOSA are applying for an Environmental Authorisation (EA), Water Use Licence (WUL) and Waste Management Licence (WML) for the proposed iMpunzi South Pit Coarse Discard Dump and Venture Co-Disposal facility project on the farms of Kromfontein 30 IS and Klipplaat 14 IS.

GOSA have appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent Environmental Assessment Practitioner (EAP) to undertake the regulatory authorisation processes associated with the abovementioned activities. The iMpunzi Complex comprises four collieries or sub-sections, namely: Arthur Taylor Colliery (ATC), Phoenix Colliery (decommissioned), Arthur Taylor Colliery Opencast Mine (ATCOM), and ATCOM East. The iMpunzi Complex has an existing mining right covering the mine's footprint of approximately 6 835 ha. iMpunzi wishes to extend its current Venture coarse discard dump into a co-disposal facility and establish a new return water dam; and establish a coarse discard facility at its South Pit operations.

The existing Venture discard dump is expanding at a faster rate than initially anticipated and will need to accommodate additional volumes of discard. The existing Venture discard dump receives coal discard from the coal processing plant at ATC. The proposed venture co-disposal facility will consist of coarse discard from ATC plant as well as slurry, that is also generated at the ATC plant and currently disposed of into the underground workings at the ATC mine. The current Venture discard dump is authorised in terms of an approved EMPr (under the Mineral and Petroleum Resources Development Act). As part of the design of the proposed co-disposal facility, a Return Water Dam (RWD) will need to be constructed to handle the expected flow rates as well as accept contaminated runoff from the facility. The new RWD is proposed to be located to the north west of the Venture co-disposal facility.

The proposed expansion will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. The proposed expansion and RWD will also trigger listed activities in terms of GN R. 327 and GN R. 325, which also requires an application for an EA supported by an EIA process. The applications for EA and WML will be submitted to the Department of Mineral Resources and Energy. The water uses associated with the proposed extension include section 21 (g), (c) and (i) of the National Water Act 36 of 1998 (NWA), and hence an application for a WUL will be submitted to the Department of Human Settlements, Water and Sanitation.

A coarse discard facility will be established at iMpunzi's old semi-rehabilitated South Pit area to provide for additional coarse discard disposal capacity for ongoing mining operations at iMpunzi. The coarse discard is generated at Central plant. Placement of coarse discard will be completed in a phased manner during which clean and dirty water separation will be managed. The proposed dump will trigger waste management activities in terms of GN R 921 as amended by GN R 633, which requires an application for a WML supported by an Environmental Impact Assessment (EIA) process, undertaken in accordance with the EIA Regulations GN R.326 of 4 December 2014, as amended. A WUL will be applied for a section 21 (g) water use in terms of the NWA.

PUBLIC COMMENT INVITED

We would like to draw I&APs' attention to the following comment periods:
 • **Draft Scoping Report: Friday, 8 November 2019 to Monday 9 December 2019** (30-day comment period).
 • **Water Use Licence Application: Friday, 8 November to Friday, 31 January 2020** (60-day comment period).
 Printed copies of the Draft Scoping Report are available at the public places listed below. The documents also can be downloaded from the following website: <https://www.golder.com/global-locations/africa/south-africa-public-documents/>.

Name of Public Place	Contact Person	Contact Number
Ogies Public Library	Librarian	(013) 643 1027
eMalahleni Public Library	Ms Maria Rozmiarek	(013) 690 6232
Ogies Clinic	Sister Choko Motau	(013) 643 2037
Golder Associates website	Mabel Qinisile/Ursula Papé	(011) 254 4800

FOR MORE INFORMATION, PLEASE CONTACT:
Mabel Qinisile/Ursula Papé, Public Participation Office
Golder Associates Africa (Pty) Ltd
 PO Box 6001, Halfway House, 1685
 Tel: (011) 254 4800; Fax: (086) 582 1561
 E-mail: ppoffice@golder.co.za



Date of the advert: 8 November 2019

IN THE MAGISTRATE'S COURT FOR THE DISTRICT OF MSUKALIGWA
 HELD AT ERMELO CASE NUMBER: 5091 2015
 IN THE MATTER BETWEEN:
 R I SCHOLTZ EIENDOMSAGENTE PLAINTIFF
 AND
 SHABANGU S D P ID: 750823 5356 08 1 1st DEFENDANT
 SHABANGU C P ID: 810112 0562 08 5 2nd DEFENDANT

NOTICE OF SALE IN EXECUTION OF MOVABLE PROPERTY
KINDLY TAKE NOTICE THAT, in terms of a Judgment granted on 23/12/2015, in the Ermelo Magistrate's Court and a Warrant of Execution issued thereafter, the undermentioned movable property will be sold in execution to the highest bidder, with no reserve price on **Friday, 6/12/2019 at 12h00** by public auction to be held at the **Offices of the Sheriff, 3 Joubert Street, Middelburg, Mpumalanga.**

Item Nr:	Description:	Quantity:
1.	Volkswagen Polo (Reg No: HRF 194 MP)	X 1

TERMS AND CONDITIONS:

- Terms and conditions will be made available by the Sheriff on the date of the auction.
- The Purchaser must remove any and all goods purchased from the premises on the day of the auction.
- Registration as a Buyer is a requirement in terms of the following:
 - The Consumer Protection Act 68 of 2009;
 - The Financial Intelligence Centre Act 38 of 2001.
- Goods will only be sold for cash to the highest bidder or sold subject to confirmation as per the Consumer Protection Act on the instructions of the Judgment Creditor or his/her attorneys.

SIGNED AT ERMELO ON THE 1st DAY OF NOVEMBER 2019

STRAUSS ATTORNEYS INC
 ATTORNEYS FOR PLAINTIFF(S)
 10 TAUTÉ STREET
 POSTNET SUITE 852
 PRIVATE BAG X 9013
 ERMELO 2350
 TEL: 017 811 5353
 FAX: 017 811 5355
 REF: Q05648 / J P STRAUSS / EP

APPENDIX F

Authority Communication



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X7279, Emalahleni, 1035, Tel: 013 653 0500, Fax: 013 656 0932
Province Building, Cnr Botha and Paul Kruger Streets, Emalahleni 1035

Enquiries: Ms. M.M Seshweni: **Email:** martha.seshweni.gov.za
Ref Number: (MP) 30/5/1/1/3/2/1 (375) EM
Directorate: Mine Environmental Management: Mpumalanga Region

REGISTERED MAIL

Glencore Operations South Africa (Pty) Ltd

Private Bag x7265

Witbank

1035

Attention: Mrs Tebogo Chauke

Fax: 013 368 8299

ACKNOWLEDGEMENT RECEIPT OF AN APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN RESPECT OF PORTIONS 1 AND 14 OF THE FARM KLIPPLAAT 14 IS, PORTION 0 KLIPPLAAT 464 IS,, PORTION 1, 2, 3, 5, 11, 12, 14, 20, 22, 23 AND 28 OF THE FARM KROMFONTEIN 30 IS AND PORTION 2 OF THE FARM BLESBOKFONTEIN 31 IS, WITHIN THE MAGISTERIAL DISTRICT OF EMALAHLENI, AS REQUIRED IN TERMS OF REGULATION 3(6) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998): ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 LODGED IN TERMS OF REGULATION 19 OF THE ABOVE-MENTIONED REGULATIONS AS READ TOGETHER WITH SECTION 12 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2008 (ACT NO.49 OF 2008) AS AMENDED.


The above-mentioned matter refers.

1. This letter serves to inform you that your application for an Environmental Authorisation lodged with this Department is hereby acknowledged.
2. Kindly be informed that the above-mentioned application has not yet been evaluated. Once the evaluation is concluded, you shall be informed in due course of the outcome

thereof. Notwithstanding this, you are reminded that all documents must be submitted in accordance with the timeframes stipulated on the NEMA: EIA Regulations, 2014.

3. For any enquire regarding this application please contact the above mentioned Official.

Yours faithfully

.....
A0 
REGIONAL MANAGER:
MINERAL REGULATION
MPUMALANGA REGION
DATE: 11/12/2019

Cc: Mariette Weideman

Email: mweideman@golder.co.za

ALL THE CORRESPONDENCE SHOULD BE ADDRESSED TO THE ATTENTION OF THE REGIONAL MANAGER OF DEPARTMENT OF MINERAL RESOURCES: MPUMALANGA.

7 November 2019

Project No. 1788674_Lett01

Regional Manager: Mpumalanga Region

Department of Mineral Resources and Energy
Nelson Mandela Drive
Saveways Crescent Centre
Witbank
1035

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND WASTE MANAGEMENT LICENCE FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT, MPUMALANGA PROVINCE

Dear Sir

INTRODUCTION

Glencore Operations South Africa Pty Ltd (GOSA) manage several coal mining operations including the iMpunzi Mine Complex, located 27 km south-east of eMalahleni in the Mpumalanga Province, near Ogies and Kriel towns and forms part of both the eMalahleni and Steve Tshwete Local Municipalities of the Nkangala District Municipality.

GOSA are applying for an Environmental Authorisation and Waste Management Licence (WML) for the proposed iMpunzi South Pit Coarse Discard Dump and Venture Co-Disposal Facility project.

GOSA have appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent Environmental Assessment Practitioner (EAP) to undertake the regulatory authorisation process associated with the abovementioned activities.

Background

The iMpunzi Complex comprises four collieries or sub-sections, namely: Arthur Taylor Colliery (ATC), Phoenix Colliery (decommissioned), Arthur Taylor Colliery Opencast Mine (ATCOM), and ATCOM East. The iMpunzi Complex has an existing mining right covering the mine's footprint of approximately 6 835 ha.

iMpunzi wishes to extend its current Venture Discard Dump into a co-disposal facility and establish a coarse discard facility at its South Pit operations.

The proposed South Pit Discard Dump will receive coarse discard from the Phoenix Plant. The South Pit is a previously mined-out area and has been partially rehabilitated. The existing Venture Discard Dump footprint will be expanded and the facility will be modified into a co-disposal facility to accommodate both coarse and fine (slurry) discard. A new return water dam (RWD) will be constructed as part of the development of the Venture Co-disposal Facility. The co-disposal facility will receive coarse discard and slurry from the ATC Plant, which sources coal from opencast workings and from discard dump reprocessing. As part of the proposed discard expansion project, an existing haul road from the ATCOM Discard Dumps to the ATC Coal Processing Plant will be widened to accommodate ADT Dump Trucks.

The above activities require authorisation in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) (as amended), the National Water Act, 1998 (Act 36 of 1998) (NWA), and the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEMWA) (as amended). The application process must be supported by an environmental impact assessment (EIA) in terms of the 2014 EIA Regulations, as amended in April 2017, to be submitted to the competent authority, the Department of Mineral Resources and Energy (DMRE).

Application form

The application form was compiled in accordance with the template provided by the DMRE.

The first appendix to the application form (APPENDIX 1) contains the declaration of independence and the Curriculum Vitae of the Environmental Assessment Practitioner (EAP). The iMpunzi locality map is appended in APPENDIX 2. All Environmental Authorizations issued to iMpunzi are attached in APPENDIX 3 while APPENDIX 4 contains a map indicating the proposed South Pit Coarse Discard and the Venture Co-disposal Facility.

Under Regulation 16(1)(b)(v), amendments to the 2014 EIA regulations identified the requirement to submit “*the report generated by the National Web based Environmental Screening Tool, once this tool is operational*”. Since the tool has been operational from October 4, 2019, Environmental Screening Reports were generated for the proposed iMpunzi activities and their location respectively. The reports have been appended to the application (refer to APPENDICES 5, 6 and 7).

The outputs of the tool recommended that several studies be initiated. The list of studies along with the EAP’s response is provided below:

- **Agricultural Impact Assessment:** This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on previously mined-out areas;
- **Visual Impact Assessment:** This assessment will not be conducted, as the proposed activities are expansions to existing discard facilities and existing mining related infrastructure;
- **Archaeological and Cultural Heritage Impact Assessment:** This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on previously mined-out areas; assessments for the proposed RWD will be based on historical data;
- **Paleontology Impact Assessment:** This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on already mined-out areas; assessments for the proposed RWD will be based on historical data;
- **Terrestrial Biodiversity Impact Assessment:** This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on previously mined-out areas; assessments for the proposed RWD will be based on historical data;
- **Aquatic Biodiversity Impact Assessment:** Existing biomonitoring data will be used for consideration and integration into the environmental impact assessment report (EIR);
- **Hydrology Assessment:** This assessment will be conducted and will be attached to the EIR;
- **Noise Impact Assessment:** Existing noise monitoring data will be used for consideration and integration into the EIR;

- Radioactivity Impact Assessment: This assessment was deemed not applicable as no radioactive materials are associated with the colliery or the regional Geology;
- Traffic Impact Assessment: A traffic assessment will not be conducted as existing haul roads on site will be utilised for the proposed activities. No traffic related impacts are envisioned;
- Geotechnical Assessment: This assessment will be conducted and will be attached to the EIR;
- Climate Impact Assessment: This assessment will not be conducted as part of this project as the proposed activities are a continuation of current activities;
- Health Impact Assessment: This assessment will not be conducted as the proposed project is a continuation of current activities of the mine, no new impacts on human health are anticipated. Human health impacts will however be taken into consideration during the assessment of groundwater impacts on water users in the study area;
- Socio-economic Assessment: This assessment will not be conducted as the proposed project is a continuation of current activities of the mine; no new impacts on socio-economic aspects are anticipated;
- Air Quality Impact Assessment: Existing air quality monitoring data will be used for consideration and integration into the EIR;
- Seismicity Assessment: A post-seismic analysis will be conducted as part of the technical design; the findings of which will be included in the EIR;
- Plant Species Assessment: This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on already mined-out areas; assessments for the proposed RWD will be based on historical data; and
- Animal Species Assessment: This assessment will not be undertaken as the footprints of the above-mentioned activities will largely be situated on already mined-out areas; assessments for the proposed RWD will be based on historical data.

Concluding remark

It is requested that the application for an Environmental Authorisation and Waste Management Licence for the proposed Venture Co-disposal Facility and South Pit Discard Dump be considered. Should the Department have any queries, Mariette Weideman can be contacted at 011 254 4800 or alternatively, mweideman@golder.co.za.

Thank you in advance for your consideration.

Golder Associates Africa (Pty) Ltd.



Mariette Weideman
EAP



Olivia Allen
Senior Environmental Practitioner

MW/LM/OA/ntb

CC: Tebogo Chauke, Glencore Operations South Africa (Pty) Ltd

Attachments: Application for Environmental Authorisation

Draft Scoping Report for the Proposed iMpunzi South Pit Coarse Discard
Dump and Venture Co-disposal Facility Project.

g:\projects\1788674 - glencoreatcom_intpermprocdiscard_mp\6. deliverables\final client deliverables\pp docs\1788674_dmr_cover letter_nov07_final.docx



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

IMPORTANT NOTICE

Kindly note that:

1. As from 8 December 2014, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.
2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect, as the form may require amendment should the Act be further amended.
3. Applicants are required to apply for the necessary water use licence and any other authorisations nor licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.
4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.
5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.
7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under "Other documents to upload".
8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR.

APPLICATION TYPE	APPLICABLE FEE	Mark with an X where applicable
NEMA S&EIR application on its own	R10 000.00	<input type="checkbox"/>
NEMA BAR application on its own	R 2 000.00	<input type="checkbox"/>
NEMWA S&EIR application on its own	R10 000.00	<input type="checkbox"/>
NEMWA BAR application on its own	R 2 000.00	<input type="checkbox"/>
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	<input checked="" type="checkbox"/>
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	<input type="checkbox"/>
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	<input type="checkbox"/>

1. CONSULTATION BASIC ASSESSMENT AND/ OR SCOPING REPORT

2. DETAILS OF THE APPLICANT

Project applicant:	Glencore Operations South Africa (Pty) Ltd	
Registration no (if any):	1997/017998/07	
Trading name (if any):	iMpunzi Complex	
Responsible Person, (e.g. Director, CEO, etc).:	General Manager (iMpunzi Mine Complex)	
Contact person:	Tebogo Chauke	
Physical address:	Portion 31 IS Farm Blesbokfontein district Bethal, eMalahleni Local Municipality of the larger Nkangala District Municipality	
Postal address:	Private Bag X7265, Witbank	
Postal code:	1035	Cell: 073 765 0999
	013 368 8299	
E-mail:	Tebogo.Chauke@glencore.co.za	

3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Mariëtte Weideman	
Professional affiliation/registration:	Professional Natural Scientist (Pr.Sci.Nat. 400107/17) with the South African Council for Natural Scientific Professionals (SACNASP)	
Contact person (if different from EAP):		
Company:	Golder Associates Africa (Pty) Ltd	
Physical address:	Building 1, Magwa Crescent West, Maxwell Office Park, Waterfall City, Midrand	
Postal address:	P.O. Box 6001, Halfway House	
Postal code:	1685	Cell: 084 515 6965
Telephone:	011 254 4800	Fax:
E-mail:	mweideman@golder.co.za	

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by the NEMA Regulations, prior to the commencement of the process.

The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the EAP must also be attached as **Appendix 1**.

4. PROJECT DESCRIPTION

Farm Name:	Klipplaats 14 IS Portions 1 and 14; Klipplaat 462 IS Portion 0; Kromfontein 30 IS Portions 1, 2, 2, 3, 3, 5, 11, 12, 14, 20, 22, 23, and 28; Blesbokfontein 31 IS Portion 2	
Application area (Ha)	267Ha	
Magisterial district:	eMalahleni Local Municipality of the larger Nkangala District Municipality	
Distance and direction from nearest town	110 km east of Johannesburg and 27 km south of the town of eMalahleni/Witbank	
21 digit Surveyor General Code for each farm portion	<ul style="list-style-type: none"> • TOIS0000000001400001 • TOIS0000000001400014 • TOIS0000000003000002 • TOIS0000000003000002 • TOIS0000000003000003 • TOIS0000000003000003 • TOIS0000000003000012 • TOIS0000000003000014 • OIS00000000046200000 	<ul style="list-style-type: none"> • TOIS0000000003000020 • TOIS0000000003000022 • TOIS0000000003000023 • TOIS0000000003000028 • TOIS0000000003100002 • TOIS0000000003000001 • TOIS0000000003000005 • TOIS0000000003000011 • TOIS0000000003100000
Locality map	Attach a locality map at a scale not smaller than 1:250000 and attach as Appendix 2	
Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)	Environmental Authorisation and Waste Management Licence application in terms of the 2014 Environmental Impact Assessment (EIA) Regulations for listed activities associated with the proposed Venture co-disposal facility and the proposed South Pit coarse discard dump project. All aspects of the proposed project fall within the existing iMpunzi Mining Rights Area (375MR).	

ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as **Appendix 3**).

1. Environmental Authorisation for the proposed ATCOM infrastructure expansion project and dewatering pipeline on portions 1 and 6 of the farm Steenkoolspruit 18 IS, remainder of portion 1, portion 3,4,11, and 18 of the Farm Kromfontein 30 IS, Portion 3 of the Farm Klippaat 14 IS, and portions 1 and 6 of the Farm van Dyksdrift 19 IS, Emalahleni, Mpumalanga Province.
Application Number: 17/2/3/ N-37.

2. Amendment of the Environmental Authorisation for the proposed ATCOM infrastructure expansion project and dewatering pipeline on portions 1 and 6 of the farm Steenkoolspruit 18 IS, remainder of portion 1, portion 3,4,11, and 18 of the Farm Kromfontein 30 IS, Portion 3 of the Farm Klippaat 14 IS, and portions 1 and 6 of the Farm van Dyksdrift 19 IS, Emalahleni, Mpumalanga Province.
Application Number: 17/2/3 NK-37.

3. Environmental Authorisation for the proposed construction of three(3) fuel and oil storage facilities at each of the identified mining reserves located at the Atcom East Mining Area, Kromfontein 30 IS, Steenkoolspruit 18 IS, and van Dyksdrift 19 IS, Middelburg, Mpumalanga.
Application Number: 17/2/1/7 NK-3.

4. Proposed amendment of the record of decision of the construction of three fuel and oil storage facilities at ATCOM East Mining Area on portions of the Farm Kromfontein 30 IS, Steenkoolspruit 18 IS, and van Dyksdrift 19 IS, Emalahleni, Mpumalanga.

5. Environmental Authorisation for the proposed diversion of Rietspruit River on a portion of the Farm Blesbokspruit 31 IS, Ogies, Mpumalanga.
Application Number: 17/2/1/1(M)MP-08.

6. Environmental Authorisation for the proposed rehabilitation of Atcom South Open Pit and Beath Dump on portions of the Farm Kromfontein 30 IS, Emalahleni, Mpumalanga province.
Application Number: 17/2/2/1(e) NK-7.

7. APPROVED LICENSES FOR OPERATION:

Water Use Licence No: 04/BA11E/CI/3732 (Dragline Walkway Crossings) a
Water Use Licence No:04/B11E/ACFGIJ/2387 (Atcom East Infrastructure)
Water Use Licence No: 04/B11E/CFGJI/735 (iMpunzi Integrated WUL)
Water Use Licence No: 04/B11E/ACGI/3699 (Atcom South Pit and Beath Dump Rehab)
Water Use Licence No:24089451 (Steenkoolspruit/Olifants River Crossings)
Water Use Licence No:24007995 (Butterfly River Diversion)

8. Environmental Authorisation for the Phoenix and Office Pit and Associated Infrastructure in respect of the Farm Kromfontein 30 IS, Middledrift 43 IS and Blesbokfontein 31 IS, Emalahleni, Mpumalanga province.
Reference number: (MP) 30/5/1/2/2 (375) EA.

9. Consolidated Travistock EIA and EMP Amendment, Xstrata South Africa (Pty) Ltd. Approved 21 May 2015.
DMR Reference No. 375 MR.

(For an application for authorisation that involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be included, note that any authorisation that may result from this application will only cover activities specifically applied for).(Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for, as **Appendix 4**)

NAME OF ACTIVITY <i>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</i> E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	Aerial extent of the Activity Ha or m²	LISTED ACTIVITY <i>(Mark with an X where applicable or affected).</i>	APPLICABLE LISTING NOTICE <i>(GNR 544, GNR 545 or GNR 546)</i>	WASTE MANAGEMENT AUTHORISATION <i>(Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)</i>
<i>"The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes—</i> <i>i. with an internal diameter of 0,36 metres or more; or</i> <i>ii. with a peak throughput of 120 litres per second or more</i>	Overall proposed Activities of 267 ha	10	GN R.327	
<i>"The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan"</i>	Overall proposed Activities of 267 ha	27	GN R.327	
<i>The expansion of existing facilities or infrastructure for any process or activity where such expansion 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, effluent or pollution, excluding—</i>	Overall proposed Activities of 267 ha	34	GN R.327	X

NAME OF ACTIVITY <i>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</i> E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	Aerial extent of the Activity Ha or m²	LISTED ACTIVITY <i>(Mark with an X where applicable or affected).</i>	APPLICABLE LISTING NOTICE (GNR 544, GNR 545 or GNR 546)	WASTE MANAGEMENT AUTHORISATION <i>(Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)</i>
<p><i>(i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; [or]</i></p> <p><i>(ii) the expansion of [or changes to] existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or</i></p> <p><i>(iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day.</i></p>				
<p><i>The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes where the existing infrastructure—</i></p> <p><i>(1) has an internal diameter of 0,36 metres or more; or</i></p> <p><i>(2) has a peak throughput of 120 litres per second or more; and</i></p> <p><i>(a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or</i></p> <p><i>(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more.</i></p>	<p>Overall proposed Activities of 267 ha</p>	<p>46</p>	<p>GN R.327</p>	
<p><i>The expansion of –</i></p> <p><i>i. infrastructure or structures where the physical footprint is expanded by 100 square metres or more; or</i></p> <p><i>ii. dams or weirs, where the dam or weir, including infrastructure and water surface area, is expanded by 100 square metres or more;</i></p> <p><i>where such expansion occurs-</i></p> <p><i>(a) within a watercourse;</i></p> <p><i>(b) in front of a development setback; or</i></p> <p><i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.</i></p>	<p>Overall proposed Activities of 267 ha</p>	<p>48</p>	<p>GN R.327</p>	
<p><i>The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-</i></p> <p><i>i. where the existing reserve is wider than 13,5metres; or</i></p>	<p>Overall proposed Activities of 267 ha</p>	<p>56</p>	<p>GN R.327</p>	

NAME OF ACTIVITY <i>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</i> E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	Aerial extent of the Activity Ha or m²	LISTED ACTIVITY <i>(Mark with an X where applicable or affected).</i>	APPLICABLE LISTING NOTICE (GNR 544, GNR 545 or GNR 546)	WASTE MANAGEMENT AUTHORISATION <i>(Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)</i>
ii. where no reserve exists, where the existing road is wider than 8 metres.				
<i>"The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding-</i> <i>(i) activities which are identified and included in Listing Notice 1 of 2014;</i> <i>(ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;</i> <i>(iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or</i> <i>(iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day".</i>	Overall proposed Activities of 267 ha	6	GN R.327	X
<i>"The clearance of an area of 20 hectares or more of indigenous vegetation, except where such clearance of indigenous vegetation is required for –</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan"</i>	Overall proposed Activities of 267 ha	15	GN R.327	

5. PUBLIC PARTICIPATION

(Provide details of the public participation process proposed for the application as required by Regulation.

Details of the Public Participation process to be followed.

5.1.1. IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES TO BE CONSULTED

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Will the landowner be specifically consulted?	X	
Will the lawful occupier on the property other than the Landowner be consulted?	X	
Will a tribal authority or host community that may be affected be consulted?	X	
Will recipients of land claims in respect of the area be consulted?	X	
Will the landowners or lawful occupiers of neighbouring properties been identified?	X	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 metres of the area be consulted?	X	
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	X	
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	X Provincial Roads Agency	
Will the Provincial Department responsible for the environment be consulted?	X	
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	X	
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X	
Other, Specify	Department of Water and Sanitation, National Department of Environmental Affairs, Department of Agriculture, Commercial enterprises and other landowners in the wider area will be included.	

5.1.2. DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

<p>Steps to be taken to notify interested and affected parties(Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultations. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. Photographs of notice boards, and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must be attached as Appendix)</p>	<p>PROVIDE DESCRIPTION HERE</p> <p>A stakeholder database of potential I&APs has been developed and will be verified.</p> <p>A background information document and letter inviting comment and registration as an I&AP will be sent to all stakeholders on the database.</p> <p>Site notices will be erected and advertisements will be placed in local newspapers. Given the nature of the of the proposed project, no public meeting has explicitly been planned, but this will be confirmed in consultation with the relevant regulators.</p>
<p>Information to be provided to Interested and Affected Parties</p>	<p>Compulsory</p> <ul style="list-style-type: none"> • The site plan. • List of activities to be authorised • Scale and extent of activities to be authorised • Typical impacts of activities to be authorised (e.g. Surface disturbance, dust, noise, drainage, fly rock etc.) • The duration of the activity. • Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land)

	Other, specify: Project motivation, alternatives considered, plan of study for impact assessment, proposed environmental management and impact mitigation measures.
Information to be required from Interested and Affected Parties.	Compulsory <ul style="list-style-type: none"> • To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions • To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity • To provide information on current land uses and their location within the area under consideration • To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied. requested to make written proposals • To mitigate the potential impacts on their socio-economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).
	Other, specify, None however we will be open to consultation.

6. Description of the assessment process to be undertaken

ITEM	DESCRIPTION
Environmental attributes. Describe how the Environmental attributes associated with the development footprint will be determined.	Specialist studies on pre-project baseline conditions within the project-affected area, e.g. surface water, groundwater, wetlands, visual resources, noise and socio-economics.
Identification of impacts and risks. (Describe the process that will be used to identify impacts and risks.	Specialist studies and risk assessment performed.
Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.	Technological alternatives will be explored in consultation with the applicant's mining and metallurgical engineers and other experts in mining and metallurgy. Layout alternatives will be evaluated in terms of their environmental impacts, cost and operability. Long-term water management and cover design alternatives will also be considered by the specialist team.
Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.	A matrix will be set up and populated with parameters such as environmental impacts, cost and operability. Weights will be assigned in consultation with appropriate experts and rankings will be calculated.
Contribution of specialist reports Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.	Impact and risk identification and assessment, as well as mitigation and post-project rehabilitation measures will be based on the findings of the specialists.
Determination of impact management objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	Environmental management objectives will take into account pre-project baseline conditions, legislated standards, local and international guidelines and current best practice.

7. OTHER AUTHORISATIONS REQUIRED

LEGISLATION	Mark with an X where applicable			
	AUTHORISATION REQUIRED		APPLICATION SUBMITTED	
	YES	NO	YES	NO
SEMA's				
National Environmental Management: Air Quality Act		x		
National Environmental Management: Biodiversity Act		x		
National Environmental Management: Integrated Coastal Management Act		x		
National Environmental Management: Protected Areas Act		x		
National Environmental Management: Waste Act	x		x	
National legislation				
Mineral Petroleum Development Resources Act	x		x	
National Water Act	x			x
National Heritage Resources Act		x		
Others: Please specify				

Please provide proof of submission of applications in **Appendix 5**.

In the event that an authorization in terms of the National Environmental Waste Management Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application. In terms of GN R. 632 and GN R. 633, a waste management licence will be required for the management of the residue stockpiles.

8. DRAFT EMPr

For consultation purposes, provide a high level approach to the management of the potential environmental impacts of each of the activities applied for.

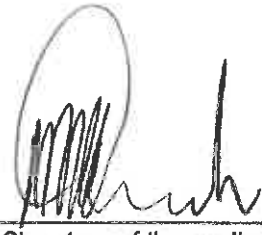
ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. for mining, - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	PHASE (of operation in which activity will take place). State: Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure.	SIZE AND SCALE (of Disturbance) (volumes, tonnages and hectares or m ²)	TYPICAL MITIGATION MEASURES (E.g., storm water control, dust control, noise control, access control, rehabilitation etc...., etc....,)	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
See Section 5 above for the complete list and description of listed activities for the proposed project	Construction	Approximately 267 ha will be affected by the development of the discard and associated facilities' footprints	Measures and control of particulate mobilisation, noise, lighting, traffic, water quality, soil and biodiversity impact	Mitigation measures will be designed to achieve compliance with national and corporate standards on air quality, noise and water quality.

See Section 5 above for the complete list and description of listed activities for the proposed project	Operation	Approximately 267 ha will be affected by operation of the proposed discard and associated facilities	Measures and control of particulate mobilisation, noise, and water quality impact	Mitigation measures will be designed to achieve compliance with national and corporate standards on air quality, noise and water quality.
See Section 5 above for the complete list and description of listed activities for the proposed project	Rehabilitation and Closure	Approximately 267 ha will be affected by rehabilitation and closure of the proposed discard facilities' footprints	Measures and control of particulate mobilisation, noise, lighting, traffic, water quality and soil impact	Mitigation measures will be designed to achieve compliance with national and corporate standards on air quality, noise and water quality.

9. CLOSURE PLAN

In the space provided under each heading below, please provide a high level description of the plan for closure and the information that will be provided in the draft EMPr accompanying draft basic assessment report or environmental impact reports going forward.	
Baseline environment Describe how the baseline environment will be determined with the input of interested and affected parties and due cognizance of the current land uses and or existing biophysical environment	Input provided by I&APs will be augmented by specialist studies on hydrology, geohydrology, soils and wetland ecology, augmented by local knowledge obtained from engagement with I&APs.
Closure objectives Describe the closure objectives and the extent to which they will be aligned to the baseline environment	Ensuring that all affected areas are physically stable and non-eroding after closure; Shaping, vegetating and integrating disturbed areas into surrounding surface topography; Ensuring that the rehabilitated areas are free-draining and run-off is routed to local/natural drainage lines; Eliminating potential latent safety threats to humans and animals; and Rehabilitating discard facilities in a manner that ensures sustainable vegetation growth.
Rehabilitation Plan Describe the scale and aerial extent of the prospecting or mining listed activities to be authorised, including the anticipated prospecting or mining area at the time of closure, and confirm that a site rehabilitation plan drawn to a suitable scale will be provided in the draft EMPr to be submitted together with the draft EIR or Basic Assessment Report as the case may be.	The areas disturbed by the project will be rehabilitated to a state that ensures sustainable vegetation growth. An appropriate rehabilitation plan will be provided in the EMPr.
Rehabilitation Cost Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof	Detailed closure objectives will be developed in consultation with I&APs. Methodologies will be as recommended by relevant specialists. Closure cost estimation will be done in accordance with the National Environmental Management Act

	(Act. 107 of 1998) Financial Provisioning Regulations, 2015 (GN. R 1147)
Decommissioning Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting or mining activity.	The area affected by the proposed discard facilities will be rehabilitated and appropriate long-term water management measures put in place.



Signature of the applicant / Signature on behalf of the applicant:

Glencore Operations South Africa (Pty) Ltd

Name of company (if applicable):

07 / 11 / 2019

Date:

 7/11/2019

Tracy Skinner
Commissioner of Oaths
Ex-Officio Professional GISC Practitioner (PGP 1356)
Magwa Crescent West, Waterfall City
Midrand

**APPENDIX 4
DECLARATION OF THE EAP**

I, **Mariëtte Weideman**, declare that –

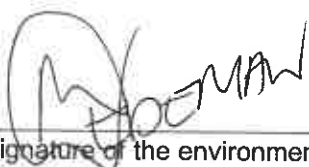
General declaration:

- I act as the independent environmental practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

~~• I have a vested interest in the proposed activity proceeding, such vested interest being:~~




Signature of the environmental assessment practitioner:

Golder Associates Africa (Pty) Ltd

Name of company:

7/11/2019

Date:

 7/11/2019
Tracy Skinner
Commissioner of Oaths
Ex-Officio Professional GISc Practitioner (PGP 1356)
Magwa Crescent West, Waterfall City
Midrand



Proof of Payment

Date: 06/11/2019 Time: 2:34:20 PM

Profile name:	GOLDER ASSOCIATES AFRICA (PT
Batch reference number:	845005604
Payment reference number:	000000002351256442
Payment date:	06/11/2019
Payment capture date:	06/11/2019
Payment authorise date and time:	06/11/2019 02:28:40 PM
From account name:	GOLDER ASSOCIATES AFRICA (PTY) LTD
From account description:	GOLDER ASSOCIATES AFRICA (PTY) LTD - 1284074102
From account statement description:	Dept of Mineral Resources
Beneficiary account number:	4059164275
Beneficiary/ Recipient name:	Dept of Mineral Resources
Beneficiary statement description:	iMpunzi 375MR
Branch code:	632005
Amount:	15,000.00
Real-time:	No

Additional comments by payer:

View your account to **confirm that you have received this payment.**

- All payments are subject to clearing rules.

Please refer to landing page for cut off times and telephone numbers.

APPENDIX 1

Curriculum Vitae of the Environmental Assessment Practitioner (EAP)



Education

*B.Sc. Biological Science
Botany and Biochemistry,
North West University,
Potchefstroom, 2003*

*B.Sc. (Hons)
Environmental Sciences
and Development, North
West University,
Potchefstroom, 2008*

*B.Sc. (Hons)
Environmental
Management, University
of South Africa, Nelspruit,
2010*

*AVCASA Crop Protection
Diploma, Tshwane
University of Technology,
Pretoria, 2004*

Certifications

Professional Natural
Scientist (Pri. Sci. Nat.
400107/17) - South
African Council for Natural
Scientific Professions
(SACNASP), 17 July 2017

Languages

English – Fluent

Afrikaans – Fluent

Golder Associates Africa (Pty) Ltd. – Johannesburg

Environmental Consultant

Mariëtte has worked in environmental consultancy for over eight years. She joined Golder in 2011 in the Mine Environment Division, gaining work experience in Environmental Management, specialising in Environmental Performance and Legal Compliance auditing, Environmental and Social Impact Assessments (ESIAs), Basic Assessments (BAs), Environmental Management Programme reports (EMPRs) for mining and industry, Section 24G applications, the Public Participation Processes, and Mine Closure Planning. Mariëtte has experience with Southern African legislation as well as IFC Performance Standards and Equator Principles.

Mariëtte has successfully completed the SAATCA approved EMA Lead Auditors examination through the completion of the ISO 14001:2015 Environmental Management Systems Auditing course.

Employment History

Golder Associates Africa (Pty) Ltd – Johannesburg, South Africa

Environmental Consultant: Mine Environment

September 2011 - current

Ocean Agriculture (Pty) Ltd – Johannesburg, South Africa

Agronomist

November 2009 to August 2011

Ocean Agriculture (Pty) Ltd – Nelspruit, South Africa

Technical and Sales Advisor

September 2007 to October 2009

MGK Obaro (Pty) Ltd – Brits South Africa

Assistant Technical Advisor

February 2007 to August 2007

Training

ISO 14001:2015 Environmental Management Systems Lead Auditors course based on ISO 19011 and 17021 Requirements

South African Bureau of Standards (SABS), 12-16 November 2018

Implementation and Facilitation of Environmental Management Systems based on ISO 14001:2015 Requirements

South African Certification and Auditing Services (SACAS), 27-29 March 2017

Planning for Effective Public Participation

International Association for Public Participation, September 2011

Communications for Effective Public Participation

International Association for Public Participation, September 2011

Project Management Fundamentals

Internal Training, 16-19 October 2013

Environmental Law for Environmental Managers

Centre for Environmental Management (CEM), Potchefstroom, July 2013

Isometrix

Internal Training, 2012

Microsoft Project 2007 Essentials

Bytes Technology Group, 29-30 November 2011

Professional Affiliations

International Association for Impact Assessment, South Africa (IAIASa)

South African Council for Natural Scientific Professionals (SACNASP)

APPENDIX 2

Locality Map

APPENDIX 3

Copies of Environmental Authorisations obtained for
the same property

MPUMALANGA PROVINCIAL GOVERNMENT

Building No. 4
No. 7 Government Boulevard
Riverside Park Extension 2
Nelspruit
1200
South Africa



Private Bag X 11215
Nelspruit, 1200
Tel: 013 766 4004
Fax: 013 766 4614
Int: +27 13 766 4004
Int: +27 13 766 4614

Department of Economic Development, Environment and Tourism

Litiko Letekutifufukiswa
Kwetemnotfo, Simondzivo netekuVakasha

Umgango WezokuThuthukiswa
KoMsotho, iBhoduluko nezamaVakaHho

Departement van Ekonomiese
Ontwikkeling, Omgewing en Toerisme

Enquiries : Musa Mondlane
Telephone : (013) 690 2595
Reference No. : 17/2/3 N-37
NEAS ref. No. : MPP/EIA/0000118/2011

Mr. Raymond du Preez
Xstrata Coal South Africa (Pty) Ltd
Private Bag 7265
Witbank
1035

Fax no: 013 690 5068
Email: rdupreez@xstratacoal.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED ATCOM INFRASTRUCTURE EXPANSION PROJECT AND DEWATERING PIPELINE, iMPUNZI DIVISION ON PORTIONS 1 AND 6 OF THE FARM STEENKOOLSPRUIT 18 IS, REMAINDER OF PORTION 1, PORTIONS 3, 4, 11 AND 18 OF THE FARM KROMFONTEIN 30 IS, PORTION 3 OF THE FARM KLIPPLAAT 14 IS AND PORTIONS 1 AND 6 OF THE FARM VAN DYKSDRIFT 19 IS, EMALAHLENI, MPUMALANGA PROVINCE

With reference to the abovementioned application, please be advised that the Department has decided to grant authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of Regulation 10(2) of the Environmental Impact Assessment Regulations, 2010, you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of this letter, of the Department's decision in respect of your application. Such notification must comply with the requirements of Regulations 10(2)(a)-(d) and must draw the attention of registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the EIA Regulations, 2010.

Your attention is drawn to Chapter 7 of the Regulations, which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 20 days of the date of this letter, by means of one of the following methods:

By facsimile: (013) 766 4614

By post: Private Bag x 11215
Nelspruit
1200





By hand: Building 4, No. 7 Government Boulevard,
Riverside Park Extension
Nelspruit
1200

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'S.S. Maluleka'.

MR. S.S. MALULEKA
CHIEF DIRECTOR: ENVIRONMENTAL SERVICES
DATE: 14.02.2012

cc: Mr. Daniel Lachenicht
Ezendalo Environmental Solutions
Fax no: 086 524 9641
Email: Daniel@ezendalo.co.za

MPUMALANGA PROVINCIAL GOVERNMENT

Building No. 4
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Int: +27 13 766 4614

Department of Economic Development, Environment and Tourism

Litiko Letekutfutukiswa
Kwetenenifo, Simondzivo neteka Vakasha

Umgango WezokuThuthukiswa
KoMnotho, iBhoduluko nezamaVakajho

Departement van Ekonomiese
Ontwikkeling, Omgewing en Toerisme

Environmental Authorisation

Application number: 17/2/3/ N-37

Holder of Authorisation: Xstrata Coal South Africa –
iMpunzi Complex

NEAS reference number: MPP/EIA/0000118/2011

Location of activity: Various Portions of the farms
Steenkoolspruit 18 IS,
Kromfontein 30 IS, Klipplaat
14 IS, Dyksdriff 19 IS, and
Blesbokfontein 31 IS,
Mpumalanga Province





1. Decision

The Department is satisfied on the basis of the information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity as specified below. Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

2. Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2010, the Department hereby authorises:

Ukufisa Investment Holding (Pty) Ltd
P.O. Box 3537
Middelburg
1050

Contact person: Mr. Raymond du Preez
Tel no: 013 687 8344
Fax no: 013 690 5068
E-mail: rdupree@xstratacoal.co.za

To undertake the following activity (hereafter referred to as "the activity"):

- o The constructions of river/stream crossings associated with the dewatering pipeline.
- o The construction of the Atcom ROM Pollution Control Dams;
- o Construction of the Atcom Central Hard Park Area, the ROM tip area and HDV workshops.
- o Storage of 150 000L top up oil within the Atcom ROM Central Hard Park Area;
- o Construction of the Phoenix Discard Dump Pollution Control Dam; and the
- o Construction of the haul roads servicing the Atcom Central Hard Park, ROM tip and new mining area.

On various Portions of the farms Steenkoolspruit 18 IS, Kromfontein 30 IS, Klipplaat 14 IS, van Dyksdrift 19 IS, and Blesbokfontein 31 IS, Emalaheni Local Municipality, Mpumalanga Province at the co-ordinates 25° 52' 35.99" S and 29° 12' 13.69" E (Activity 11, 12, 13 & 18 of Government Notice R 544 and Activity 5, 15 & 18 Government Notice R 545 of 18 June 2010).

The granting of this environmental authorisation is subject to the conditions set out below.

3. Conditions of Authorisation

Scope of authorisation

- 3.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
- 3.2 The holder of the authorisation must ensure compliance with these conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 3.2.1 The activity which is authorised may only be carried out at the property indicated above.
- 3.3 Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.



- 3.4 In the event that the impacts exceed the significance as predicted in the basic assessment report, the authorisation may be withdrawn after proper procedures have been followed.
- 3.5 In the event of any dispute concerning the significance of a particular impact, the opinion of the Department in respect of its significance will prevail.
- 3.6 The Department may change or amend any of the conditions of this authorisation if, in the opinion of the Department, it is environmentally justified.
- 3.7 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 3.8 This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
- 3.9 The holder of this authorisation is responsible for compliance with the provisions for Duty of Care and Remediation of Environmental Damage contained in Section 28 of the National Environmental Management Act, 1998 (Act 107 of 1998).
- 3.10 This authorisation is subject to the permit / license requirements of the National Water Act, 1998 (Act No. 36 of 1998) and with respect to the on-site treatment of sewage, and, if thresholds are applicable, to the requirements of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).
- 3.11 This authorisation does not negate the holder of the authorisation, responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Appeal of authorisation

- 3.12 The holder of the authorisation must notify every registered interested and affected party, in writing and within twelve (12) days of the date of this decision, of the outcome of the application.
- 3.13 The notification referred to above, must –
 - a) Specify the date on which the authorisation was issued;
 - b) Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Regulations; and
 - c) Advise the interested and affected party to the manner in which the decision can be accessed;
 - d) Be published in the news papers contemplated in Regulation 54(2)(c) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management and monitoring of the activity

- 3.14 The Environmental Management Programme (EMPr) dated October 2011 and submitted as part of the basic assessment report is hereby approved and must be implemented and adhered to throughout the lifecycle of the activity.
- 3.15 The applicant must appoint an independent Environmental Control Officer (ECO) that will have the responsibility of monitoring and reporting on compliance with the conditions of this environmental authorisation as well as monitoring and reporting on the implementation of the approved EMPr.
 - 3.15.1 The ECO must be appointed before the commencement of construction and the Department must be notified of such an appointment for communication purposes.
 - 3.15.2 The ECO must oversee and monitor the success of all rehabilitation activities.
 - 3.15.3 During the construction phase, the ECO must submit monthly compliance reports to the Department in writing and copy the applicant with such reports. Where applicable, the ECO may negotiate the required frequency for the submission of reports with the Department, which must be agreed to in writing by the Department.



The reports must include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. All reports must reflect the Department's reference number of the project on the cover page.

- 3.15.4 The ECO must maintain the following on site:
- A site diary
 - Copies of all reports submitted to the Department
 - A complaints' register of all complaints and the remedies applied to such complaints
- 3.15.5 The ECO must remain employed until all rehabilitation measures as well as site clean-up are completed and the site is handed over to the applicant by the contractor for operation.
- 3.16 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report must be compiled by an independent environmental auditor and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the conditions of this authorisation as well as the requirements of the EMPr.
- 3.17 The Department retains the right to monitor and/ or inspect the proposed development during both construction and operational phases.

Commissioning and operation of the activity

- 3.18 Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, and must include the name and contact details of the appointed ECO.
- 3.19 The construction site must be defined and demarcation of material lay down areas must precede all activities on site.
- 3.20 Construction activities must remain within the defined construction area.
- 3.21 No activity, such as temporary housing, construction camps, temporary ablution facilities, storing of equipment, stockpiling of topsoil or any other activity, may take place below the 1:100 year flood line, or within a horizontal distance of 32m of a watercourse.
- 3.22 The storage and handling of fuel, lubricants, paint, tar, bitumen binders and other chemicals must be in especially demarcated impervious and bunded areas.
- 3.23 Construction vehicles and equipment must be checked and maintained regularly to ensure that there is no environmental contamination as a result of oil, fuel or hydraulic fluid leakages.
- 3.24 The pollution of adjacent areas due to improper storage of construction materials or any hazardous substances is prohibited.
- 3.25 Dry chemical toilet facilities or e-loo's must be provided on site at a ratio of 1:15 for construction staff. Ablution facilities may not be located within 100m from any watercourse or wetland, and may not cause pollution. The use of pit latrines (unimproved or ventilated) on site is strictly prohibited.
- 3.26 Increased runoff due to vegetation clearance and/ or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering any watercourse.
- 3.27 Soils that become compacted through the activities of the development must be loosened to an appropriate depth to allow seed germination.
- 3.28 Storm water management must be designed to slow the release of runoff into wetlands and watercourses.
- 3.29 Topsoil from construction footprints (such as Phoenix Dump Return Water Dam, Haul Roads, etc) must be stripped to maximum topsoil depths.
- 3.30 Proper water management practice must be implemented in line with the mine EMPr.



- 3.31 Waste management practice must cater for solid and liquid, hazardous and non hazardous waste.
- 3.32 Mechanisms for dissipating water energy must be implemented at the inception of the construction phase to prevent erosion.
- 3.33 The rate of storm water runoff must be reduced by using mechanisms such as the construction of earth berms and the construction of energy breakers at storm water outlet structures.
- 3.34 Surface water rich in sediments and other pollutants must be prevented from entering any watercourse.
- 3.35 A pipe outlet must be installed with a valve that can be manually opened to allow discharge of runoff water from the upstream side, but to remain normally closed to prevent reverse flow during a flood.
- 3.36 The pipeline must remain indefinitely as it could be used for post closure transfer of decant water for other mines overall closure plans.
- 3.37 The new haul road extensions will connect to the existing network to allow coal to be trucked back to the ATCOM ROM tip area.
- 3.38 Rockfill and ferricrete material for haul road construction must be obtained from mine sources.
- 3.39 Special flood protection measures must be implemented including the construction of the road higher than the floodline elevation, so the road embankment itself must serve as a flood protection barrier.
- 3.40 The coolant and oil must be stored within 4 separate metal tanks; each tank must have an individual metal bunding.
- 3.41 The entire area must be lined with concrete and drain to a central sump, and the facility must not handle waste oil.
- 3.42 Waste oil must be recovered in the workshops and form part of the workshop oil management system.
- 3.43 The Phoenix dam must contain only mine affected water and avoid the consequences of overtopping or leakage that will pose the greatest risk to surface as well as groundwater resources.
- 3.44 The dam must be have appropriate liners and monitoring systems to reduce the likelihood of leakages.
- 3.45 All servitudes belonging to Telkom, Eskom and the Department of Public Works must be left intact and these stakeholders must be consulted at all times if any deviations necessitate getting into their servitude.
- 3.46 Grids must be installed at all storm water inlets to trap litter and detritus material before being released into any watercourse.
- 3.47 Grease and oil traps must be installed at the wash bay and workshop areas before water is discharged into the storm water/sewer system.
- 3.48 The holder of the authorisation must constantly monitor and record the effectiveness of the storm water model throughout the lifecycle of the activity.
- 3.49 It is the responsibility of the holder of the authorisation to rectify any source of pollution from their undertaking and to take appropriate measures to prevent any pollution of surface as well as ground water.
- 3.50 Measures must be taken to remove alien vegetation and control new alien vegetation recruitment on the property throughout the lifecycle of the activity.
- 3.51 All disturbed areas must be fully rehabilitated and protected from erosion. Rehabilitation measures must be aimed at the prevention of soil erosion and the re-establishment of vegetation.
- 3.52 For dust suppression purposes, water must be obtained from the evaporation or pollution control dam and vehicles travelling along the access roads must adhere to the speed limits of 40km/h to avoid creating excessive dust. *CS*



- 3.53 The use of gravel and/ or sand from borrow/gravel pits must adhere to all applicable legislation in terms of authorisation and permits.
- 3.54 No construction material or any other waste material may be dumped into any watercourse or surrounding area.
- 3.55 All general waste generated on the site must be disposed of at an official registered landfill site or as directed by any other relevant authority.
- 3.56 All hazardous waste must be disposed of at an official registered site, or be removed by registered hazardous waste contractors.
- 3.57 Construction personnel must be sensitized to the requirements of the South African Heritage Resources Act. Should any material of cultural or archaeological significance be encountered during construction, all activities must cease immediately and the South African Heritage Resources Agency (SAHRA) must be informed accordingly.
- 3.58 Any complaints received from the public during the construction and operational phases of the activity must be attended to as soon as possible and addressed to the satisfaction of all concerned.

General

- 3.59 A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 3.1. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 3.2. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

ENVIRONMENTAL AUTHORISATION APPROVED BY:

MR. S.S. MALULEKA
CHIEF DIRECTOR: ENVIRONMENTAL SERVICES
DATE: 14.02.2012





- a) According to the basic assessment report, all necessary services at the capacity required by the proposed development are currently available, and no additional capacity has to be created to cater for the development.
- b) According to the basic assessment report, the proposed development is considered to be environmentally and economically sustainable.
- c) All general waste generated during construction of the proposed development will be disposed off at a registered landfill site of Emalahleni Local Municipality.
- d) No significant detrimental environmental impacts are anticipated, should the mitigation measures stipulated in the basic assessment report and conditions of this environmental authorisation be implemented and adhered to.
- e) The decommissioning and closure of the pipeline is rated as a low risk once mitigation measures have been implemented.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated for to acceptable levels. Authorisation is accordingly granted.

A small, faint circular mark or stamp located at the end of the paragraph.

MPUMALANGA PROVINCIAL GOVERNMENT

Building No. 4
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1200
South Africa



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Nelspruit, 1200
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Fax: 013 766 4614
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Int: +27 13 766 4614

Department of Economic Development, Environment and Tourism

Litiko Letekutfutukiswa
Kwetemnotfo, Simondzwo netekuVakasha

Umngango WezokuThuthukiswa
KoMnotho, iBhoduluko nezamaVakatjho

Departement van Ekonomiese
Ontwikkeling, Omgewing en Toerisme

Enquiries : Musa Mondlane
Telephone : (013) 690 2595
Reference : 17/2/3 NK-37

Mr. Raymond du Preez
Xstrata Coal South Africa
1st Floor, 23 Melrose Boulevard

Melrose Arch,
Melrose North

2196

Fax : (013) 690 5068
E-mail : rdupreez@xstratacoal.co.za

Dear Sir,

AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (17/2/3 NK 37): THE PROPOSED ATCOM INFRASTRUCTURE EXPANSION PROJECT AND DEWATERING PIPELINE iMPUNZI DIVISION ON PORTIONS 1 AND 6 OF THE FARM STEENKOOLSPRUIT 18 IS, REMAINDER OF PORTION 1, PORTIONS 3, 4, 11 & 18 KROMFONTEIN 30 IS, PORTION 3 OF THE FARM KLIPPLAAT 14 IS AND PORTIONS 1 AND 6 VAN DYKSDRIFT 19 IS, EMALAHLENI, MPUMALANGA

You are advised that the Department has, in terms of the powers vested in it by regulation 42 of the Environmental Impact Assessment Regulations, 2010 promulgated in terms of Sections 24 (5) and 44 of the National Environmental Management Act, 1998 (Act 107 of 1998) (as amended) decided to amend the abovementioned environmental authorisation. Details regarding the basis on which the Department reached this decision are attached hereto.

Your request for amendment dated 11 April 2012 refers.

1. The requested amendments are as follows:
 - o Substitution of wrong company details on page 4. The application was made by Xstrata Coal South Africa – iMpunzi Complex and not Ukufisa Investment Holding.



- Email address and phone number for Raymond du Preez is incorrect. It should be rdupreez@xstratacoal.co.za and (013) 687 8314.
 - Land owner details in the Environmental Authorisation are not included. These must be updated to Xstrata Coal South Africa – a division of Xstrata South Africa (Pty) Ltd 1st floor; 23 Melrose Boulevard, 2196 South Africa.
 - Page 7: point 3.44 – should be read ‘The dam must have appropriate liners’.
2. The request for amendment has been considered. The amendments must be read in conjunction with the Environmental Authorisation dated 2012/02/14. The concerns are as follows:
- Xstrata Coal South Africa, is responsible for compliance with the provisions for “Duty of Care” and remediation of damage contained in Section 28 of the National Environmental Management Act.
 - The current footprint mentioned in the Basic Assessment Report must remain as it is and any changes must be in line with the Environmental Authorisation.

Please take note that the onus rests on the applicant/developer to ensure that this amendment of the Environmental Authorisation is brought to the attention of all Interested and Affected Parties. Formal appeals can be submitted to the MEC for Economic Development, Environment & Tourism, Mpumalanga, Province within 12 days from the date of this amendment.

Further to the above, this amendment is regarded as an annexure to the Environmental Authorisation and forms part of the Environmental Authorisation issued on the 14 February 2012, Reference No. 17/2/3 N-37.

All the other conditions and key factors that are stipulated in the Environmental Authorisation dated remain in force and are not amended in any way.

Your attention is drawn to Chapter 7 of the Regulations, which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 20 days after the date of the decision, by means of one of the following methods: CS

By facsimile: (013) 766 4614

By post: Private Bag x 11215
Nelspruit
1200



By hand: Building 4, No. 7 Government Boulevard,
Riverside Park Extension 2
Nelspruit
1200

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

The applicant must, in writing, within twelve (12) days of the date of the decision on the application, notify every registered interested and affected party of the outcome of the application and the reasons for the decision, and their attention must be drawn to the manner in which they can access the decision, and the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the regulations. The applicant must also within twelve (12) days of the date of the decision on the application, publish a notice in the newspaper that was used for placing advertisements as part of the initial public participation process which must include the abovementioned information.

The decision to amend the environmental authorisation is subject to the following conditions:

- a) The amended Environmental Authorisation dated 14 February 2012 remain in force and is not amended in any way, only to ensure that the Environmental Authorisation is correctly registered and to ensure that it is factually correct.
- b) Interested and affected parties will not be able to contact the correct person if the details are not correct.
- c) Page 9 of the original ROD will be sent to the applicant, so that it can be reviewed as a complete document.

Sincerely,

MR. S.S. MALULEKA
CHIEF DIRECTOR: ENVIRONMENTAL SERVICES
DATE: 28.06.2012

cc: Daniel Lachenicht
Ezendalo Environmental Solutions
Fax: 086 524 9641
Email: Daniel@ezendalo.co.za



Reasons for Decision

1. Background

The Department issued an environmental authorisation to the applicant on 14 February 2012 to undertake the following activity –

THE PROPOSED ATCOM INFRASTRUCTURE EXPANSION PROJECT AND DEWATERING PIPELINE IMPUNZI DIVISION ON PORTIONS 1 AND 6 OF THE FARM STEENKOOLESPRUIT 18 IS, REMAINDER OF PORTION 1, PORTIONS 3, 4, 11 & 18 KROMFONTEIN 30 IS, PORTION 3 OF THE FARM KLIPPLAAT 14 IS AND PORTIONS 1 AND 6 VAN DYKSDRIFT 19 IS, EMALAHLENI.

The Department considered amending the environmental authorisation for the following reasons –

- a) No significant changes to the impacts that were identified and assessed during the Basic Assessment Process are expected.
- b) No objections to the amendments were received during the public participation process.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the amendment application received by the Department on 11 April 2012.
- b) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

In view of the above, the Department is of the opinion that the amendments would not result in a negative environmental impact that would conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998). It is accordingly decided to amend the environmental authorisation.

MPUMALANGA PROVINCIAL GOVERNMENT

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Republic of South Africa



051801 Private Bag x 11219
Nelspruit 1200
Republic of South Africa
Tel: +27 (0)13 766 6067/8
Fax: +27 (0)13 766 8295
Email: info.ardla@mpg.gov.za

Department: Agriculture, Rural Development and Land Administration
HEAD OFFICE

*Litiko Letakulima, kufufukiswa
Kwetindzawo Tasemakhaya
Netekuphatwa Kwemhlaba*

*Ndzawulo ya Wintini, Nhluvukiso wa
Matiko xkaya nI Vulawuri bya Misava*

*UmNyan go wezokulima nokuTjela,
zo kuThuthukiswa kweNdawo
zemaKhaya nokuPhatwa koMhlaba*

»

ATTENTION : Lizet Vermaak

FROM : Selby

Mpumalanga Provincial Government

Piet Koorhooft Building
Corner Justice & Kruger
Witbank, 1035
Republic of South Africa



Private Bag x 7255
Witbank, 1035
South Africa
Tel: ☎ (013) 690-1279
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DEPARTMENT OF AGRICULTURE AND LAND ADMINISTRATION DIRECTORATE: ENVIRONMENTAL IMPACT MANAGEMENT

Litiko Letekulima Kanye
Nekuphatfwa Kwemhlaba

Departement van Landbou, en
Grondadministrasie

Umyango Wezokulima,
Nebhoduluko KweNarha

Enquiries: Martha Seshweni

Attention: Mr. Howard Mangwale
Xstrata Coal South Africa
Private Bag x7265
Witbank
1035

Fax no: (013) 690 5068

Tel no. (013) 690 5081

PER FACSIMILE/REGISTERED MAIL

Dear Sir,

APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED CONSTRUCTION OF THREE (3) FUEL AND OIL STORAGE FACILITIES AT EACH OF THE IDENTIFIED MINING RESERVES LOCATED AT THE ATCOM EAST MINING AREA, KROMFONTEIN 30 IS, STEENKOOLSPRUIT 18 IS, AND VAN DYKSDRIFT 19 IS, MIDDELBURG, MPUMALANGA.

With reference to the abovementioned application, please be advised that the Department has decided to grant authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties, in writing and within 7 (SEVEN) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations, which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 10 days of receiving this letter, by means of one of the following methods:

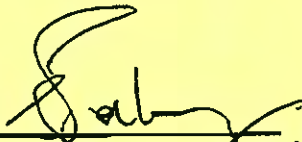
By facsimile: (013) 7668 445

By post: Private Bag x 11219
Nelspruit
1200

By hand: Building 6, Government Boulevard,
Riverside Park Extension 2
Nelspruit
1200

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully,



**Director: Environmental Impact Management
For HOD: Agriculture and Land Administration**

2009/08/28
Date

Mpumalanga Provincial Government

Piet Koornhoof Building
Corner Justice & Kruger
Witbank, 1035
Republic of South Africa



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South Africa
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DEPARTMENT OF AGRICULTURE AND LAND ADMINISTRATION DIRECTORATE: ENVIRONMENTAL IMPACT MANAGEMENT

Litiko Letekulima Kanye
Nekuphatfwa Kwemhlaba

Departement van Landbou, en
Grondadministrasie

Umnyango Wezokulima,
Nebhoduluko KweNarha

ENVIRONMENTAL AUTHORISATION

Authorisation register number : 17/2/1/7 NK-3

Authorisation : Xstrata Coal SA

Location of activity : Located at Kromfontein 30 IS,
Steenkoolspruit 18 IS, and Van
Dyksdrift 19 IS, Witbank.

1. Decision

The Department is satisfied on the basis of the information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activity as specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1

2. Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2006, the Department hereby authorises:

Xstrata Coal South Africa
Private Bag x7265
Witbank
1035

Contact person: Mr. Howard Mangwale

to undertake the following activity (hereafter referred to as "the activity"): **The proposed construction of three (3) fuel and oil storage facilities with a combined capacity of more than 30m³ but less than 1000m³ at each of the identified mining reserves located at the Atcom East Mining area, namely; Kromfontein 30 IS, Steenkoolspruit 18 IS, and Van Dyksdrift 19 IS, Middelburg, Mpumalanga Emalahleni Local Municipality: Listed as Item 7, as identified in terms of Chapter 5 of the National Environmental Management Act, 1998 and Government Notice R 386 of 21 April 2006, at the following co-ordinates: 26° 04.87 S, 29° 16.11 E**

26° 05.37 S, 29° 14.67 E

26° 06.40 S, 29° 14.04 E

The granting of this environmental authorisation is subject to the conditions set out below.

3. Conditions of Authorisation

Scope of authorization

- 3.1 Authorization of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
- 3.2 The holder of the authorisation must ensure compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 3.3 The activity which is authorized may only be carried out at the property indicated above.

- 3.4 Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
- 3.5 This activity must commence within a period of two (2) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
- 3.6 This authorization does not negate the holder of the authorization, responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Appeal of authorization

- 3.7 The holder of the authorisation must notify every registered interested and affected party, in writing and within 10 (Ten) calendar days, of receiving notice of the Department's decision to authorize the activity.
- 3.8 The notification referred to above must –
 - 3.8.1 Specify the date on which the authorisation was issued;
 - 3.8.2 Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations; and
 - 3.8.3 Advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.

Management of the activity

- 3.9 The Environmental Management Plan ("EMP") which fulfills the requirements of this authorization must be compiled and submitted to the Department for approval. The EMP must:
 - 3.9.1 Contain all the information specified in regulation 34 of the regulation;
 - 3.9.2 Be approved by the Department before the commencement of any construction activities and
 - 3.9.3 Be adhered to during the commencement, operation and closure of the activity.
- 3.10 An independent Environmental Control Officer must be appointed to secure compliance with the conditions of this Environmental Authorisation.
- 3.11 The holder of the authorization must submit a post-construction environmental audit report to the department. The audit report must be compiled by an independent auditor.
- 3.12 The Department retains the right to monitor and/or inspect the proposed project during both construction and operational phases.

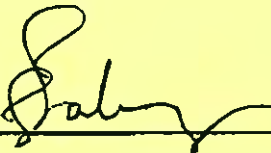
Commissioning and Operation of the activity

- 3.13 Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.
- 3.14 All construction activities must be limited to the said site. No activities must be allowed on adjacent agricultural land.
- 3.15 No development must take place below the 1:100 year flood line of any watercourse.
- 3.16 The applicant must ensure that all the steep slopes are avoided to prevent all the negative impacts that might arise.
- 3.17 All reasonable measures must be undertaken to prevent and manage soil erosion during and after construction.
- 3.18 Adequate storm water management system must be implemented on site and the storm water structures must be properly maintained to ensure their effectiveness.
- 3.19 Mixing of chemicals and hazardous substances must take place either on a tray or on an impermeable surface and waste must be disposed off at a registered landfill site.
- 3.20 Construction vehicles and equipment must also be checked and maintained regularly to ensure that there is no environmental contamination as a result of oil, fuel or hydraulic fluid leakages.
- 3.21 All hazardous and risk areas must be clearly indicated with signs and the employees must be trained on occupational, health and safety aspects.
- 3.22 A three level containment system must be installed with the tank to ensure that spills and leaks are managed and possibly eliminated. If the spill occurs in a secondarily contained area or within a bund, it must be cleaned up manually using a pump or an absorbent material which must then be disposed of into a hazardous waste bin.
- 3.23 The proposed storage facility must be designed and constructed in accordance with SANS 1089 Part 1, which would further reduce the potential for medium or higher safety standards.
- 3.24 Disturbance to natural vegetation must be restricted to the absolute minimum and areas disturbed as a result of construction activities must be rehabilitated as soon as possible to the satisfaction of the Department.
- 3.25 Appropriate measures must be implemented to prevent and control veldfires.
- 3.26 Stringent measures must be applied to suppress dust emanating from the construction site.
- 3.27 No surface or ground water may be polluted due to any activity on the property or site. The relevant requirements of the National Water Act, 1998 (Act No. 36 of 1998) must be complied with at all times.
- 3.28 Should any material of cultural or archeologically significance be encountered during construction, all activities must cease immediately and the south African Heritage Resources Agency (SAHRA) should be informed accordingly.

General

- 3.29 A copy of this authorization must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 3.30 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 3.31 The holder of the authorisation must notify the Department, in writing and within 24 (twenty four) hours, if conditions of this authorisation are not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 3.32 Non-compliance with a condition of this authorization may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

Environmental Authorisation approved by:



**Director: Environmental Impact Management
For HOD: Agriculture and Land Administration**

2009/08/28

Date

Annexure 1: Reasons for the Decision

1. Background

1.1 The applicant Xstrata Coal SA, applied for authorization to continue with the following activity:

Item 7, of Government Notice R 386 of 21 April 2006 – **The proposed construction of three fuel and oil storage facilities with a combined capacity of more than 30m³ but less than 1000m³ at each of the identified mining reserves located at the Atcom East Mining area, namely; Kromfontein 30 IS, Steenkoolspruit 18 IS, Van Dyksdrift 19 IS in Middelburg, Mpumalanga Emalahleni Local Municipality at the following co-ordinates:**

- 26° 04.87 S, 29° 16.11 E
- 26° 05.37 S, 29° 14.67 E
- 26° 06.40 S, 29° 14.04 E

The proposed activity will include the following:

Temporary Service Facility

- 4x23 0000 liter aboveground fuel storage tanks.
- Physical Size (footprint) 112m².
- Site establishment and preparations.
- Construction of oil storage tanks.
- Rehabilitation of the site.

Central Hardpark Facility

- 2x83 000 liter above fuel storage tanks.
- Physical size (footprint) 270 m².
- Site preparations.
- Construction of fuel storage tanks.
- Rehabilitation of the site.

Atcom workshop Service Complex

- 8x83 000 liter aboveground fuel storage tanks.
- Physical size (footprint) 1010 m²
- Site preparation.
- Construction of fuel storage tank.
- Rehabilitation of the site.

The applicant appointed the following Environmental Assessment Practitioner to undertake a Basic Assessment process:

Jones and Wagener Consulting and Civil Engineers
P.O Box 1434
Rivonia
2128
Contact person: Ms. Beth Candy
Tel: (011) 519 0200
Fax: (011) 519 0201

2. Information considered in making the decision.

In reaching its decision, the Department took the following into consideration:

- a) The information contained in the Basic Assessment Report.
- b) The comments received from interested and affected parties as included in the Basic Assessment Report.
- c) The objective and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998); and
- d) The findings of the site visit undertaken by Martha Seshweni from the Department on 02nd March 2009.

3. Key factors considered in making the decision.

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below:

- a) The site will be accessed through the existing Gravel road.
- b) There will be no significant environmental impacts, as the site is already utilized for mining activities.
- c) All the neighbours and potential interested and affected parties have given a verbal and written consent for the project to proceed.
- d) The construction and installation of fuel storage facilities will enable the mine to work effectively.

4. Findings

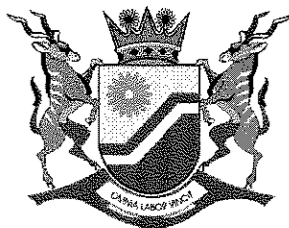
After consideration of the information and factors listed above, the Department made the following findings:

- a) The proposed development will take place on a mining area; therefore there is no fauna and flora that will be negatively affected by the proposed development.
- b) There were no signs of culturally or historically significant elements including Archaeological or paleontological sites observed during the site visit.
- c) No significant detrimental environmental impacts are anticipated, the mitigation measures stipulated in the basic assessment report and conditions of this environmental authorisation must be implemented and adhered to.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated for to acceptable levels. The application is accordingly granted.

MPUMALANGA PROVINCIAL GOVERNMENT

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Tel: 013 766 4004
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Int: +27 13 766 4004
Int: +27 13 766 4614

Department of Economic Development, Environment and Tourism

Litiko Letekufufukiswa
Kwetenmotfo, Simondzwo netekuVakasha

Umgungo WezokuThuthukiswa
KoMnotho, iBhoduluko nezamaVakatjho

Departement van Ekonomiese
Ontwikkeling, Omgewing en Toerisme

Enquiries: Musa Mondlane
Tel: (013) 656 2595

Ms. Beth Candy
Xstrata Coal South Africa
Private Bag x 7265
Witbank
1035
Fax no: (011) 519 0201

Dear Madam,

PROPOSED AMENDMENT OF THE RECORD OF DECISION OF THE CONSTRUCTION OF THREE FUEL AND OIL STORAGE FACILITIES AT ATCOM EAST MINING AREA ON PORTIONS OF THE FARMS KROMFONTEIN 30 IS, STEENKOOLSPRUIT 18 IS AND VAN DYKSDRIFT 19 IS, EMALAHLENI, MPUMALANGA

Your request for amendment as received by the Department on 11 February 2011 refers.

The Environmental Authorisation dated 28 August 2009 is hereby amended as follows;

1. The requested amendments are as follows by the applicant:
 - Since the approval of Basic Assessment process, the proposed infrastructure required as part of the proposed new Xstrata Atcom East project has been revised, and as a result the location and volumes of fuel and oil storage required for the project has changed.
 - The new locations are all within the existing mining area, and therefore the impacts outlined in the Basic Assessment remain the same.
 - As stated in the Environmental Authorisation no significant detrimental environmental impacts are anticipated, the mitigation measures stipulated in the



Basic Assessment Report and conditions of the environmental authorization will be implemented and adhered to.

The changes required for the Atcom East project proposed fuel and oil storage facilities will include the following:

- Atcom Run of Mine (ROM) central hard park area
(26° 05.59' S, 29° 13.43' E (Cape datum Lo29))
 - 2 x 475 000 litres above ground fuel storage tanks
 - Physical size (footprint) 1 690m² (fuel)
 - Site establishment and preparation is proposed for 1 March 2011
 - Construction of fuel and oil storage tanks
 - Rehabilitation of the site during decommissioning phase

- Atcom main workshop oil facility
(26° 06.40' S, 29° 13.84')

 - 150 000 litres above ground oil storage tanks
 - Physical size (footprint) 200m²
 - Site establishment and preparation is proposed for June 2011
 - Construction of fuel and oil storage tanks
 - Rehabilitation of the site during decommissioning phase

- Temporary service yard diesel storage
(26° 04.11'S, 28° 15.68' E)
 - 4 x23 000 litres above ground oil storage tanks
 - Physical size (footprint) 200m²
 - Site establishment and preparation
 - Construction of fuel and oil storage tanks
 - Rehabilitation of the site during decommissioning phase

2. The request for amendment has been considered and the amendments must be read in conjunction with the Record of Decision dated 2009/08/28. The concerns are as follows:

- The proposed amendment must not alter the development footprint of this activity and must only be within the proposed site as specified on the amendment.
- The applicant is responsible for compliance with the provisions for "Duty of Care" and remediation of damage contained in Section 28 of the National Environmental Management Act.



Please take note that the onus rests with the applicant/developer to ensure that this amendment of the Record of Decision is brought to the attention of all Interested and Affected Parties. Formal appeals can be submitted to the MEC for Department of Economic Development, Environment & Tourism, Mpumalanga Province within 30 days from the date of this amendment.

All the other conditions and key factors that are stipulated in the Record of Decision dated 04 November 2010 remain in force and are not amended in any way.

Yours faithfully,

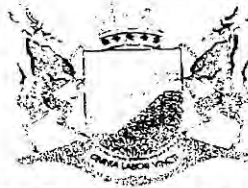
MR. S.S. MALULEKA

HEAD OF DEPARTMENT

DATE: 27.09.2011

Mpumalanga Provincial Government

Building 6, Government Boulevard,
Riverside Park Extension 2
Nelspruit, 1200
Republic of South Africa



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Tel: ☎ (013) 7666040
Fax: 📠 (013) 7668445

DEPARTMENT OF AGRICULTURE AND LAND ADMINISTRATION DIRECTORATE: ENVIRONMENTAL IMPACT MANAGEMENT

Litiko Letekulima Kanye
Nekuphatfwa Kwemhlaba

Departement van Landbou, en
Grondadministrasie

Umnnyango Wezokulima,
Nebhoduluko KweNarha

Enquiries: Portia Leshilo

Xstrata Coal South Africa (Pty) Ltd (Impunzi Division)
Private Bag x 7265
Witbank
1035

Fax no: (013) 690-5068

Attention: Raymond Dupree

PER FACSIMILE/REGISTERED MAIL

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED DIVERSION OF RIETSPRUIT RIVER ON A PORTION OF THE FARM BLESBOKFONTEIN 31 IS, OGIES, MPUMALANGA.

With reference to the abovementioned application, please be advised that the Department has decided to grant authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties, in writing and within 7 (SEVEN) calendar days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations, which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 10 days of receiving this letter, by means of one of the following methods:

By facsimile: (013) 7668 445
By post: Private Bag x 11219
Nelspruit
1200

By hand: Building 6, Government Boulevard,
Riverside Park Extension 2
Nelspruit
1200

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully,



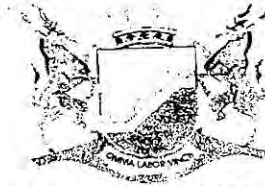
Director: Environmental Impact Management

2008/02/04

Date

Mpumalanga Provincial Government

Building 6, Government Boulevard,
Riverside Park Extension 2
Nelspruit, 1200
Republic of South Africa



Private Bag x 1121
Nelspruit 120
South Africa
Tel: (013) 766604
Fax: (013) 766844

DEPARTMENT OF AGRICULTURE AND LAND ADMINISTRATION DIRECTORATE: ENVIRONMENTAL IMPACT MANAGEMENT

Litiko Letekulima Kanye
Nekuphatfwa Kwemhlaba

Departement van Landbou, en Grondadministrasie

Umnyango Wezokulima,
Nebhoduluko KweNarha

Environmental Authorisation

Authorisation register number: 17/2/1/1(M) MP-08

Holder of Authorisation: Xstrata Coal South Africa
(Impunzi Division)

Location of activity: Portion of the farm
Blesbokfontein 31 IS.

1. Decision

The Department is satisfied on the basis of the information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activity as specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

2. Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2006, the Department hereby authorises:

Xstrata Coal South Africa (Pty) Ltd
Private Bag x 7265
Witbank
1035

Contact person: Piet Wessels

to undertake the following activity (hereafter referred to as "the activity"): The diversion of the Alpha and South Witbank streams on a portion of the farm Blesbokfontein 31 IS, Emalahleni Local Municipality at the following co-ordinates: South Witbank streams 26° 8' 13.832"S, 29° 8' 58.856"E, 26° 6' 11.436"S, 29° 9' 3.050" E and Alpha stream 26° 7' 26.365"S, 29° 10' 258.169"E, 26° 6' 16.973"S, 29° 10' 6.280"E: Item 1(m) as identified in terms of Chapter 5 of the National Environmental Management Act, 1998 and Government Notice R 386 of 21 April 2006

The granting of this environmental authorisation is subject to the conditions set out below:

3. Conditions of Authorisation

Scope of authorization

1. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
2. The holder of the authorisation must ensure compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
3. The activity which is authorised may only be carried out at the property indicated above.
4. Any changes to, or deviations from, the project description as set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not,

the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.

5. This activity must commence within a period of two (2) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
6. This authorisation does not negate the holder of the authorization of the responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Appeal of authorization

7. The holder of the authorisation must notify every registered interested and affected party, in writing and within 10 (Ten) calendar days, of receiving notice of the Department's decision to authorize the activity.
8. The notification referred to in 1.7 must –
 - 8.1 Specify the date on which the authorisation was issued;
 - 8.2 Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations; and
 - 8.3 Advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.

Management and Monitoring of the activity

9. The Environmental Management Plan ("EMP"), which fulfills the requirements of this authorization, must be compiled and submitted to the Department for approval:
 - 9.1 It must contain all the information specified in regulation 34 of the regulation;
 - 9.2 It must be approved by the Department before the commencement of any construction activities and
 - 9.3 Be adhered to during the commencement, operation and closure of the activity.
10. An independent Environmental Control Officer must be appointed to ensure compliance with the conditions of this Environmental Authorisation.
11. The holder of the authorization must submit a post-construction environmental audit report to the department. The audit report must be compiled by an independent auditor.
12. The Department retains the right to monitor and/ or inspect the proposed project during both construction and operational phases.

Commissioning and Operation of the activity

13. Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will end.
14. Chemical toilets must be provided for the construction workers and these must be serviced on a regular basis.
15. Vehicles traveling to and from the construction site must adhere to speed limits so as to avoid producing excessive dust.
17. Stockpiles must be stabilized with vegetation to reduce erosion and siltation into streams and dams.

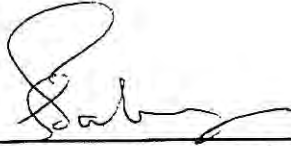
18. Stormwater drainage and pollution control facilities must be constructed to divert the flow of water and separate clean and dirty water on site.
19. An emergency spill response plan must be put in place to address any accidental spillages of hydrocarbons and these spills must be communicated to the Department of Water Affairs and Forestry.
20. Dust must be controlled on the haul roads by regular spraying of water from a bowser as and when necessary.
21. Dust must be monitored to detect whether significant quantities are being emitted and appropriate corrective measures implemented.
22. Noise measurements must be taken at nearby dwellings before construction is commissioned to ensure that noise levels are not raised above acceptable levels.
23. The plant species declared as weeds or alien invasive must be managed and controlled through weed killers and other agreed upon programs.
24. The transplant of any Red Data species found on site must be done by specialists.
25. Disturbed surfaces must be re-vegetated with a specified grass mix, preferably with pioneer species with a wide range of growth forms and habits to achieve good cover.
26. An awareness programme must be implemented in order to educate workers on site about the importance of conserving the local animals.
27. The disposal of waste in non-designated areas, particularly hazardous wastes must be avoided.
28. A 35m buffer zone assigned to wetland area must be adhered to at all times
29. In order to prevent excessive sedimentation of the wetland area the earth piles must be vegetated or use gabions to trap the sediment.
30. A 20m buffer zone must be kept to all riparian zones associated with both Alpha and South Witbank streams.
31. These buffer zones must be kept of any activity.
33. Destroyed channel structure of the South Witbank Stream must be rehabilitated.
34. Sources affecting the flow of water, such as dams and water abstraction points must be identified and managed.

General

35. A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
36. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the applicant knows the new details.
37. The holder of the authorisation must notify the Department, in writing and within 24 (twenty four) hours, if conditions of this authorisation are not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.

38. Non-compliance with a condition of this authorization may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

Environmental Authorisation approved by:



**Director: Environmental Impact Management
For HOD: Agriculture and Land Administration**


2008/02/04

Date



Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully,


MR. S.S. MALULEKA
CHIEF DIRECTOR: ENVIRONMENTAL SERVICES
DATE: 23.05.2012

cc: Ms. Paulette Jacobs
HydroScience cc
Fax no: 086 692 8820
Email: paulette@hydroscience.co.za

MPUMALANGA PROVINCIAL GOVERNMENT

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1209
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Department of Economic Development, Environment and Tourism

Indaba Lechibulalanga
Kumkhondo, Nkomafeni, eMantsoeng

Umgungu Wenzel Hlabizwa
Kumkhondo, eMantsoeng, eMantsoeng

Department van Ekonomiese
Ontwikkeling, Omgewingsake en Toerisme

Environmental Authorisation

Application number: 17/2/2/1(e) NK-7

Holder of Authorisation: Xstrata Coal South Africa –
Open cast Mine (Atcom)
South

NEAS reference number: MPP/EIA/000014260/2011

Location of activity: Portion of the farm
Kromfontein 30
IS, Mpumalanga Province



1. Decision

The Department is satisfied on the basis of the information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity as specified below. Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

2. Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2010, the Department hereby authorises:

Xstrata Coal Energy South Africa
Open Cast Mine (Atcom) South
Private Bag x 1
Melrose Arch
2076

Contact person: Mr Raymond du Preez
Tel no: 013 687 8344
Fax no: 086 518 0455
E-mail: rdupree@xstratacoal.co.za

To undertake the following activity (hereafter referred to as "the activity"):

- o The rehabilitation of the 645 ha Atcom south open pit.
 - o The rehabilitation of the beath dump which covers 10 hectares.
- On Portions 1-9,11-14,18.,26,28 and 29 of the farm Kromfontein 30 IS, Emalahleni Local Municipality, Mpumalanga Province at the co-ordinates 26° 06' 53,2" S and 29° 13' 36" E (Activity 1(k), 1(m)13, 25 of Government Notice R 386 of 21 April 2006 and 1(e), 1(j) of R387).

The granting of this environmental authorisation is subject to the conditions set out below.

3. Conditions of Authorisation

Scope of authorisation

- 3.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
- 3.2 The holder of the authorisation must ensure compliance with these conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 3.2.1 The activity which is authorised may only be carried out at the property indicated above.
- 3.3 Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
- 3.4 In the event that the impacts exceed the significance as predicted in the environmental impact report, authorisation may be withdrawn after proper procedures have been followed.
- 3.5 In the event of any dispute concerning the significance of a particular impact, the opinion of the Department in respect of its significance will prevail.



- 3.6 The Department may change or amend any of the conditions of this authorisation if, in the opinion of the Department, it is environmentally justified.
- 3.7 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 3.8 This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
- 3.9 The holder of this authorisation is responsible for compliance with the provisions for Duty of Care and Remediation of Environmental Damage, contained in Section 28 of the National Environmental Management Act, 1998 (Act 107 of 1998).
- 3.10 This authorisation is subject to the requirements of the permit / license requirements of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) with respect to the on-site treatment of sewage.
- 3.11 This authorisation does not negate the holder of the authorisation, responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Appeal of authorisation

- 3.12 The holder of the authorisation must notify every registered interested and affected party, in writing and within twelve (12) days of the date of this decision, of the outcome of the application.
- 3.13 The notification referred to above, must –
 - a) Specify the date on which the authorisation was issued;
 - b) Inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Regulations; and
 - c) Advise the interested and affected party to the manner in which the decision can be accessed;
 - d) Be published in the newspapers contemplated in Regulation 54(2)(c) and which newspaper was used for the placing of advertisements as part of the public participation process.

Management and monitoring of the activity

- 3.14 The Environmental Management Programme (EMPr) dated September 2011 and submitted as part of the environmental impact report is hereby approved and must be implemented and adhered to throughout the lifecycle of the activity.
- 3.15 The applicant must appoint an Independent Environmental Control Officer (ECO) that will have the responsibility of monitoring and reporting on compliance with the conditions of this environmental authorisation as well as monitoring and reporting on the implementation of the approved EMPr.
 - 3.15.1 The ECO must be appointed before the commencement of construction and the Department must be notified of such an appointment for communication purposes.
 - 3.15.2 The ECO must oversee and monitor the success of all rehabilitation activities.
 - 3.15.3 During the construction phase, the ECO must submit monthly compliance reports to the Department in writing and copy the applicant with such reports. Where applicable, the ECO may negotiate the required frequency for the submission of reports with the Department, which must be agreed upon in writing by the Department. The reports must include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. All reports must reflect the Department's reference number of the project on the cover page.
 - 3.15.4 The ECO must maintain the following on site:



- A site diary
 - Copies of all reports submitted to the Department
 - A complaints' register of all public complaints and the remedies applied to such complaints
- 3.15.5 The ECO must remain employed until all rehabilitation measures as well as site clean-up are completed and the site is handed over to the applicant by the contractor for operation.
- 3.16 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the rehabilitation activities. The environmental audit report must be compiled by an independent environmental auditor and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the conditions of this authorisation as well as the requirements of the EMPr.
- 3.17 The Department retains the right to monitor and/ or inspect the project whilst the rehabilitation is being conducted.

Commissioning and operation of the activity

- 3.18 Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.
- 3.19 Equipment must remain within the defined rehabilitation area.
- 3.20 No activity, such as temporary housing, construction camps, temporary ablution facilities, storing of equipment, stockpiling of topsoil or any other activity, may take place below the 1:100 year flood line, or within a horizontal distance of 32m of the Steenkoolspruit.
- 3.21 The eroded areas must be filled in or leveled and areas left bare must be vegetated.
- 3.22 Where activities occur outside the open pit or already transformed mining areas, soil must be stripped ahead of the proposed rehabilitation.
- 3.23 The storage and handling of fuel, lubricants, paint, tar, bitumen binders and other chemicals must be in especially demarcated impervious and bunded areas.
- 3.24 Construction vehicles and equipment must be checked and maintained regularly to ensure that there is no environmental contamination as a result of oil, fuel or hydraulic fluid leakages.
- 3.25 Potential faunal species that might be found on areas such as beath dump must be relocated before rehabilitation take place
- 3.26 Alien species must be removed and indigenous species re-established in areas compacted during construction, decommissioning and closure phase.
- 3.27 Areas that may be prone to erosion or where signs of erosion are evident must be stabilised. Methods of stabilization must include brush-cut packing, mulch or chip cover, sand bags, straw stabilizing, sodding, hydro-seeding and physical stabilization methods such as gabions, reno-mattresses, armour flex or retaining walls.
- 3.28 The existing air quality monitoring programme must be expanded in order to accommodate new projects such as the rehabilitation of the beath dump, creation of the paddocks walls and subsequent deposition of fine material. The updated air quality monitoring programme must be informed by a suitably qualified specialist.
- 3.29 Proper water management practice must be implemented in line with the mine EMP.
- 3.30 Waste management practice must cater for solids and liquid, hazardous and non hazardous waste.
- 3.31 The paddock walls must be designed and constructed to align with an outside slope of 1:5 and inside slopes of 1:3 to ensure that they are stable.
- 3.32 The paddock platforms must be properly engineered and compacted to reduce percolation and seepage of contaminants from the fine material into underlying in-situ material and groundwater.
- 3.33 Pipelines and all associated equipment such as pumps and scouring valves must be pressure tested prior to commissioning in accordance to relevant standards



- 3.34 Any leaks or potential weakness in the pipeline must be immediately repaired.
- 3.35 Any incidents as a result of contamination of surface water due to in-pit water decant and spills from the pipeline must be reported immediately so that effective remediation and cleanup strategies and procedures can be implemented.
- 3.36 Construction personnel must be sensitized to the requirements of the South African Heritage Resources Act as there are sixteen sites consisting of 380 graves 11km north-west of the beach dump. Should any material of cultural or archaeological significance be encountered during construction, all activities must cease immediately and the South African Heritage Resources Agency (SAHRA) must be informed accordingly.
- 3.37 Any complaints received from the public during the construction and operational phases of the activity must be attended to as soon as possible and addressed to the satisfaction of all concerned.
- 3.38 The applicant is responsible for compliance with the provisions for "Duty of Care" and remediation of damage contained in Section 28 of the National Environmental Management Act

General

- 3.39 A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 3.40 Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 3.41 National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

ENVIRONMENTAL AUTHORISATION APPROVED BY:


 MR. S.S. MALULEKA
 CHIEF DIRECTOR: ENVIRONMENTAL SERVICES
 DATE: 23.05.2017



Annexure 1: Reasons for the Decision

1. Background

1.1 The applicant, Xstrata Coal Energy South Africa-Open Cast Mine (Atcom) South, applied for authorisation to carry out the following activity:

To undertake the following activity (hereafter referred to as "the activity"):

- o The rehabilitation of the 645 ha Atcom South Open Pit.
 - o The rehabilitation of the beath dump which covers 10 hectares.
- On Portions; 1-9, 11-14, 18,-,26, 28 and 29 of the farm Kromfontein 30 IS, Emalahleni Local Municipality, Mpumalanga Province at the co-ordinates 26° 06' 532" S and 29° 13' 836" E (Activity 1(k), 1(m)13, 25 of Government Notice R 386 of 21 April 2006 and 1(e), 1(j) of R387.

1.2 The applicant appointed the following Environmental Assessment Practitioner (EAP) to undertake an environmental impact assessment process:

Ms. Paulette Jacobs
HydroScience cc
P.O. Box 1322
Ruimsig
1732

Contact details

Tel: 082 650 5482
Fax: 086 692 8820
Email: paulette@hydroscience.co.za

2. Information considered in making the decision.

In reaching its decision, the Department took the following into consideration:

- a) The information contained in the Environmental Impact Report and the EMPr.
- b) The objective and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998); and
- c) The findings of the site visit undertaken by Chanty Mthimunye on 09th March 2012.

3. Key factors considered in making the decision.

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below:

- a) The project will reduce the possible excess water from the open pit due to rehabilitation and thus limiting the amount of contaminated water to be abstracted for the treatment to maintain the in-pit water balance.
- b) During the rehabilitation of the open pit, jobs will be created and thus reduce the unemployment rate in the area.
- c) Employment and work related wage benefits for construction workers and their associated communities will be uplifted.

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4. Findings

After consideration of the information and factors listed above, the Department made the following findings:

- a) The proposed development will take place within an area that has been disturbed by mining activities.
- b) According to the environmental impact report, the project is considered to be environmental and economically sustainable.
- c) All general waste generated on site during rehabilitation will be disposed off at a registered landfill site of Emalaheni Local Municipality.
- d) No significant detrimental environmental impacts are anticipated, should the mitigation measures stipulated in the environmental impact report and conditions of this environmental authorisation be implemented and adhered to.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated for to acceptable levels. Authorisation is accordingly granted.



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Schoeman Street, Pretoria,
Tel: (012) 336-7500, Fax: (012) 326-4472/ (012) 326-2715

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998) (THE ACT)

I, **Trevor Balzer**, in my capacity as Director-General (Acting) in the Department of Water Affairs and acting under authority of the powers delegated to me by the Minister of Water and Environmental Affairs, hereby authorise the following water uses in respect of this licence.

SIGNED: 

DATE: 22/11/2023

LICENCE NO: 04/B11E/ACFGIJ/2387
FILE NO: 27/2/2/B511/1/1

1. Licensee :

**Xstrata Coal South Africa:
Impunzi Complex Atcom East Section**

Postal Address:

Private Bag X 7265
Witbank
1035

2. Water uses

- 2.1 Section 21(a) of the Act: Taking of water from a water resource, subject to the conditions set out in Appendices I and II.
- 2.2 Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse, subject to the conditions set out in Appendices I and III.
- 2.3 Section 21 (f) of the Act: Discharging waste or water containing waste into a water resource through a pipe, canal, sewer or other conduit subject to the conditions as set out in Appendices I and IV.
- 2.4 Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and V.
- 2.5 Section 21(i) of the Act: Altering the bed, banks course or characteristics of a watercourse, subject to the conditions set out in Appendices I and III.

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2.6 Section 21(j) of the Act:

Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people, subject to the conditions set out in Appendices I and VI.

3. Properties in respect of which this licence is issued

Table 1: Properties where water use activities are taking place

PROPERTY
Section 21 (a)
Portion 11 of the farm Kromfontein 30 IS
Section 21 (c & i)
Portion 3 of the farm Klipplaat 14 IS and portion 1 of the farm Kromfontein 30 IS
Portion 1 and 5 of the farm Kromfontein 30 IS
Portion 1 of the farm Vandyksdrift 19 IS and portion 1 of the farm Steenkoolspruit 18 IS
Portion 1 of the farm Vandyksdrift 19 IS
Portion 1 of the farm Vandyksdrift 19 IS
Portion 3 of the farm Kromfontein 30 IS and portion 1 of the farm Steenkoolspruit 18 IS
Portion 3 of the farm Kromfontein 30 IS
Portion 6 of the farm Steenkoolspruit 18 IS
Section 21 (f)
Portion 4 of the farm Kromfontein 30 IS
Portion RE1 of the farm Kromfontein 30 IS
Section 21 (g)
Portion 3 of the farm Kromfontein 30 IS and Portion 6 of the farm Steenkoolspruit 18 IS
Portion 11 of the farm Kromfontein 30 IS
Portion 3 of the farm Kromfontein 30 IS
Portions RE 1, 2, 3, 4, 6, 7, 9, 11, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 28, 29 and 31 of the farm Kromfontein 30 IS; Portions RE 1, 2, 5, 6, 7, 8, 9, 10 and 11 of Steenkoolspruit 18 IS; Portions 1 and 6 of farm Vandyksdrift 19 IS and Portion 1, 3, 4, 5, 6, 13 and 14 of Klipplaat 14 IS
Section 21 (j)
Portion RE1 of the farm Steenkoolspruit 18 IS and portion 1, 6 and RE 6 of the farm Vandyksdrift 19 IS
Portion RE 1 of the farm Steenkoolspruit 18 IS
Portion 6 of the farm Vandyksdrift 19 IS
Portion RE1 of the farm Vandyksdrift 19 IS

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4. Registered owner(s) of the properties

4.1 Xstrata Coal South Africa

5. Licence and Review Period

5.1 This licence is valid for a period of sixteen (16) years from the date of issuance and it may be reviewed every four (4) years.

6. Definitions

“Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) shall bear the same meaning when used in this licence.”

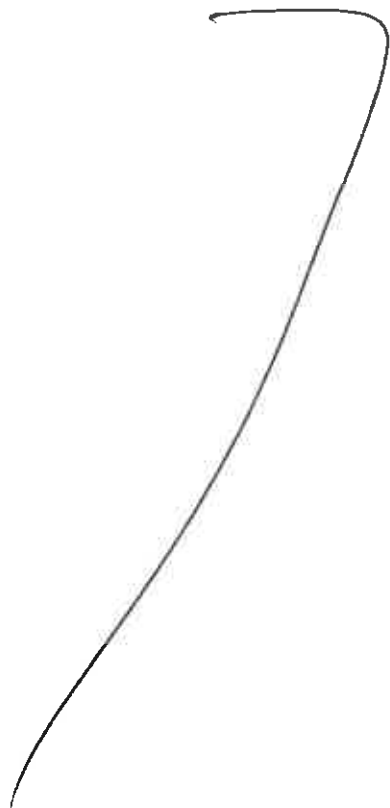
“IWWMP” means Integrated Waste and Water Management Plan

“The Regional Head” means the Regional Chief Director: Mpumalanga, Department of Water Affairs, Private Bag X11259, NELSPRUIT, 1200.

“Report” refers to the report entitled Integrated Water Use Licence Application (WULA) report for the iMpunzi complex Atcom East Section compiled by Jones & Wagener consulting civil engineers dated July 2011 as well as all other related documentations and communication (emails, letters, verbal, etc) related thereto.

7. Brief description of the activity

This licence authorises the activities relating to Section 21 (a), (c), (f), (g), (i) and (j) in terms of the National Water Act, 1998 (Act 36 of 1998) for the Xstrata Coal South Africa: iMpunzi Complex (ATCOM East Section) located at various properties as indicated above. The coal mining and associated mining activities are located in quaternary catchment B11E and B11B in Mpumalanga Region. The associated infrastructure is located upstream of the Steenkoolspruit/ Olifants River confluence.



APPENDIX I

GENERAL CONDITIONS FOR THE LICENCE

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee must immediately inform the Regional Head of any change of name, address, premises and/or legal status.
4. If the property(ies) in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Regional Head of the Department within sixty (60) days of the said change taking place.
5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory.
6. The Licensee shall be responsible for any water use charges or levies imposed by a Responsible Authority.
7. While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made; it shall be given effect to.
8. The licence shall not be construed as exempting the Licensee from compliance with the provisions any other applicable Act, Ordinance, Regulation or By-law.
9. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
10. The Licensee shall conduct an annual internal audit on compliance with the conditions of licence. A report on the audit shall be submitted to the Regional Head within one (1) month of the finalisation of the audit.
11. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted six (6) months of the date of this licence and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.
12. Any incident that causes or may cause water pollution shall be reported to the Regional Head or his/her designated representative within 24 hours.
13. Flow metering, recording and integrated devices must be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two (2) years. Calibrated certificates shall be available for inspection by the Regional Head or his/her representative upon request.

APPENDIX II

SECTION 21 (a) OF THE ACT: TAKING WATER FROM A WATER RESOURCE

1. The Licensee is authorised to abstract a maximum quantity in cubic metres per annum (m³/a) as indicated in Table 2 for use in the processing plant and mining associated activities:

Table 2: Summary of section 21 (a) water uses

Purpose/ description	Properties	Capacity (m ³)	Volume (m ³ /a)	Coordinates
Water from the Phoenix Return Water Dam to be used in the processing plant and mining associated activities	Portion 11 of the farm Kromfontein 30 IS	25 000	163 155	26° 06' 04.1" S 29° 12' 33.6" E

2. The quantity of water authorised to be taken in terms of this licence may not be exceeded without prior authorisation by the Minister.
3. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.
4. The above mentioned volume may be reduced when the licence is reviewed.
5. The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the efficient use of water containing waste, in an endeavour to conserve water at all times.
6. The Licensee shall be responsible for any water use charges or levies, which may be imposed from time to time by the Department or responsible authority in terms of the Department's Raw Water Pricing Strategy.
7. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:
 - 7.1 shortage of water
 - 7.2 inundations or flood
 - 7.3 siltation of the resource; and
 - 7.4 required reserve releases.
8. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders with respect to Water Conservation and Water Demand Management initiatives.

APPENDIX III

SECTION 21 (c) OF THE ACT: IMPEDING OR DIVERTING THE FLOW OF WATER IN A WATERCOURSE;

AND

SECTION 21 (i) OF THE ACT: ALTERING THE BED, BANKS, COURSE OR CHARACTERISTIC OF A WATERCOURSE

1. GENERAL

1.1 This licence authorises Xstrata Coal South Africa: iMpunzi Complex Atcom East for Section 21(c) and (i) water use activities as set out in Table 3 and in the water use licence application reports submitted to the Department or the Responsible Authority:

Table 3: Section 21 (c) and (i) water use activities

DESCRIPTION	COORDINATES	DIMENSIONS	PROPERTY
Wetland crossing by dewatering pipeline: (western section)	START 26° 05' 36.00" S 29° 12' 08.29" E MIDDLE 26° 05' 40.5" S, 29° 12' 12.84" E END 26° 05' 43.66" S 29° 12' 17.04" E	Length: 712 m	Portion 3 of the farm Klipplaat 14IS and portion 1 of the farm Kromfontein 30IS
Watercourse crossing of Gilfillan stream by dewatering pipeline	START 26° 05' 50.73" S 29° 12' 28.07" E MIDDLE 26° 05' 55.85" S, 29° 12' 42.05" E END 26° 05' 58.93" S 29° 12' 56.44" E	Length: 1 166 m	Portion 1 and 5 of the farm Kromfontein 30IS
Dewatering pipeline adjacent to Olifants River	START 26° 05' 26.10" S 29° 15' 27.04" E MIDDLE 26° 05' 30.08" S, 29° 15' 56.21" E END 26° 05' 35.53" S 29° 16' 25.48" E	Length: 2 218 m	Portion 1 of the farm Vandyksdrift 19IS and portion 1 of the farm Steenkoolspruit 18IS
Wetland crossing by dewatering pipeline: (eastern section no 1)	START 26° 06' 12.61 S, 29° 17' 39.93" E MIDDLE 26° 06' 13.72" S, 26° 17' 41.31" E, END 26° 06' 14.89" S, 29° 17' 42.81" E,	Length: 201 m	Portion 1 of the farm Vandyksdrift 19IS
Wetland crossing by dewatering pipeline: (eastern section no 2)	START 26° 05' 49.84 S, 29° 16' 59.90" E	Length: 1 390 m	Portion 1 of the farm Vandyksdrift 19IS

DESCRIPTION	COORDINATES	DIMENSIONS	PROPERTY
	MIDDLE 26° 06' 04.48" S, 26° 17' 13.36" E, END 26° 05' 05.56" S, 29° 17' 31.29" E,		
Steenkoolspruit crossing by dewatering pipeline	START 26° 5' 45.78" S, 29° 14' 07.06" E, MIDDLE 26° 05' 36.76" S, 29° 14' 21.41" E, END 26° 05' 31.52" S, 29° 14' 34.71" E	Length: 1 937 m	Portion 3 of the farm Kromfontein 30IS and portion 1 of the farm Steenkoolspruit 18IS
Cleanwater runoff diversion channel within the 1:100 year floodline of the Steenkoolspruit (Hard Park Sewage Treatment Plant-Southern Section)	MIDDLE 26° 05' 37.86" S, 29° 14' 15" E	Length: 100 m	Portion 3 of the farm Kromfontein 30IS
Cleanwater runoff diversion channel within the 1:100 year floodline of the Steenkoolspruit (North area clean water diversion)	START 26° 05' 36.00" S 29° 12' 08.29" E MIDDLE 26° 05' 40.5" S, 29° 12' 12.84" E END 26° 05' 43.66" S 29° 12' 17.04" E	Length: 100 m	Portion 6 of the farm Steenkoolspruit 18IS

- 1.2 The Licensee must carry out and complete all the activities listed under condition 1.1, Appendix III according to the following:
- 1.2.1 Reports submitted to the Department or the Responsible Authority, specifically:
- 1.2.1.1 Ecological and wetland assessment for dewatering pipeline route: ref No.: 1485
- 1.2.1.2 Reserve determination, dated Surface: 27 May 2011 and Ground: 13 May 2011;
- 1.2.2 Conditions of this licence; and any other written direction issued by the Responsible Authority in relation to this licence.
- 1.3 No activity must take place within the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised by this licence.
- 1.4 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.
- 1.5 A copy of the water use licence and reports set out under condition 1.2, Appendix III must be on site at all times.

1.6 A suitably qualified person(s), appointed by the Licensee, and approved in writing by the Regional Head, must be responsible for ensuring that the activities are undertaken in compliance with the specifications as set out in reports submitted to the Department or the Responsible Authority and the conditions of this licence.

2. FURTHER STUDIES AND INFORMATION REQUIREMENTS

2.1 For water use activities in Table 3:

- 2.1.1 Work method statements, site plan(s) and detailed design drawings for the construction of all infrastructure impeding and/or diverting flow of watercourse(s) as well as alterations to watercourse(s) on the property must be submitted to the Regional Head for a written approval before construction and implemented as directed. The foregoing must indicate the regulated activities, marking the limits of disturbance in relation to the impacted watercourse(s); morphology of the watercourse(s); site specific impacts; and environmental management, particularly erosion and sediment, controls and measures;
- 2.1.2 No fundamental alterations of the work method statements, site plan(s) and drawings are allowed, unless a modification is requested and granted by the Regional Head in writing; and
- 2.1.3 No site activities must occur beyond the proposed site location of the erosion and sedimentation controls and marked limits of disturbance.
- 2.2 If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a programme for hand over to the successor-in-title including a brief management/maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuance of this licence.
- 2.3 An Environmental Management Plan (EMP) and rehabilitation plan for the decommissioning of any of the water use activities listed in Table 3 must be submitted five (5) years before commencing with closure to the Regional Head for written approval.
- 2.4 For all the activities listed under condition 1.1, Table 3, "as-built" plan(s) and engineering drawing(s) prepared by a registered professional engineer, must be submitted to the Regional Head within six (6) months of completion of new activities within six (6) months of the date of issuance of this licence. These plan(s) and drawing(s) must indicate the watercourse(s) including wetland boundaries and layout and structure location(s) of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the property(ies).
- 2.5 A Storm Water Management Plan must be compiled and submitted to the Regional Head before construction may commence.
- 2.6 The stormwater management plan should be designed in a way that aims to ensure that post-development run-off does not exceed pre-development values in:
- 2.6.1 Peak discharge for any given storm,
 - 2.6.2 Total volume of run-off for any given storm,
 - 2.6.3 Frequency of run-off volumes,
 - 2.6.4 Pollutant and debris concentrations reaching watercourses,

- 2.6.5 Demonstrate minimal soil and vegetation clearance practices,
- 2.6.6 Demonstrate an effective re-vegetation campaign for bare areas,
- 2.6.7 Velocity of outgoing storm water shall not exceed the velocities of incoming water in order to reduce erosion impacts, and
- 2.6.8 Increase in run-off due to a higher water table resulting from tree clearing practices.

3. PROTECTIVE MEASURES

3.1 Stormwater Management

- 3.1.1 Stormwater management practices must be constructed, operated and maintained in a sustainable manner throughout the project and for the water use activities set out in condition 1.1, Appendix III and must include but are not limited to the following:
 - 3.1.1.1 Increased runoff due to vegetation clearance (**promoting limiting vegetation clearance at all times**) and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the watercourse(s);
 - 3.1.1.2 Stormwater must be diverted from construction works, access roads, linear infrastructure, shaft areas and borrow pits and must be managed in such a manner as to disperse runoff and to prevent the concentration of stormwater flow;
 - 3.1.1.3 The velocity of stormwater discharges must be attenuated and the banks of the watercourses protected;
 - 3.1.1.4 Stormwater leaving the Licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises;
 - 3.1.1.5 Stormwater must be directed to stormwater control dams. The outfall locations equipped with inlet silt, litter, oil traps and energy dissipating outlets into the existing watercourse's extent, whilst preventing head cut erosion;
 - 3.1.1.6 Drainage next to the activities listed in Table 6 must be diverted away from the water course(s) to ensure that any contaminated runoff does not flow directly into the watercourse(s) as a stormwater discharge; and
 - 3.1.1.7 Sheet runoff from paved/hardened surfaces and access roads need to be curtailed.

3.2 Structures, Construction Area and Materials

- 3.2.1 Necessary erosion prevention measures must be employed to ensure the sustainability of all structures.
- 3.2.2 The height, width and length of structures must be limited to the minimum dimension necessary to accomplish the intended function.
- 3.2.3 Structures must not be damaged by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 3.2.4 Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.



- 3.2.5 Structures must be inspected regularly for accumulation of debris, blockage, erosion of abutments and overflow areas - debris must be removed and damages must be repaired and reinforced immediately.
- 3.2.6 The construction camp, plant and material stockpiles must be located outside the extent of the watercourse(s) and must be recovered and removed one (1) month after construction has been completed.
- 3.2.7 During construction, erosion berms should be installed for the entire life-of-operation to prevent gully formation, according to the slope as set out in Table 4. The designs and placement of the berms must be done by a registered, professional, independent Civil Engineer and approved in writing by the Regional Head before construction commences.

Table 4: Erosion protection berm placement.

Track slope	Berm placement
<2%	Every 50 m
2% - 10%	Every 25 m
10% - 15%	Every 20 m
>15%	Every 10 m

- 3.2.8 All areas affected by construction should be rehabilitated upon completion of the construction phase of the development. Areas should be reseeded with indigenous vegetation species as required, and the use of seed nets is recommended to prevent erosion.
- 3.2.9 During the construction phase no vehicles shall be allowed to indiscriminately drive through any wetland areas.
- 3.2.10 No construction is allowed within the 1:100 year floodline and/or delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised in this licence.
- 3.2.11 Any conveyor belt shall be fully (100%) enclosed within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest, or wetland to prevent spillages into the watercourse. Authorisation for this activity must be applied for.
- 3.2.12 Any access roads or crossings should be:
 - 3.2.12.1 Non-erosive, structurally stable and should not induce any flooding or safety hazard;
 - 3.2.12.2 Any damage is repaired immediately to prevent further damage;
 - 3.2.12.3 Non-polluting with respect to silt and litter that can be deposited into a watercourse;
 - 3.2.12.4 Watercourse crossings to facilitate the movement of aquatic and non-aquatic organisms and fauna;
 - 3.2.12.5 Crossing surfaces must be tarred or concreted along the extent of the watercourse and extent at least 100m beyond the extent of the watercourse to minimise impacts on the characteristics of the watercourse;
 - 3.2.12.6 Where any road is within the 100m buffer zone of the watercourse, this portion of the road shall be concreted or tarred; and
 - 3.2.12.7 Not consist of any coal, carbonaceous and/or other polluting material.

3.3 Water Quality

- 3.3.1 The Licensee shall sample the water quality weekly (during construction) and monthly (operation) for the mentioned variables as set out in Table 5 at least at the monitoring points

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both upstream and downstream of the activities in Table 6 and report to the Responsible Authority within thirty (30) days after the results of each sampling event is received:

Table 5: Water quality parameters relevant for sampling.

Variable	Limit
Flow (l/s)	Not applicable
Temperature (°C)	<10% variation
pH	6.5 – 8.4
Electrical conductivity (EC) (mS/m)	<40
Suspended solids (SS) (mg/l)	<25
Dissolved oxygen (mg/l)	≥6.0
Chemical Oxygen Demand (COD) (mg/l)	<10
Turbidity (NTU)	<3.0
Secchi disk depth (m)	≥0.15 meter
Alkalinity (mg CaCO ₃ /l)	<120
Calcium (Ca) (mg/l)	≤25
Magnesium (Mg) (mg/l)	≤20
Sodium (Na) (mg/l)	≤20
Potassium (K) (mg/l)	≤10
Sulphate (SO ₄) (mg/l)	≤60
Fluoride (F) (mg/l)	≤0.5
Iron (Fe) (mg/l)	≤1.0
Manganese (Mn)	≤0.18
Aluminum (Al) (mg/l)	≤0.02
Chromium VI (Cr ⁶⁺)	≤0.05
Boron (B) (mg/l)	<0.5
Arsenic (As) (mg/l)	<0.01
Mercury (Hg) (mg/l)	<0.001
Silica (Si) (mg/l)	≤5.0
Ammonia (NH ₃) as N	≤0.007
PO ₄ (mg/l)	≤0.05
NO ₃ /NO ₂ (as N) (mg/l)	≤6.0
BTEX, TPH (mg/l) (including naphthalene)	<1.0
Faecal Coliforms (counts/100ml)	<130

The variables may be amended on discretion of the Responsible Authority. Only an accredited (SANS 17025) laboratory to be used for analysis.

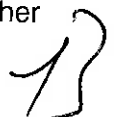
- 3.3.2 Activities that lead to elevated levels of turbidity of any watercourse(s) must be prevented, reduced, or otherwise remediated. Activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible. If this is not possible and if management measures have not been provided for in the reports submitted to the Regional Head, the Licensee must submit such to the Regional Head for a written approval before these activities commence. Natural in stream hydrology is to be used to determine which months constitute the low flow months.
- 3.3.3 The Licensee must ensure that the quality of the water to downstream water users does not decrease because of the of the water use activities listed under condition 1.1, Appendix III.
- 3.3.4 A qualified person must be appointed to assess the quality of water both upstream and downstream of the activities prior to commencement of construction.
- 3.3.5 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediated through proper operation, maintenance and effective protective measures.

- 3.3.6 Vehicles and other machinery must be serviced well above the 1:100 year flood line or delineated riparian habitat, whichever is the greatest. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.
- 3.3.7 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance and all storage facilities must be equipped with large, clearly readable material safety data sheets (MSDS).
- 3.3.8 Carbon containing material and other material that has a risk of pollution within the 1:100 year floodline and riparian habitat shall be fully contained on a lined surface (including concrete) and equipped with functional and effective pollution control systems to ensure risk prevention to the watercourse(s).
- 3.3.9 All reagent storage tanks and reaction units must be supplied with a bunded area built to cater for at least 110% of the capacity of the facility and provided with sumps and pumps return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.
- 3.3.10 The Licensee shall actively participate in any Catchment Management Agency's related activity.
- 3.3.11 The Licensee shall sample and analyse twice a year (dry - July and wet – January season) all surface and groundwater monitoring points for a full spectrum of heavy metals and submit this information with conditions 3.3.1, Appendix.
- 3.3.12 An annual assessment of dam capacities and the risk to decant/pollution by storing water in the dams must be annually assessed by a professional, independent, qualified civil engineer, Geohydrologist and Ecologist. The reporting is part of condition 3.3.1, Appendix III of this licence.
- 3.3.13 Where dust suppression is practiced the following shall apply: Dust suppression activities shall not contaminate and/or pollute any watercourse and the Licensee must conduct six (6) monthly soil monitoring events to determine the impact of dust suppression on the receiving environment. Soil samples shall at least be analysed for pH, Electrical Conductivity (mS/m), Calcium (Ca), Magnesium (Mg), Potassium (K), Sodium (Na), Chloride (Cl), Sulphate (SO₄), Aluminium (Al), Iron (Fe), Manganese (Mn) and Nitrate (NO₃ as N). The soil monitoring program and reporting must be conducted by an independent, professional, qualified soil scientist and hydrologist. Soil samples to be compared with reference sites. The reporting is part of condition 3.3.1, Appendix III.
- 3.3.14 The Geohydrological model based on the latest disposal and stockpiling plans has to be reviewed by the Licensee on an annual basis and the subsequent management actions resulting from the model shall be implemented. The study must incorporate the presence of geological pathways that might accelerate the migration of pollution plumes. The Regional Head shall be formally consulted regarding the outcome of the modelling exercise.
- 3.3.15 The Licensee shall conduct every two (2) years a geochemical update about its stockpiling and depositing activities and the impact of these on all watercourses in the vicinity of all authorised activities related to the impacted catchments of this licence and related licence(s). The geochemical update must be submitted to the Regional Head for written approval within one (1) month of the completion of the model.

3.4 Flow



- 3.4.1 The Licensee must determine flood lines (1:50 and 1:100 year) prior to construction to ensure risks are adequately managed. Flood lines must be clearly indicated on the site plan(s) and drawings along with all wetland boundaries.
- 3.4.2 Activities must be conducted in a manner that does not negatively affect catchment yield, hydrology and hydraulics. The Licensee must ensure that the overall magnitude and frequency of flow in the watercourse(s) does not decrease, other than for natural evaporative losses and authorised attenuation volumes.
- 3.4.3 For the activities in Table 3 the Licensee must ensure that hydrological and Geohydrological flows are at all times maintained where the flows are connected to the respective wetlands. The monitoring and reporting of these flows are part of condition 3.3.1, Appendix.
- 3.4.4 The Licensee shall submit to the Regional Head, in consultation with the Deputy Director: Environment & Recreation, a formal map with a legend that exactly resembles all activities within one (1) month from the issuance of this licence for a written approval.
- 3.4.5 Appropriate design and mitigation measures must be developed to minimise impacts on the natural flow regime of the watercourse i.e. through placement of structures/supports and to minimise turbulent flow in the watercourse.
- 3.4.6 Structures must be designed in a way to prevent the damming of stream/river water and not impact on the flow of the water, during the construction and operational phases of all developments.
- 3.4.7 The development may not impede natural drainage lines.
- 3.4.8 The diversion structures may not restrict river flows by reducing the overall river width or obstructing river flow.
- 3.4.9 Bank filling must restore the channel shape and bed level to pre-construction condition.
- 3.4.10 Where flow to wetlands are impacted, any infrastructure constructed in wetland areas (refer to the reports mentioned in condition 1.2 and the buffer area as indicated in condition 1.3, of Appendix III) must incorporate a Geohydrological barrier between the impacted wetland(s) and the wetland(s) in the buffer area as well those with high Recommended Ecological Class (REC) ranging from A to C must be maintained.
- 3.4.11 The activities in Table 3 shall have all the appropriate pollution prevention mechanisms to avoid at all times pollution and water quality not meeting the requirements of Table 4 entering the watercourses bordering the activities and downstream of the activities. Compliance to Section 19 of the Act shall be met at all times as referenced in the company's policy of Zero Liquid Effluent Discharge (ZLED).
- 3.4.12 A series of cut-off trenches/sub-surface drains and return water dams should be constructed around the co-disposal facility to ensure that all contaminated water seeping out of the facility as well as run-off from the side-slopes will be intercepted and captured in the return water dams.
- 3.5 Riparian and In-stream Habitat (Vegetation and Morphology)**
- 3.5.1 Activities (including spill clean-up) must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.



- 3.5.2 Operation and storage of equipment must not take place within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest unless authorised in this licence.
- 3.5.3 Activities must not occur in sensitive riffle habitats.
- 3.5.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.
- 3.5.5 Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be sustainably eradicated or controlled.
- 3.5.6 Existing vegetation composition must be maintained or improved by maintaining the natural variability in flow fluctuations. Rehabilitated areas shall have vegetation basal cover of at least 15% at all times.
- 3.5.7 Recruitment and maintaining of a range of size classes of dominant riparian species in perennial channels must be stimulated.
- 3.5.8 Encroachment of additional exotic species and terrestrial species in riparian zones must be discouraged.
- 3.5.9 Accumulation of woody debris on terraces by periodic flooding must be discouraged.
- 3.5.10 Existing flood terraces and deposition of sediments on these terraces to ensure optimum growth, spread and recruitment of these species must be maintained.
- 3.5.11 Necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent in-stream sedimentation.
- 3.5.12 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 3.5.13 Slope/bank stabilisation measures must be implemented with a 1:3 ratio or flatter and vegetated with indigenous vegetation immediately after the shaping.
- 3.5.14 Stockpiling of removed soil and sand must be stored outside of the 1:100 flood line or delineated riparian habitat, whichever is the greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.
- 3.5.15 The indiscriminate use of machinery within the in-stream and riparian habitat will lead to compaction of soils and vegetation and must therefore be strictly controlled.
- 3.5.16 The overall macro-channel structures and mosaic of cobbles and gravels must be maintained by ensuring a balance (equilibrium) between sediment deposition and sediment conveyance maintained. A natural flooding and sedimentation regime must thus be ensured as far as reasonably possible.
- 3.5.17 As much indigenous vegetation growth as possible should be promoted within the proposed development area in order to protect soil and to reduce the percentage of the surface area which is paved/hardened.
- 3.5.18 Run-off from paved/hardened surfaces should be slowed down by the strategic placement of berms.
- 3.5.19 Any medicinal, sensitive and protected plants that are impacted upon must be assessed by the Responsible Authority and a registered, professional specialist and relocated, if

necessary, to a suitable site. This activity must take place within thirty (30) days after the issuance of this licence and proof must be submitted to the Regional Head for a written approval.

- 3.5.20 The direction and alignment of pipelines must be perpendicular to the direction of the slope or flow across a wetland(s). Where this is not feasible, appropriate measures to reduce the risk of preferential flow path development and associated erosion must be put in place.
 - 3.5.21 Lay pipes and cables must be laid across the watercourse on the downstream side of channel bedrock outcrops.
 - 3.5.22 Trench must be open for minimal length of time.
 - 3.5.23 Adequate bank stabilisation measures must be implemented. Only riparian vegetation in the immediate path of the pipeline shall be removed.
 - 3.5.24 Adequate measures must be implemented to prevent in-stream siltation during the construction phase.
 - 3.5.25 Unless authorised by this licence, access roads must not encroach into the extent of the watercourse(s).
 - 3.5.26 Trench breakers to be installed along the pipeline trench. A material with low hydrological conductivity in the form of trench breakers shall be packed around the pipe and shall be installed at regular intervals to prevent the pipeline behaving as a conduit and to intercept any concentrated flow down the pipeline route. Spacing between trench breakers shall vary depending on the slope of the landscape – the steeper the slope the smaller the distance between trench breakers. Spacing should be such that flows backing up behind one trench breaker extend back to the base of the previous trench breaker. This method also applies to construction, like the dirty water dams and pump stations, at the base of the dump.
- 3.6 Biota**
- 3.6.1 The Licensee must take all reasonable steps to allow movement of aquatic species, including migratory species.
 - 3.6.2 All reasonable steps must be taken not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
 - 3.6.3 The current level of diversity of biotopes and communities of animals, plants and microorganisms must be maintained.
 - 3.6.4 The outcome of condition 3.3.15 must be assessed together with condition 5.2, Appendix III.

4. REHABILITATION AND MANAGEMENT

- 4.1 The Licensee must embark on a systematic long-term rehabilitation programme to restore the watercourse(s) to environmentally acceptable and sustainable conditions after completion of the activities, which must include, but not be limited to the rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem.



- 4.2 All disturbed areas must be re-vegetated with an indigenous seed mix in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.
- 4.3 An active campaign for controlling invasive species must be implemented within disturbed zones and its bordering areas (seed depots) to ensure that it does not become a conduit for the propagation and spread of invasive exotic plants.
- 4.4 Rehabilitation must be concurrent with construction.
- 4.5 Topsoil must be stripped and redistributed. A height restriction on stockpiles of not more than 2.0m must be followed in order to preserve the soil's microbiological and nutrient characteristics. Topsoil must be placed immediately after stripping, if possible, but not stockpiled for longer than three (3) months.
- 4.6 Compacted and disturbed areas must be shaped to natural forms and to follow the original contour. In general cut and fill slopes and other disturbed areas must not exceed 1:3 (v:h) ratio, it must be protected, vegetated, ripped and scarified parallel with the contour.
- 4.7 The Regional Head must sign a release form indicating that rehabilitation was done satisfactory according to specifications as per this license.
- 4.8 A photographic record must be kept as follows and submitted with reports as set out in section 5:
 - 4.8.1 Dated photographs of all the sites to be impacted before construction commences;
 - 4.8.2 Dated photographs of all the sites during construction on a monthly basis; and
 - 4.8.3 Dated photographs of all the sites after completion of construction, seasonally.
- 4.9 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.
- 4.10 A comprehensive and appropriate rehabilitation and management programme to restore the watercourse(s) to environmentally acceptable and sustainable conditions after construction must be developed and submitted to the Regional Head for written approval within one (1) month from the date of issuance of this licence.
- 4.11 The original contours must be established over any activities within the extent of a watercourse and/or the regulated area of a wetland. After the backfill has subsided, the contour must follow the surrounding contours to stop irregular flows or blockage of biotic movement.
- 4.12 A Wetland Management and Rehabilitation Plan must be compiled by a wetland specialist when wetlands are affected and submitted to the Regional Head for written approval.
- 4.13 All wetlands (pan, hillslope seep, contact seep and valley bottom wetland) around the activity(ies) in Table 2 must be visited by a wetland specialist prior to construction to determine baseline conditions. This should be repeated during and after rehabilitation measures have been implemented to assess the success of rehabilitation and erosion control measures.

5. MONITORING AND REPORTING

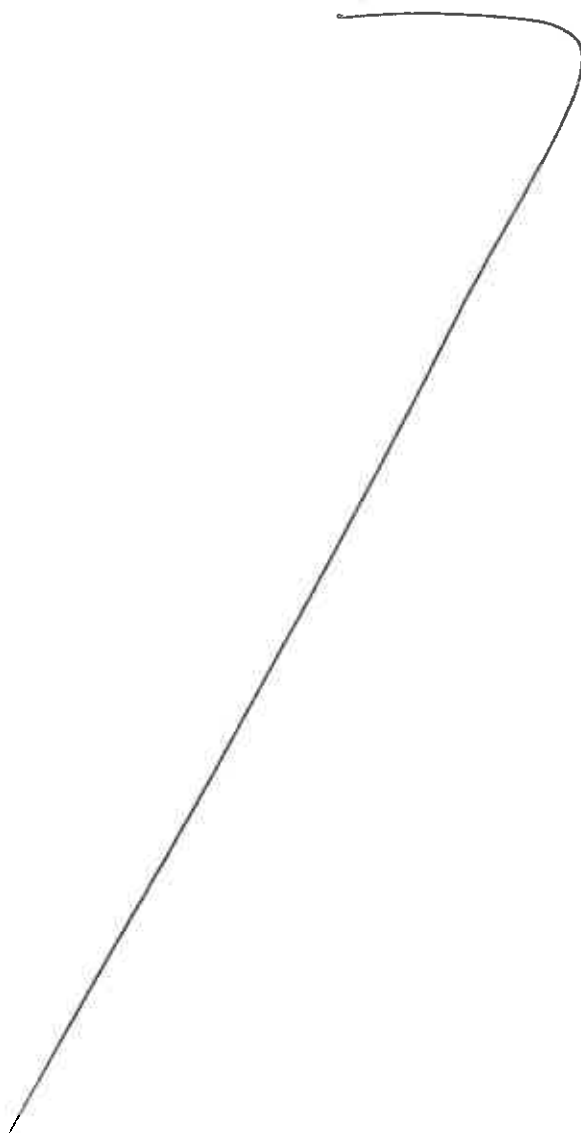
- 5.1 The Responsible Authority must be notified in writing one week prior to commencement of the licensed activity and again upon completion of the activity.
 - 5.2 Quarterly monitoring reports must be submitted to the Responsible Authority until otherwise agreed in writing with the Regional Head.
 - 5.3 A qualified, independent, registered, professional and responsible scientist must be retained by the Licensee who must give effect to the various licence conditions and to ensure compliance thereof pertaining to all activities impeding and/or diverting flow of watercourses as well as alterations to watercourses on the property(ies) as set out in condition 1.1, Appendix III.
 - 5.4 The Licensee must conduct on an annual basis an internal audit on compliance with the conditions this licence. A report on the audit must be submitted to the Responsible Authority within one month of the finalization of the audit. A qualified independent auditor must undertake this audit.
 - 5.5 The audit reports must include but are not limited to:
 - 5.5.1 Reporting in respect of the monitoring programme referred to in condition 5.2, Appendix III and all other reporting and compliance conditions outlined in this licence;
 - 5.5.2 A record of implementation of all mitigation measures including a record of corrective actions; and
 - 5.5.3 Compensation measures for damage where mitigation measures have failed to adequately protect the in-stream and riparian habitat or any other characteristic of the watercourses.
 - 5.6 The Licensee must apply in writing to the Regional Head for alternative reporting arrangements for which written approval must be provided.
 - 5.7 An Environmental Management/Monitoring Committee (EMC) must be established consisting of, but not limited to, representatives of the licensee, the Responsible Person(s) for ensuring compliance with this licence, the Department of Water Affairs, the relevant Department of Environmental Affairs, the Department of Energy, and other stakeholders (identified through the public consultation processes), including impacted water users.
- 6. OTHER WATER USERS**
- 6.1 The Licensee must attempt to prevent adverse affect on other water users. All complaints must be logged (audit purposes) and investigated by a suitable qualified, independent person and if investigations prove that the Licensee has impaired the rights of other water users, the Licensee must initiate suitable compensative measures.
- 7. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS**
- 7.1 Pollution incidents shall be dealt with in accordance with the Act.
 - 7.2 If surface and/or groundwater pollution has occurred or may possibly occur, the Licensee must conduct, and/or appoint specialists to conduct the necessary investigations and implement additional monitoring, pollution prevention and remediation measures to the satisfaction of the Responsible Authority.
 - 7.3 The Licensee shall keep all records relating to the compliance or non-compliance with the conditions of this licence in good order. Such records shall be made available to the

Responsible Authority within fourteen (14) days of receipt of a written request by the Department for such records.

- 7.4 The Licensee shall keep an incident report and complaints register, which must be made available to any external auditors and the Department.

8. BUDGETARY PROVISIONS

- 8.1 The Licensee must ensure that there is a budget sufficient to complete and maintain the water use and for successful implementation of the rehabilitation programme as set out in this licence.
- 8.2 The Department may at any stage of the process request proof of budgetary provisions for rehabilitation and closure of project.
- 8.3 The Licensee shall annually update and submit to the Regional Head before the 31st of March annually.



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APPENDIX IV

SECTION 21 (f) OF THE ACT: DISCHARGING WASTE OR WATER CONTAINING WASTE INTO A WATER RESOURCE THROUGH A PIPE, CANAL, SEWER OR OTHER CONDUIT

1. QUANTITY OF WATER CONTAINING WASTE

1.1 This licence authorises the discharge of a maximum volume of treated waste or water containing waste from ATCOM wastewater treatment works as set out in Table 6:

Table 6: Summary of 21(f) water use activities

Activity/Description	Property(ies)	Quantity (m ³ /a)	Coordinates
Discharge of treated sewage effluent from ATCOM offices and workshop STW into Steenkoolspruit.	Portion 4 of the farm Kromfontein 30 IS	25 500	26° 06' 14.14" S 29° 14' 06.71" E
Discharge of treated sewage effluent from ATCOM central park STW into Steenkoolspruit.	(RE) Portion 1 of the farm Kromfontein 30 IS	25 500	26° 05' 37.62" S 29° 14' 21.34" E

1.2 The quantity of treated wastewater authorised to be discharged in terms of this licence must not be exceeded without authorisation by the Minister or Delegated Authority.

1.3 The Licensee must put in place all appropriate measures to ensure that there is no erosion occurring as a result of conveyance of treated wastewater from the Sewage Treatment Works (STW) and the discharge of the wastewater in terms of condition 1.1 above. The Licensee must ensure that the discharge in terms of condition 1.1, Appendix IV is adequately dispersed and is always at sub-critical flow conditions.

2. QUALITY OF WATER CONTAINING WASTE

2.1 The quality of the wastewater discharged into the Steenkoolspruit must comply with the criteria as set out in Table 7, ninety five percent (95%) of the time (i.e. 95 Percentile Compliance Level) as provided for in the General and Special standards:

Table 7: Limits for wastewater to be discharged into Steenkoolspruit

VARIABLE	LIMIT
pH	5.5 – 9.5
Electrical Conductivity (mS/m)	70 (150max)
Nitrate/Nitrite as Nitrogen (mg/l)	4
Ammonia (ionised and un-ionised) as Nitrogen (mg/l)	1.5
Chemical Oxygen Demand (mg/l)	75
Faecal Coliforms (per 100ml)	100

Ortho-Phosphate as phosphorous (mg/l)	1 (median) 2.5 (maximum)
Suspended Solids (mg/l)	25
Chlorine as Free Chlorine (mg/l)	0.25
Fluoride (mg/l)	1.0
Soap, oil, grease (mg/l)	2.5

3. WASTEWATER MONITORING

3.1 Quantity of wastewater

- 3.1.1 The quantity of wastewater entering the sewage treatment works must be metered and recorded daily.
- 3.1.2 The quantity of wastewater discharged into the Steenkoolspruit must be metered and recorded daily.
- 3.1.3 Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two (2) years. Calibration certificates shall be available for inspection by the Regional Head or his/her representative upon request.

3.2 Quality of wastewater

3.2.1 The quality of the wastewater shall be monitored by taking grab samples every week at the monitoring points described in condition 4.2 below. Each sample shall be analysed according to the following water quality variables and/or any other variable as may be required from time to time by the Regional Head:

pH	
Electrical Conductivity (EC)	in mS/m
Chemical Oxygen Demand (COD)	in mg/l
Ammonia (as N)	in mg/l
Ortho-phosphate (as P)	in mg/l
Nitrate (as N)	in mg/l
Suspended solids	in mg/l
Faecal Coliforms	in CFU/100ml
Chloride (Cl)	in mg/l
Fluoride (F)	in mg/l
Soap, oil and grease	in mg/l

3.2.2 The date, time, weather conditions and name of monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.

4. MONITORING POINTS

4.1 Monitoring for quality and flow shall only be carried out at the monitoring points listed below:

4.1.1 Monitoring points for the flow:

- 4.1.1.1 at the inlet point of the plant; and
- 4.1.1.2 at the outlet point of the plant.

4.1.2 Monitoring points for quality:

- 4.1.2.1 at the inlet point where wastewater enters the plant; and
- 4.1.2.2 at the outlet point of the plant.

- 4.2 The monitoring points shall not be changed without prior notification to and written approval by the Regional Head.
- 4.3 The monitoring programme (including sampling network, sampling techniques) must be in accordance with all applicable procedures obtainable from the SABS.

5. GROUNDWATER QUALITY MONITORING

- 5.1 The Licensee shall develop, implement and maintain a groundwater monitoring programme to be incorporated into a Water Quality Monitoring Report for the sewage treatment works.
- 5.2 The programme must encompass a groundwater sampling protocol and monitoring specifications for groundwater levels, direction (gradient) and quality.
- 5.3 The programme shall entail the list of groundwater-monitoring boreholes in and around the plant's site. This list should include the following:
 - 5.3.1 The borehole reference;
 - 5.3.2 Description of the area where boreholes are situated (location);
 - 5.3.3 The geographical co-ordinates of boreholes;
 - 5.3.4 Monitoring frequencies; and
 - 5.3.5 The variables to be monitored.
- 5.4 Monitoring boreholes shall be clearly marked and numbered, and must be equipped with lockable caps. The Department reserves the right to sample groundwater from the monitoring boreholes at any time for analyses.
- 5.5 The following water quality variables shall be monitored:

pH	
EC	in mS/m
Chemical Oxygen Demand (COD)	in mg/l
Ammonia (as N)	in mg/l
Ortho-phosphate (as P)	in mg/l
Nitrate (as N)	in mg/l
Suspended solids	in mg/l
Faecal Coliforms (CFU/100ml)	in CFU/100ml
Chloride (Cl)	in mg/l
Fluoride (F)	in mg/l
- 5.6 The monitoring frequencies as indicated in the approved programme shall not be changed prior to notification of and written approval by the Regional Head.
- 5.7 The Licensee shall use acknowledged methods for borehole water sampling and the date, time, sampler, borehole number, date and time of sample delivery and sample analysis at the laboratory must be indicated for each sample.
- 5.8 The Licensee shall make provision for any additional monitoring requirements that might be required from time to time by the Regional Head.

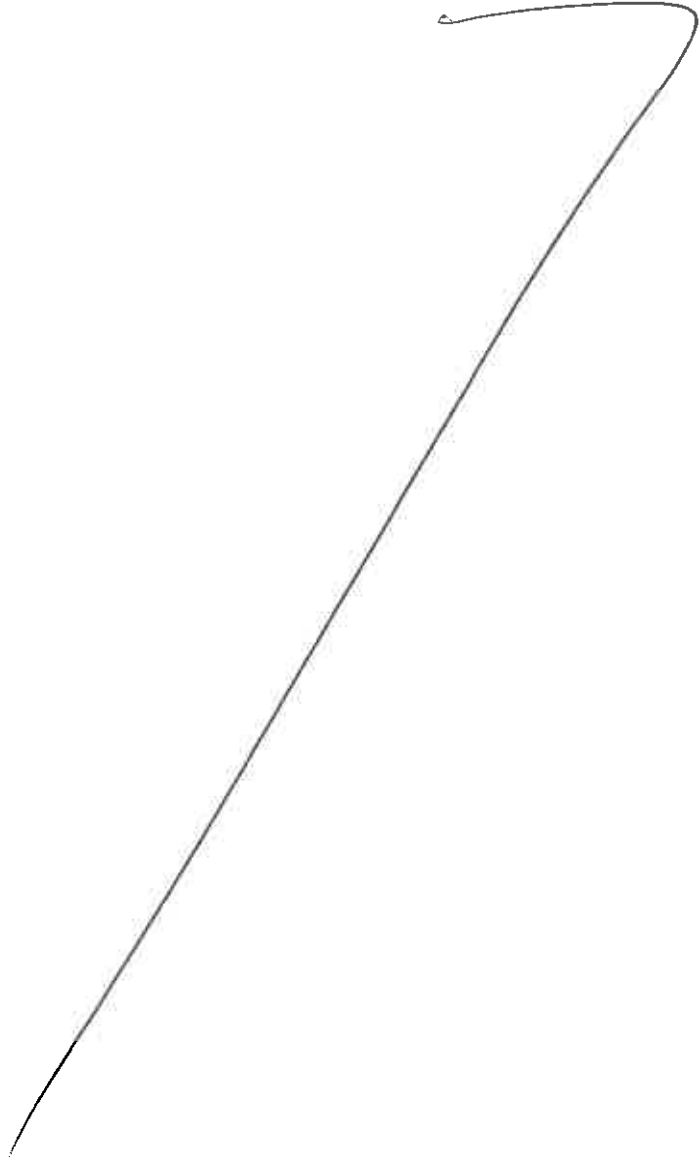
6. METHODS OF ANALYSIS



- 6.1 Analyses of the samples shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards, in terms of the Standards Act 2008, (Act 8 of 2008).
- 6.2 The methods of analysis shall not be changed without prior notification to and written approval by the Minister or delegated nominee.

7. REPORTING

- 7.1 The information required as per condition 3, Appendix IV shall be submitted monthly to the Regional Head, under reference 27/2/2/B511/1/1.
- 7.2 All reports with statistical data analyses shall specifically state the level of adherence to conditions of this licence, and must include an interpretation of all available monitoring data and other records regarding the operation of the sewage treatment works and all its impacts on water resources.
- 7.3 All reports shall contain recommendations for rectification of non-compliance or prevention of potential non-compliance and must specify target dates for the implementation of the recommendations by the Licensee.



APPENDIX V

SECTION 21 (g) OF THE ACT: DISPOSING OF WASTE IN A MANNER WHICH MAY DETRIMENTALLY IMPACT ON A WATER RESOURCE

1. CONSTRUCTION AND OPERATION

1.1 The Licensee shall carry out and complete all the activities, including the construction and operation of the facilities as set out in Table 8, according to the report and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Regional Head:

Table 8: Geographical positions of all the waste water management facilities

NAME OF THE ACTIVITY	COORDINATES	CAPACITY OF THE FACILITY (m ³)	VOLUME PER ANNUM (m ³ /a)	PROPERTY
ATCOM ROM stockpile pollution control dam	26° 05' 30.24" S, 29° 14' 09.25" E	50 000	3 148 855	Portion 3 of the farm Kromfontein 30IS
Phoenix dump return water dam	26° 05' 59.91" S 29° 12' 32.82" E	25 000	163 155	Portions RE 1, 2, 3, 4, 6, 7, 9, 11, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 28, 29 and 31 of the farm Kromfontein 30IS; Portions RE 1, 2, 5, 6, 7, 8, 9, 10 and 11 of Steenkoolspruit 18IS; Portions 1 and 6 of farm Vandyksdrift 19IS and Portion 1, 3, 4, 5, 6, 13 and 14 of Klipplaat 14IS
New ATCOM Run-of-Mine stockpile	26° 05' 37.60" S 29° 13' 43.97" E		9 800 000 tons	Portion 3 of the farm Kromfontein 30 IS and Portion 6 of the farm Steenkoolspruit 18IS
Dust suppression – for eastern, northern and southern operations (including mining operational areas, haul roads, loading/tipping areas and discard dumps)	N/A		931 480	Portion 11 of the farm Kromfontein 30IS

- 1.2 The construction of the dams listed in Table 8 must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.
- 1.3 The Licensee shall in writing within thirty (30) days after the completion of the activities and in accordance with the relevant provisions of this licence, under reference 27/2/2/B511/1/1, inform the Regional Head thereof. This shall be accompanied by a signature of approval from the designer referred in condition 1.2, Appendix V that the construction was done according to the design plans referred to in the Report.
- 1.4 The Licensee must ensure that the disposal of the waste water and the operation and maintenance of the system are done according to the provisions in the Report.
- 1.5 The Licensee shall as well submit a set of as-built drawings to the Regional Head after the completion of the waste facilities listed in Table 8.
- 1.6 The waste facilities listed in Table 8 shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.
- 1.7 The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.

2. QUALITY OF WATER CONTAINING WASTE TO BE DISPOSED

- 2.1 The quality of water containing waste to be disposed of into the dams shall be of qualities as set out in Table 9:

Table 9: Typical quality of water containing waste to be disposed into wastewater facilities.

Parameter	Typical Water Quality to be disposed
pH	5.5-3.5
Total Alkalinity	<50-0
Aluminium (mg/l)	>10
Iron (mg/l)	>10
Sodium (mg/l)	50-150
Potassium (mg/l)	30-50
Sulphate (mg/l)	1 500-3 000
Total dissolved solids (mg/l)	2 500-6 700
Calcium (mg/l)	600-900
Magnesium (mg/l)	100-300
Manganese (mg/l)	>10

3. MONITORING

- 3.1 The Licensee shall monitor on monthly basis the water resources at surface water monitoring points and groundwater monitoring points to determine the impact of the facility and other mining activities on the water quality by taking samples at the monitoring points as set out in Tables (10 and 11):

Table 10: Surface water monitoring points for Atcom East

Monitoring Site	Description	X co-ordinate	Y co-ordinate
ATSD-1	Saaiwaterspruit overflow of Phoenix Dam	19666	-2884030

ATSD-2	ATC pollution control dam overflow	17317	-2887225
ATSD-3	No description	17523	-2884910
ATSD-4	ATC Venture pollution control dam overflow	18612	-2886523
ATSI-1	ATC-Suez canal	17300	-2887662
ATSI-2	Dump 2 Toedrain	17257.46	-2887545
ATSI-3	Dump 1 Toedrain	16408.53	-2887725.48
ATSR-1	Saaiwaterspruit-inflow to Phoenix dam	17835.00	-2884823.00
ATSR-2	Gillfillian-downstream at stream guage	19718.94	-2884642.15
ATSR-3	ATC-outflow of wetlands	16952	-2887176
ATSR-4	ATC upstream of dumps	16843	-2888170
ATSR-5	ATC outflow of property	16950	-2887088
ATSR-6	SWCM Stream outflow off property	15096	-2888058
ATSR-7	SWCM streambefore pollution from witcons	15105	-2888169
ATSR-8	ATC pit at east downstream of rehab	20115	-2887724
ATSR-9	Tweefonteinspruit at Van Jaarsveld damwall	21293	2881840
ATSR-10	Upstream of butterfly-SCWM stream	15364	-2889429
ATSR-11	Upstream of butterfly-Alpha stream	16816	-2889441
ACSD-1	ATCOM-plant settling point	22978	-2889483
ACSD-10	ATCOM- Haulroad poll control dam -verflow	23965	-2889002
ACSD-11	TCOM slurry lagoon water	23933	-2890580
ACSD-12	ATCOM fringe 1 slurry logoon water	23143	-2890460

Table 11: Groundwater monitoring points for Atcom East

Monitoring point	Description	X co-ordinate	Y co-ordinate
AEGM-1	ATCOM East triangle area	24994.28831	-2886985
AEGM-2	Patula site offices	25672.69981	-2886860.686
AEGM-3	iMpunzi East Hauler road (poplar trees)	26132.55641	-2886275.183
AEGM-4	Middeldrift dam	26968.00169	-2888175.73
AEGM-5	Middeldrift dam	27626.88747	-2889078.618
AEGM-6	Middeldrift dam	26886.43351	-2889263.864
AEGM-7	Middeldrift farm (next to railway)	26696.94697	-28891349.499

- 3.2 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.
- 3.3 Monitoring points shall not be changed prior to notification to and written approval by the Regional Head.
- 3.3 An Aquatic Scientist approved by the Regional Head must establish a monitoring programme for the following indices: Invertebrate Habitat Assessment System (IHAS) and the latest SASS

(South African Scoring System). Sampling must be done once during the summer season and once during the winter season, annually, to reflect the status of the river upstream and downstream of the mining and associated activities.

- 3.4 The Licensee shall participate in any initiative such as Direct Estimation of Ecological Effect Potential (DEEEP) to determine the toxicity of complex tailings waste discharges. Both acute and chronic toxicity must be addressed and at least three (3) taxonomic groups must be present when toxicity tests are performed.
- 3.5 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, 1982 (Act 30 of 1982).
- 3.6 The methods of analysis shall not be changed without prior notification to and written approval by the Minister.
- 3.7 Proper ground and surface water monitoring network should be established to monitor the quality and quantity of groundwater as per the Report recommendation and ensuring that water used by other water users are safeguarded in accordance to Chapter 14 of the National Water Act, 1998.

4. WATER RESOURCE PROTECTION

- 4.1 The impact of the activities of the mine on the groundwater shall not exceed the interim resource water quality objective (RWQO) for the management unit seven (7) as detailed in the Water Quality Reserve for the area as set out in Table 12:

Table 12: Water quality objectives indicated in the groundwater Reserve

Substance/parameter	Resource Quality Objectives (RQO)
pH	6.5-9.0
Total Dissolved Solids(mg/l)	70
Sulphate (SO ₄) (mg/l)	450
Chloride (Cl) (mg/l)	25
Sodium (Na) (mg/l)	70
Magnesium (Mg) (mg/l)	70
Calcium (Ca) (mg/l)	150
Nitrate (NO ₃) (mg/l)	6.0
Flouride(mg/l)	1.0
Iron (mg/l)	1.0
Manganese (mg/l)	0.4
Phosphates (mg/l)	0.05

5. REPORTING

- 5.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.
- 5.2 The Licensee shall submit the results of analysis for the monitoring requirements to the Regional Head on a quarterly basis under the reference number 27/2/2/B511/1/1.
- 5.3 The Licensee shall submit the nature and the quality of the waste disposed of into the following wastewater facilities:

- 5.3.1 Pollution Control Dam
- 5.3.2 Return water Dam

6 STORMWATER MANAGEMENT

- 6.1 Stormwater leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.
- 6.2 Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the stream.
- 6.3 Stormwater shall be diverted from the mine complex site and roads and shall be managed in such a manner as to disperse runoff and concentrating the stormwater flow.
- 6.4 Where necessary works must be constructed to attenuate the velocity of any stormwater discharge and to protect the banks of the affected watercourses.
- 6.5 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.
- 6.6 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the streams.
- 6.7 All stormwater that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.
- 6.8 The polluted stormwater captured in the stormwater control dams shall be pumped to the process water treatment plant for reuse and recycling.

7. PLANT AREAS AND CONVEYANCES

- 7.1 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.
- 7.2 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.
- 7.3 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.
- 7.4 Any access roads or temporary crossings must be:
 - 7.4.1 non-erosive, structurally stable and shall not induce any flooding or safety hazard and
 - 7.4.2 Be repaired immediately to prevent further damage.

8. ACCESS CONTROL

- 8.1 Strict access procedures must be followed in order to gain access to the property. Access to the ATCOM ROM stockpile pollution control dam, Phoenix dump return water dam, new

Atcom run-off-mine stockpile and discharge points must be limited to authorised employees of the Licensee and their Contractors only.

- 8.2 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

9. CONTINGENCIES

- 9.1 Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records shall be available for inspection by the Regional Head upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of all the contributory circumstances:

- 9.1.1 operating errors
- 9.1.2 mechanical failures (including design, installation or maintenance)
- 9.1.3 environmental factors (e.g. flood)
- 9.1.4 loss of supply services (e.g. power failure) and
- 9.1.5 Other causes.

- 9.2 The Licensee must, within fourteen (14) days, or a shorter period of time, as specified by the Regional Head, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Regional Head of measures taken to:

- 9.2.1 correct the impacts resulting from the incident
- 9.2.2 prevent the incident from causing any further impacts and
- 9.2.3 Prevent a recurrence of a similar incident.

10. AUDITING

- 10.1 The Licensee shall conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Regional Head within one (1) month of finalisation of the report, and shall be made available to an external auditor should the need arise.

- 10.2 The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within six (6) months of the date this licence was issued and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.

11. 11. INTEGRATED WATER AND WASTE MANAGEMENT

- 11.1 The Licensee must update an *Integrated Water and Waste Management Plan (IWWMP)*, which must together with the updated *Rehabilitation Strategy and Implementation Programme (RSIP)*, be submitted to the Regional Head for approval within one (1) year from the date of issuance of this licence.

- 11.2 The IWWMP and RSIP shall thereafter be updated and submitted to the Regional Head for approval, annually.

- 11.3 The Licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Regional Head of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan*, for approval.

12. 12. GENERAL CONDITIONS

- 12.1 Water samples must be taken from all the monitoring boreholes by using approved sampling techniques and adhering to recognized sampling procedures. Samples should be analyzed for both organic as well as inorganic pollutants, as mining activity often lead to hydrocarbon spills in the form of diesel and oil. At least the water quality parameters on Table 5 should be analyzed.
- 12.2 These should be recorded on a data sheet. It is proposed that the data should be entered into an appropriate computer database and reported to the Department.
- 12.3 Mining areas should be flooded as soon as possible to prevent oxygen from reacting with remaining pyrite.
- 12.4 The Licensee should remove all coal from the opencast and as little as possible should be left.
- 12.5 The final backfilled opencast topography should be engineered such that runoff is directed away from the opencast areas.
- 12.6 A safety pillar of at least 30 m should be left between the underground and opencast areas.
- 12.7 Quarterly groundwater sampling must be done to establish a database of plume movement trends, to aid eventual mine closure.
- 12.8 The Licensee must ensure in advance that alternative water supply for external water users is provided to these users should groundwater resources be impacted
- 12.9 Pollution control dam must be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment. A plan must be in place to stop overflowing in a dam in case of rainy seasons.
- 12.10 Geochemical assessment should be done on the discard material during the mining operation.
- 12.11 The Licensee shall at all times together with the conditions of this licence adhere to the Regulations on use of water for mining and related activities aimed at the protection of water resources (GN 704, 4 June 1999).

13. 13. SITE SPECIFIC CONDITIONS

- 13.1 The Licensee must ensure that measures are set in place to collect and treat decanting water during the decommissioning stage.
- 13.2 Groundwater modelling should be undertaken and the results should be presented to the Department within the first six (6) months of mining and thereafter reviewed after three (3) years.

APPENDIX VI

SECTION 21 (j) OF THE ACT: REMOVING, DISCHARGING OR DISPOSING OF WATER FOUND UNDERGROUND IF IT IS NECESSARY FOR THE EFFICIENT CONTINUATION OF AN ACTIVITY OR FOR THE SAFETY OF PEOPLE

1. This licence authorises the removal, discharging or disposing of a maximum volume of water found underground for the efficient continuation of an activity as set out in Table 13:

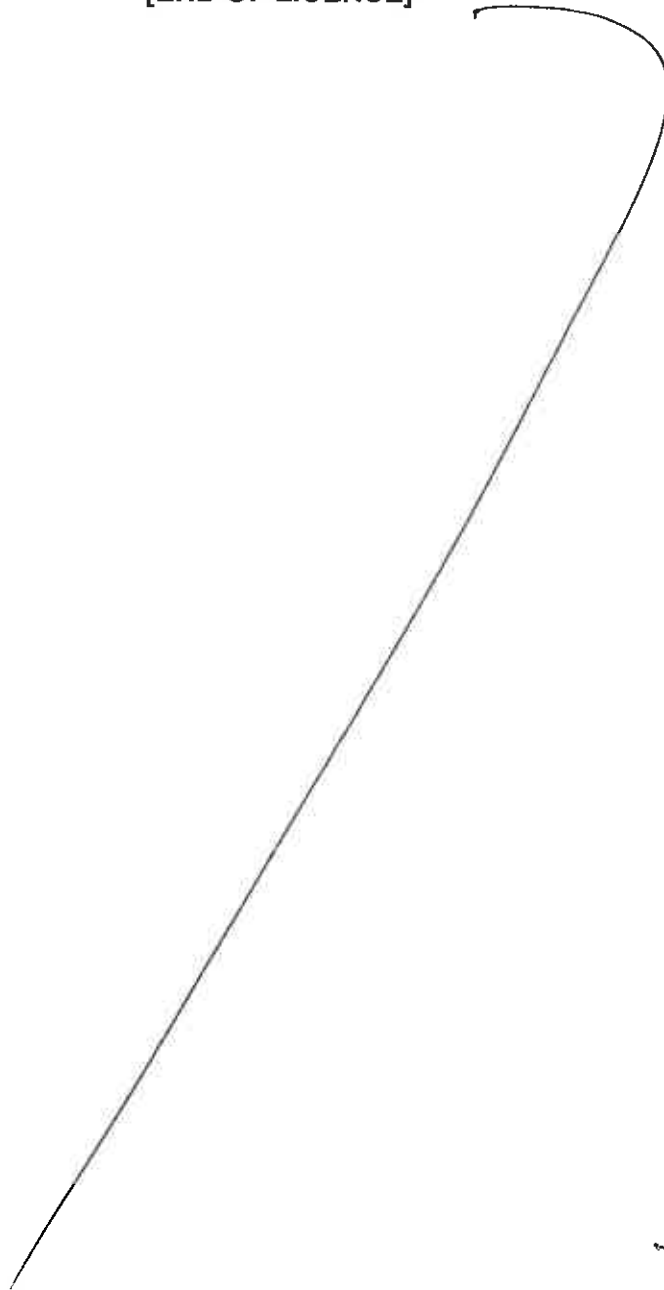
Table 13: Summary of section 21(j) water uses

Purpose/ Description	Properties	Total volume (m³/a)	Coordinates
Dewatering of historical underground workings for the continuation of mine at River West Pit	(RE) Portion 1 of the farm Steenkoolspruit 18 IS; Portion 1,6 and RE 6 of the farm Vandyksdrift 19 IS	320 835	26° 05' 20.7" S 29° 15' 36.2" E
Dewatering from historical underground operations for the continuation of mine at Vandyksdrift West Pit	(RE) Portion 1 of the farm Steenkoolspruit 18 IS	123 370	26° 05' 37.62" S 29° 15' 23.37" E
Dewatering of historical underground workings for the continuation of mine at River Shaft South Pit	Portion 6 of the farm Vandyksdrift 19 IS	200 020	26° 05' 20.4" S 29° 16' 39.6" E
Dewatering from historical underground operations for the continuation of mine at Vandyksdrift South Pit	(RE) Portion 1 of the farm Vandyksdrift 19 IS	725 985	26° 06' 15.6" S 29° 17' 45.4" E

2. The quantity of the water authorized to be removed and disposed of into the pollution control dam in terms of this licence may not be exceeded without prior authorization by the Minister.
3. The Licensee shall provide any water user whose water supply is impacted by the water use with potable water.
4. The quantity of water removed from underground must be metered and recorded on a monthly basis.
5. Groundwater levels shall be monitored every six (6) months (once in the beginning of the dry season and once in the beginning of the wet season).
6. Self-registering flow metres must be installed in the delivery lines at easily accessible positions near the dewatering points.
7. Calibration certificates in respect of the pumps must be submitted to the Regional Head after installation thereof and thereafter at intervals of two (2) years.
8. The date and time of monitoring in respect of each sample taken shall be recorded together with the results of the analysis.

9. Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards, in terms of the Standards Act, 1982 (Act 30 of 1982).
10. The methods of analysis shall not be changed without prior notification to the Licensee and written approval by the Minister or his/her delegated nominee.
11. The Licensee shall follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the underground storage water removal system.
12. Reasonable measures must be taken to provide for mechanical, electrical or operational failures and malfunctions of the underground water removal system.

[END OF LICENCE]



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mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X7279, Emalahleni, 1035, Tel: 013 653 0500, Fax: 013 656 1474
1st floor Saveways Crescent Centre, Mandela Drive, Emalahleni, 1035

Enquiries: Ms. M.Y Ratsela **Email:** matshilele.ratsela@dmr.gov.za

Ref no: (MP) 30/5/1/2/3/2/1/ (375) EM

Directorate: Mine Environmental Management: Mpumalanga Region

BY HAND

Glencore Operations South Africa (Pty) Ltd

Private Bag X7265

WITBANK

1035

Attention: Mrs. Tebogo Chauke

Tel no : (013) 368 8299

Email: Tebogo.Chauke@glencore.co.za

ENVIRONMENTAL AUTHORISATION ISSUED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT 107 OF 1998 (NEMA) AS AMENDED, THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 IN RESPECT OF THE FARMS KROMFONTEIN 30 IS, MIDDLEDRIFT 43 IS AND BLESBOKFONTEIN 31 IS , SITUATED WITHIN THE MAGISTERIAL DISTRICT OF WITBANK MPUMALANGA REGION.

With reference to the above-mentioned application, the Department has decided to **grant** environmental authorisation in terms of National Environmental Management Act (Act 107 of 1998) as amended. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 4 (2) of the Environmental Impact Assessment Regulations of 2014, you are instructed to notify all registered interested and affected parties, in writing within 14 (Fourteen) calendar days, from the date of the Department's decision in respect of your application and the relevant provisions regarding the lodgement of appeal must be provided for in terms of the National Appeal Regulations of 2014.

Should you wish to appeal any aspect of the decision, you must submit the appeal to the Minister of Environmental Affairs and a courtesy copy of such an appeal to the Department of Mineral Resources (Mpumalanga Regional Office), within 20 days from the date of notification, and such appeal must be lodged as prescribed in Chapter 2 of the National Appeal Regulations of 2014, by means of the methods as per prescribed below:

Appeal to the Department of Environmental Affairs

Attention : Directorate Appeals and Legal Review
Email : appealsdirector@environment.gov.za
By post : Private Bag X 447, **PRETORIA**, 0001
By hand : Environmental House, Corner Steve Biko and Soutpansberg Street, Arcadia,
Pretoria, 0083

Copy of the lodged appeal to the Department of Mineral Resources

Attention : Regional Manager: Mpumalanga Region
By facsimile : (013 656 1474
E-mail : aubrey.tshivhandekano@dmr.gov.za
By post : Private Bag X 7279, **WITBANK**, 1035
By hand : Saveways Centre, Nelson Mandela Drive, Emalahleni, 1035

Should you decide to appeal, you must comply with the National Appeal Regulation of 2014 in relation to notification of all registered interested and affected parties, and a copy of the official appeal form can be obtained from the Department of Environmental Affairs.

Kind Regards



.....
REGIONAL MANAGER: MINERAL REGULATION
MPUMALANGA REGIONAL OFFICE
DATE: 06/07/2017

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A DEFINATION

“activity” means an activity identified-

- (a) in Government Notice No. R. 983 of 2014 as a listed activity; or
- (b) in any other notice published by the minister or MEC in terms of Section 24D of the Act as a listed activity or specified activity.

“associated structures or infrastructure” means the building or infrastructure that is necessary for the functioning of a facility or activity or that is used for an ancillary service or use from the facility.

“commence” means the start of any physical activity, including site preparation and any other activity on the site in furtherance of a listed activity or specified activity, but does not include any activity required for purposes of an investigation or feasibility study as long as such investigation or feasibility study does not constitute a listed activity or specified activity.

“construction” means the building, erection or expansion of a facility, structure or infrastructure that is necessary for the undertaking of an activity, but excludes any modification, alteration or upgrading of such facility, structure or infrastructure that does not result in a change to the nature of the activity being undertaken or an increase in the production, storage or transportation capacity of that facility, structure or infrastructure.

“independent”, in relation to an EAP or a person compiling a specialist report or undertaking a specialised process or appointed as a member of an appeal panel, means

- a) that such EAP or person has no business, financial, personal or other interest in the activity, application or appeal in respect of which that EAP or person is appointed in terms of these Regulations other than fair remuneration for work performed in connection with that activity, application or appeal; or
- b) that there are no circumstances that may compromise the objectivity of the EAP or person in performing such work.

“public participation process” in relation to the assessment of the environmental impact of any application for an environmental authorisation, means process by which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to the application,

“registered interested and affected party”, in relation to an application, means an interested and affected party whose name is recorded in the register opened for that application in terms of Regulation 42.

“the Act” include the schedule and regulations and any notice issued under the Act.

“the Department” means the Department of Agriculture, Conservation, Environment and Rural Development

“the Regulations” means the Environmental Impact Assessment Regulations, 2014.

B. ENVIRONMENTAL AUTHORISATION

ENVIRONMENTAL AUTHORISATION ISSUED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (NEMA) AS AMENDED, THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 FOR THE PROPOSED PHOENIX AND OFFICE PIT AND ASSOCIATED INFRASTRUCTURE IN RESPECT OF THE FARM KROMFONTEIN 30 IS, MIDDLEDRIFT 43 IS AND BLESBOKFONTEIN 31 IS, SITUATED IN THE MAGISTERIAL DISTRICT OF WITBANK IN MPUMALANGA REGION.

1. REFERENCE NUMBER: (MP) 30/5/1/2/2 (375) EA

2. BRIEF DESCRIPTION OF THE ACTIVITIES

Glencore Operations South Africa (Pty) Ltd also known as Impunzi complex intends to expand its mining operations at Arthur Taylor Colliery Opencast mine (ATCOM) Phoenix and Arthur Taylor Colliery (ATC) Office pits. The proposed activities entail opencast mining of seam 4 coal reserves at the Office and Phoenix areas. The proposed project will use existing infrastructure within the Impunzi complex, expansion of the water conveyance infrastructure and access road will also be done as part of this project.

3. LOCATION

The site is located on the farm Kromfontein 30 IS, Middeldrift 43 IS and Blesbokfontein 31 IS, the mine situated 27 km away from the Witbank town and approximately 110 km East of Johannesburg.

4. APPLICANT

Glencore Operations South Africa (Pty) Ltd
Private Bag X 7265
Witbank
1035

Contact Person: Mrs. Tebogo Chauke
Tel no: (013) 368 8399

5. ENVIRONMENTAL ASSESSMENT PRACTITIONER

Golder Associates Africa (Pty) Ltd
Contact Person: Mr. Gareth Isenegger
Tel No: (011) 254 4800
Cell No: 072 683 5350
Fax No.: (011) 315 0317

6. SITE VISIT

A site visit was never conducted

7. DECISION

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation. An Authorisation is granted in terms of section 24(2) (a) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended specified below

GNR 983

Activity 9 –The development of infrastructure exceeding 1000 meters in length for the bulk transportation of water or storm water-with an internal diameter of 0,36 metres or more or with a peak throughput of 120 litres per second or more; excluding where- such infrastructure is for bulk transportation of water or storm water drainage inside a road reserve, or where such development will occur within an urban area.

Activity 12(iv) - The development of dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size.

Activity 12(x) - The development of buildings exceeding 100 square metres in size; where such development occurs within a watercourse, in front of the development setback; or if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse

Activity 12(xii) -The development of infrastructure or structure with a physical footprint of 100 square metres or more; where such development occurs within a watercourse, in front of the development setback; or if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse

Activity 24 - The development of a road which an environmental authorization was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010 or a road with a reserve wider than 13,5 meters or where no reserve exists where the road is wider than 8 meters but excluding roads which are identified and included in activity 27 in listing notice 2 of 2014 or roads where the entire road falls within an urban area.

Activity 27 – The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation , except where such clearance of indigenous vegetation is required for- the undertaking of a linear activity or maintenance purposes undertaken in accordance with a maintenance management plan.

Activity 45 - The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure – has an internal diameter of 0,36 metres or more; or where the facility or infrastructure is expanded by more than 1000 metres in length ; or where the throughput capacity of the facility or infrastructure will be increased by 10% or

more, excluding where such expansion – relates to transportation of water or storm water within a road reserve ;or will occur within an urban area.

Activity 46-the expansion and related operation of infrastructure for the bulk transportation of sewage , effluent ,process water ,waste water , return water ,industrial discharge or slimes where slimes where the existing infrastructure has an internal diameter of 0.36 metres or more or has a peak throughput of 120 litres per second or more and where the facility or infrastructure is expanded by more than 1000 metres in length or where the throughput put of the infrastructure will be increased by 10% or more ; excluding where such expansion relates to transportation of sewage , effluent , process water , waste water , return water industrial discharge or slimes within a road reserve or will occur within an urban area.

Activity 56 – The widening of a road by more than 6 metres , or the lengthening of a road by more than 1 kilometre where the existing reserve is wider than 13,5 meters or where no reserve exists where the existing road is wider than 8 metres ; excluding where widening or lengthening occur inside urban areas.

GNR 984

Activity 6: The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions , pollution or effluent , excluding activities which are identified and included in Listing Notice 1 of 2014; activities which are included in the list of waste management activities published in terms of Section 19 of the National Environmental Management: Waste Act ,2008 (Act no.59 of 2008) in which case the National Environmental Management : Waste Act 2008 applies ; or the development of facilities or infrastructure for the treatment of effluent ,waste water or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.

Activity 15: The clearance of an area of 20 hectares or more of indigenous vegetation , excluding where such clearance of indigenous vegetation is required for the undertaking of a linear activity or maintenance purposes undertaken in accordance with the maintenance management plan.

Activity 17: Any activity including the operation of that activity which requires a mining right as contemplated in Section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002), including associated infrastructure, structures and earth works, directly related to the extraction of a mineral resource, including activities for which an exemption has been issued in terms of Section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002).

GNR 985

Activity 4: The development of a road wider than 4 metres with a reserve less than 13, 5 metres outside urban areas in critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.

Activity 14: The development of channels exceeding 10 square metres in size in sensitive areas identified in an environmental management framework as contemplated in chapter 5 of

the Act and as adopted by the competent authority; sites or areas identified in terms of an international convention.

7.1 BACKGROUND

The applicant, **Glencore Operations South Africa (Pty) Ltd**, applied for authorisation to carry on the following activity (ies):

to intend to expand its mining operations at Arthur Taylor Colliery Opencast mine (ATCOM) Phoenix and Arthur Taylor Colliery (ATC) Office pits, construction of access road and water conveyance infrastructure on the farm Kromfontein 30 IS, Middeldrift 43 IS and Blesbokfontein 31 IS, Magisterial District of Witbank, Mpumalanga Province.

The applicant appointed Golder Associates Africa (Pty) Ltd to undertake an Environmental Impact Assessment Process.

7.2 INFORMATION CONSIDERED IN MAKING THE DECISION

In reaching its decision, the Department took, *inter alia*, the following into consideration –

- a) The information contained in the application form dated 27 June 2016, Scoping Report dated 08 August 2016 and Environmental Impact Assessment report (EIAR) Environmental Management Programme report (EMPr) dated 02 December 2016
- b) The objectives and requirements of relevant legislation (Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), other environmental legislation, policies, guidelines and the EIA Regulations of 2014;
- c) Public Participation Process (PPP) attached as Appendix 6 of the EIAR and EMPr;
- d) The comments received from the organs of state and interested and affected parties as included in the EIAR dated 02 December 2016;
- e) The information contained in the specialists studies of the EIAR dated 02 December 2016;
- f) Mitigation measures as proposed in the EIAR dated 02 December 2016 and
- g) Layout Plan describing the location of the activities

7.3 KEY FACTORS CONSIDERED IN MAKING THE DECISION

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below:

a) **Need and desirability:**

According to the Environmental Impact Assessment report coal plays a vital role in South Africa's energy economy. Coal is expected to be the second largest source of primary energy and the largest source for electricity generation in the next 30 years, during which Eskom will need about four billion tons of coal. The Impunzi Phoenix and Office pits

project is aimed at augmenting coal supplies to Eskom and export markets. Other benefits of the project include employment and income generation in the area as well as the development of BEE opportunities during construction, operations and eventual closure and rehabilitation.

b) Public participation:

The public participation process involves the placement of newspaper advertisements in the Witbank News and site notice boards to inform the public of the proposed activity as well as sending letters to interested and affected parties to inform them about the project. A report was made available to the landowners, interested and affected parties for comments. A report was also sent to Gert Sibande District Municipality and Department of Agriculture, Rural Development, Land and Environmental Affairs comments were received from both State organs.

c) Specialist studies conducted

Surface Water Hydrology

The surface water assessment for Impunzi Phoenix and Office pit dated August 2016 was conducted by Golder Associates Africa (Pty) Ltd. The study indicate that the larger Impunzi Complex is characterised by a number of surface water courses namely; the Zaiwaterspruit, Olifants river and the Steenkoolspruit all flow through portions of the larger Impunzi complex. These water courses generally flow in a north-north western direction towards and ultimately into the Witbank dam which supplies urban and industrial water to Emalahleni and Middelburg. The relevant water course associated with the Impunzi complex is the Steenkoolspruit. The course of the Steenkoolspruit was historically diverted to allow access to coal reserves at South pit.

An impact assessment of the proposed site was undertaken and mitigation measures for each potentially harmful event have been provided for all phases. The study further recommends that process water streams going to and from the pits be monitored on a regular basis to have an understanding of the flow rates and it will allow optimisation of the water circuits and help with water conservation and demand management.

Terrestrial Ecological and Wetlands Assessment:

The wetlands study for the proposed Impunzi Phoenix and Office pit dated May 2016 was conducted by Wetland Consulting Services (Pty) Ltd. The study revealed that more than 3170 hectares of wetland habitat occur within the Impunzi mining right area, covering 22.5% of the study area. Hillslope seepage wetlands are by far the most extensive wetland type, making up over 80% of the delineated wetland area. Approximately 4.5% of the wetland area is made up of dams and other artificial wetlands. Six different hydrogeomorphic wetland types have been recorded on site.

In terms of goods and services that individual wetlands provide all of the wetlands on site play a role in moderating water quality through the trapping and removal of sediment, nitrates and phosphates. The pan wetlands are however considered to be less important in this regard as they are not generally connected to downstream water courses.

The present ecological state assessment of the wetland areas on site indicates that no pristine wetlands occur within the study area due to various agricultural and mining impacts. The wetlands in the office pit area are considered moderately to largely modified. Wetlands in the office pit area have been impacted by mining and agricultural activities. It

was found that large portions of the wetlands area were historically cultivated. The surrounding agricultural activities have led to impacts to the seepage wetland.

Ground Water Impact Assessment:

The Ground water impact assessment study for Impunzi Office and Phoenix pits dated July 2016 was conducted by Golder Associated Africa (Pty) Ltd. The study revealed that based on available information it was shown that the interpolated water levels beneath the proposed pits are unlikely to be intersected by the pits during development. Hence it is unlikely that significant ground water will report to the pits during operational phase, as such the impact of the pits on water levels during the operational phase is viewed to be low.

During post closure, decant may occur from the backfilled pits; however predictions on the water quality of decant emanating from the backfill have not yet been established. The study recommend that based on the conceptual understanding drawn from available data it is not deemed necessary to develop a numerical or analytical ground water flow model for the Office and Phoenix pits as it is viewed unlikely that the proposed pits will intersect the water table. The concept understanding does however need to be confirmed through the drilling of shallow boreholes.

d) Financial provision

The quantum of financial provision calculated to the amount of **R 33,011,427.00** for the purpose of rehabilitation

7.4 FINDINGS

After consideration of the information and factors listed above, the Department made the following findings:

- a) The potential impacts on the proposed activities were clearly assessed, investigated and mitigation measures were outlined.
- b) Public Participation Process complied with Chapter 6 of the EIA Regulations R.982 of 2014. The Public participation process included, *inter-alia*, the following:
 - i) Site notices were placed at the project area
 - ii) Newspaper advert was placed in the Witbank News
 - iii) Proof of consultation with the landowners, interested and affected parties has been provided.
 - iv) No objections were raised during the meetings; issues raised during the public participation process were adequately addressed and measures have been provided.
 - v) The identified land owners, interested and affected parties were informed about the availability of reports through letters.
 - vi) Emails were sent to landowners, interested and affected parties
 - vii) It is envisaged that, should the conditions stipulated in this Environmental Authorisation be complied with, the negative environmental impacts of these activities will be minimised.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the authorised activity will not conflict with the general objectives of Integrated Environmental Management laid down in

Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and that any potentially detrimental environmental impacts resulting from the authorized activities can be mitigated to acceptable levels.

The granting of this Authorisation is subject to the following conditions set out below:

8 CONDITIONS

8.1 STANDARD CONDITIONS

- 8.1.1** Authorisation of the activity is subject to the conditions contained in this Authorisation, which forms part of the Environmental Authorisation and are binding on the holder of the Authorisation.
- 8.1.2** The holder of the Authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the Authorisation.
- 8.1.3** This activity must commence within a period of five **(5) years** from the date of issue. If commencement of the activity does not occur within that period, the Authorisation lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.
- 8.1.4** If the proponent anticipates that commencement of the activity would not occur within five (5) year period, he / she must apply and show good cause for an extension of the Environmental Authorisation three (3) months prior to its expiry date
- 8.1.5** Any changes to, or deviations from, the project description set out in this Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the Authorisation to apply for further Authorisation in terms of the Regulations.
- 8.1.6** Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, including the transfer of this authorization, the applicant must in writing notify the Regional Manager of this Department, within **fourteen (14) days** of the above specified change.
- 8.1.7** A copy of this authorisation must be kept on site. The Authorisation must be produced to any Governmental official(s) who may requests to see it for inspection purposes and must be made available to the contractor(s) /subcontractor(s) authorised to undertake to undertake work at the property.
- 8.1.8** This authorisation does not negate the holder of the Authorisation's responsible to comply with any other statutory requirements that may be applicable to the undertaking of the activity.
- 8.1.9** After an appeal period has expired and no good course to extent the appeal period has been submitted in accordance with Chapter 2 of the National Appeal Regulations of 2014, a **thirty (30) day**-written notice must be given to the Department that the activity will

commence. Commencement for purpose of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.

8.2 SPECIFIC CONDITIONS

8.2.1 COMMISSIONING OF THE ACTIVITY

8.2.1.1.1 This Authorisation is hereby solely granted for the mining of Phoenix and Office pits, construction and widen of haul roads, construction and expansion of current water conveyance infrastructure, as well as establishment of cut off trenches/pipes.

8.2.1.2 The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local.

8.2.1.3 The applicant must apply the principle of best practicable environmental option for all technologies used/implemented during mining.

8.2.1.4 Pre-construction Phase

- a) The applicant must appoint an independent Environmental Control Officer (ECO) who will monitor contractors, compliance with EMP and EA (see 8.2.2. Management of the activity for more details).
- b) The applicant must provide all contractors and sub-contractors with a copy of Environmental Management Programme and Environmental Authorisation prior to the mining activities.
- c) All pre-construction phase mitigation measures as outlined in the Environmental Management Programme attached in Environmental Impact Assessment report must be adhered to at all times.
- d) In order to ensure safety, all employees must be given the necessary personnel protective equipment (PPE).
- e) Appropriate notification sign must be erected at the construction site, warning the public (residents, visitors etc.) about the hazard around the construction site and presence of heavy vehicles and machinery.
- f) Construction must include design measures that allow surface and subsurface movement of water along the drainage lines so as not to impede natural surface and subsurface water flow, and drainage measures must promote the dissipation of storm water runoff.
- g) Construction areas (e.g. material lay down areas), topsoil and subsoil must be protected from contamination or pollution. Stockpiling must not take place in drainage lines or areas where it will impede surface water runoff.
- h) If any soil contamination is noted at any phase of the proposed activity (ies), the contaminated soil must be removed to a licensed waste disposal facility and the site must be rehabilitated to the satisfaction of the Department and Department of Water and Sanitation. The opportunity for the onsite remediation and re-use of contaminated

soil must be investigated prior to the disposal and this Department must be informed in this regard.

8.2.1.5 Access roads and traffic impact

- a) Necessary signage and traffic measures must be implemented for safe and convenient access to the site from adjacent roads.
- b) Access roads must be well maintained throughout the mining operation

8.2.1.6 Air quality management

- a) Proper measures must be put in place to suppress dust in order to minimize nuisance conditions.
- b) A speed restriction of 40km/h must be enforced and monitored on site for all mine vehicles.

8.2.1.7 Proliferation of alien species

- a) All construction/mining equipment and vehicles must be cleaned before entering and leaving the site to reduce the chances of spreading weeds and invasive species.

8.2.1.8 Noise

- a) Construction/ mining activities must be limited to normal working hours (7h00 – 17h00)
- b) Mine vehicles must be fitted with standard silencers prior to beginning of construction.

8.2.1.9 Erosion control measures

- a) All soil surfaces compacted as a result of mining/construction activities must be ripped, and imported materials must be removed.
- b) Any erosion channel developed during mining/construction period or during vegetation establishment must be restored to a proper condition.

8.2.1.10 Excavation activities

- a) Topsoil must be stripped and stockpiled prior to excavation in a designated area.
- b) Under no circumstances should material stockpiles be disposed of outside the boundary of the mine area.

8.2.1.11 Waste management

- a) General waste must be kept in containers which are wind and scavenger proof, and disposed of at a permitted landfill site. No temporary dumping and littering of waste is allowed on site.
- b) No waste must be disposed of through burying and burning.

- c) All hazardous waste must be disposed of at an official registered site, or be removed by registered hazardous waste contractors.
- d) An emergency preparedness plan to address any pollution incidents (e.i such as oil spillage etc) that occur on site must be developed.

8.2.1.12 Surface and groundwater contamination must be prevented and/or mitigated by implementation of the following conditions

- a) Specific area must be demarcated for fueling and workshop services. And such area must be bunded to reduce the possibility of soil and water contamination.
- b) Irrespective of the nature of a spillage (whether major or minor), all spillages must be cleaned up as soon as they occur.
- c) Spillage of petrochemical products must be avoided. In the case of accidental spillage, contaminated soil must be removed for bioremediation or disposed of at a facility for the substance concerned. Disturbed land must be rehabilitated and seeded with vegetation seed naturally occurring on site.

8.2.1.13 Fire prevention and management

- a) Fire extinguishers that are in good working conditions must be made available at all times for their usage during the occurrence of accidental fires
- b) Workers must be adequately trained in the handling of firefighting equipment.
- c) Open fires must strictly be prohibited.
- d) Smoking must be prohibited in the vicinity of flammable substances.
- e) Cooking and heating fires must be permitted only in designated areas with appropriate safety measures.

8.2.1.14 Storm water management

- a) Storm water management plan must be developed, and implemented on site.

8.2.1.15 Safety

- a) Potentially hazardous area must be demarcated with danger tape.
- b) Appropriate signage must be placed to caution employees and contractors not to attempt to enter certain structures without being authorised.

8.2.1.16 Emergency Response Plan

- a) An Emergency Response Plan should be available for accidental spills and fire fighting during both construction and operation of the project.
- b) In the event of emergency, the holder must notify the department within 24hrs, and contact relevant emergency services in the area.

- c) All significant pollution incidents must be reported to this Department within **forty eight (48) hours** of occurrences

8.2.1.18 Compliance with other legislation

- a) The National Environmental Management Act, 1998 (Act 107 of 1998), with particular reference to the principles in chapter 2 of the said Act.
- b) The National Water Act, 1998 (Act 36 of 1998), with particular reference to the sections pertaining to mining in the proximity of dams and their catchments areas, rivers, marshes, streams, pans and other water courses.
- c) The National Environmental Management Air Quality Act (Act 36 of 2004), with particular reference to the sections pertaining to the liberation of dust, and other emissions, created by prospecting activities, into the atmosphere.
- d) The Conservation of Agriculture Resources Act, 1983 (Act 43 of 1983), with particular references to the sections pertaining to soil conservation.
- e) The National Heritage Resources Act, 1989 (Act No 25 of 1999), with particular reference to the protection of all historical and pre-historical cultural remains.
- f) The Mine Health and Safety Act, 1996 (Act 29 of 1996) in conjunction with the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), with particular reference to those sections and regulations pertaining to health and safety at mines; mining within 100 m from structures that must be protected; as well as those sections pertaining to rehabilitation of the surface.
- g) All provisions of the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and any other applicable legislation must be adhered to by the holder of this Authorisation.
- h) The National Environmental Management: Waste Act (Act No. 59 of 2008)

8.2.1.19 Liability of the holder of this Authorisation

- a) The competent authority shall not be held responsible for any damages or losses suffered by the holder or his/her successor in title in any instance where mining/ construction or operation subsequent to construction are to be temporarily or permanently stopped for reasons of non-compliance by the holder with conditions of approval as set out in the document or any other subsequent document emanating from this Authorisation. The holder shall be responsible for all the costs necessary to comply with the above condition unless otherwise specified.
- b) Any complaint from the public during the life of mine must be attended to by the holder of this Authorisation as soon as possible to the satisfaction of parties concerned.
- c) The contractor must ensure that serviceable ablution facilities are available for employees. It is the responsibility of the holder of the Authorisation to see to it that this condition is adhered to.

8.2.2 MANAGEMENT OF THE ACTIVITY

- a) A copy of an Environmental Authorisation and Environmental Management Programme must always be available on site so as to monitor compliance with conditions outlined in both the documents. Both documents must be used as on-site reference document during the life of mine.
- b) The Environmental Management Programme prepared by Golder Associates Africa (Pty) Ltd (attached to the EIA Report) must be adhered to during the life of the mine.
- c) All duties and responsibilities as outlined in the Environmental Management Programme attached are binding throughout the life of the mine
- d) Any proposed amendments to the Environmental Management Programme (as a result of this authorisation or otherwise) must be submitted in writing to this Department for approval prior to the amendment being implemented. On approval of the proposed amendment the EMP must be accordingly amended and adhered to.

8.2.3 Appointment of Environment Control Officer

- a) An Environmental Control Officer must be appointed, who will monitor and ensure compliance and correct implementation of all mitigation measures and provisions as stipulated in the Environmental Authorisation and Environmental Management Programme, prior to any commencement of mining activities on site.
- b) The Environment Control Officer appointed must monitor the construction of the infrastructure to ensure that the layout plans are in accordance to the designs and record important findings of the site inspection.
- c) The Environment Control Officer must also monitor the implementation of specific elements of the Environmental Management Programme by contractors.
- d) All duties and responsibilities as outlined in the Environmental Management Programme attached are binding throughout the life of project/ mine.

8.2.4 Site Closure and Decommissioning

- a) The commissioning and decommissioning of individual activity within the overall listed mining activity must take place within the phases and timeframes as set out in the EMP.
- b) The application for closure indicated above must be submitted together with all relevant documents as indicated in Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended.
- c) All mitigation measures for the decommissioning phase, as outlined in the EA. The holder of EA must apply for a closure certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended within 180 days of occurrence of lapsing, abandonment, cancellation, cessation, relinquishment and completion of the operation.

8.3 MONITORING

- a) This Department reserves the right to monitor and audit the activity to ensure compliance with legislation and the conditions stipulated in this authorisation.
- b) It is the holder of this Authorisation's responsibility to ensure that an ongoing management and monitoring of the impacts of the activity on the environment throughout the life of the mine is put into practice.

8.4 RECORDING AND REPORTING TO THE DEPARTMENT

The authorization holder must submit annual an environmental audit report during the operation of the activity, unless otherwise requested by the department. The audit report must convey the following:

- a) The date in which the audit was carried out,
- b) The outcome of the audit, in relation to the conditions stipulated in the environmental authorization and the EMPr as well as the actions taken to mitigate environmental impacts on site
- c) Records of monitoring and /or auditing must be made available for inspection to this Department and any other relevant authority inspecting the development activities.
- d) Records relating to compliance and non-compliance with the conditions of this authorisation must be kept in good order. Such records shall be made available to this Department within **seven (7) days** of receipt of a written request by the Department. Environmental compliance will further be monitored through complaints received from the public.
- e) All records relating to the implementation of the Environmental Management Programme must be kept in the office where it is safe and can be retrievable.

8.5 NON-COMPLIANCE

- a) In the event of non-compliance by any contractor during the mining/construction the authorised activity, the holder of this Authorisation will be liable.
- b) The holder shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.
- c) The holder must in the event of non-compliance with any condition of this Authorisation inform the Regional Manager of Mpumalanga region of this Department, in writing, within **forty eight (48) hours**
- d) Non compliance to this authorisation is an offence as provided for in terms of the National Environmental Management Act, 1998, Section 49(a) and Regulation 48. Any conviction of such offence may result in Section 49(a) being enforced.

9. APPEAL OF AUTHORISATION

The holder of the authorisation must notify every **registered** interested and affected party, in writing and within fourteen (14) days, of receiving the Department's decision.

The notification must –

- a) Specify the date on which the Authorisation was issued.
- b) Inform the registered interested and affected parties of the appeal procedure provided for in Chapter 2 of the National Appeal Regulations of 2014.
- c) Advise the interested and affected parties that a copy of the Authorisation and reasons for the decision will be furnished on request.
- d) An appeal against the decision must be lodged in terms of Chapter 2 of the National Appeal Regulations of 2014.

Signed on this 06TH day of JULY 2017, at EMALATHLENI



REGIONAL MANAGER: MINERAL REGULATION
MPUMALANGA REGIONAL OFFICE

Acknowledgement of Receipt by: MR./Ms. Tebogo Chauke

On behalf of the company IMPUNZI A SLENKORE OPERATION

On this 13 day of July 2017, at DMR-emakhekui



Signature:

375MR

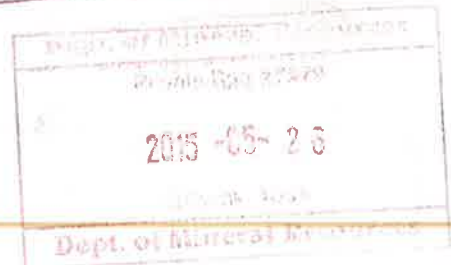


CONSOLIDATED TAVISTOCK EIA AND EMPR AMENDMENT



XSTRATA SOUTH AFRICA (PTY) LTD

APRIL 2014



IN SUPPORT OF A SECTION 102 APPLICATION



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Digby Wells and Associates (South Africa) (Pty) Ltd (Subsidiary of Digby Wells & Associates (Pty) Ltd), Co. Reg. No. 2010/008577/07, Fern Isle, Section 10, 359 Pretoria Ave Randburg Private Bag X10046, Randburg, 2125, South Africa
Tel: +27 11 789 9495, Fax: +27 11 789 9498, info@digbywells.com, www.digbywells.com

Directors: A Sing*, AR Wilke, LF Koeslag, PD Tanner (British)*, AJ Reynolds (Chairman) (British)*, J Leaver*, GE Trusler (C.E.O)
*Non-Executive



DIGBY WELLS
ENVIRONMENTAL

This document has been prepared by **Digby Wells Environmental**.

Report Title: Consolidated Tavistock EIA and EMPR Amendment

Project Number: XST1364

Name	Responsibility	Signature	Date
Degrecia Zwane	Report Compiler		22 October 2012
			15 November 2012
Stephanie Aken	Project Manager		22 November 2012
			3 December 2012
Johan Hayes	Reviewer		22 October 2012
			26 November 2012

This report is provided solely for the purposes set out in it and may not, in whole or in part, be used for any other purpose without Digby Wells Environmental prior written consent.



UNDERTAKING

I, J. E. PILLAY

The undersigned and duly authorised thereto by GLENCORE OPERATIONS
SOUTH AFRICA

Company/Close Corporation/Municipality (Delete that which is not applicable) have studied and understand the contents of this document in it's entirety and hereby duly undertake to adhere to the conditions as set out therein including the amendment(s) agreed to by the Regional Manager and approved on 21 MAY 2015

Signed at WITBANK this 21 day of MAY 2015.

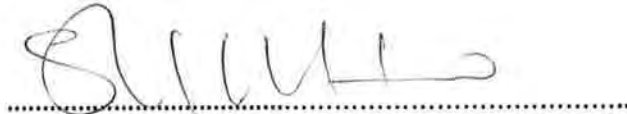

Signature of applicant

GENERAL MANAGER
Designation

APPROVAL

Approved in terms of Section 39(4) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)

Signed at Witbank this 21 day of May 2015.


REGIONAL MANAGER: MPUMALANGA REGION

APPROVED

Signature:.....

Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:.....

EXECUTIVE SUMMARY

This report has been compiled in support of a Section 102 application, in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA), to consolidate the various collieries under the Tavistock mining right and to include the new mining operations i.e. the AddCar mining operations into a single EIA/EMP document as well as to include the ATCOM East area. The latter area currently falls under the BHP Billiton Energy Coal South Africa (formerly Ingwe Collieries Limited) (BECSA) Douglas operations and this amendment is also in support of the relevant Section 11 application.

The Tavistock mining area is managed and owned by Xstrata South Africa (Pty) Ltd (Xstrata SA), member of Glencore group of companies. It is situated south west of Emalahleni in the Mpumalanga Province of South Africa. Tavistock covers an area of approximately 12 700 hectares (ha) and currently has a total annual production capacity of more than 15 million tons (Mt) run of mine (RoM) coal and approximately 184.3 Mt of recoverable coal reserves.

The individual collieries making up Tavistock include:

- Arthur Taylor Opencast Mines (ATCOM);
- Arthur Taylor Colliery (ATC);
- Klippoortjie;
- Phoenix Colliery;
- Tavistock Colliery;
- South Witbank Coal Mines (SWCM); and
- ATCOM East (falls under the BECSA EMP).



The above collieries are currently managed as part of the iMpunzi Complex for Xstrata SA except for SWCM, Klippoortjie and the Tavistock Colliery which form part of the Tweefontein South Complex.

The original Environmental Management Programme Report (EMPR) under Tavistock Collieries Limited was approved by the Department of Minerals and Resources (DMR, then the Department of Minerals and Energy) in 2001. Since then, several Environmental Impact Assessments (EIAs) and Environmental Management Programme (EMPs) amendment reports have been compiled to address the potential environmental impacts associated with mine, infrastructure and discard dump expansions at the various collieries.

The consolidation of all the areas will aid in the integrated environmental management of the different operations, under "Tavistock". The Tavistock EIA/EMP consolidation document has therefore been updated to include changes to the existing mining areas, to accommodate new mining areas and to meet the DMRs format for these types of reports.

Focus is placed on current mining activities, as well as potential future mining activities to be undertaken within the ambit of the surface area now considered to be Tavistock.

Information was extracted from the existing EIA/EMPs for the compilation of this report and updated with new environmental monitoring and other data. This information was extracted, correlated and where required, adapted, to provide an accurate and comprehensive understanding of the environmental impacts associated with mining current and planned operations.

POTENTIAL ENVIRONMENTAL IMPACTS

Aspect	Impact Description
Topography	Potential surface subsidence due to a collapse of underground pillars, leading to surface cracks and the ponding of water.
Soils	Potential soil contamination due to the spillage of lubricants and fuel from mining equipment and storage areas (e.g. bull dozers, dragline, excavators, etc.)
	Soil compaction due to the repetitive movement of heavy mining equipment and due to the replacement activities associated with the rehabilitation operations (e.g. bull dozers, dragline, excavators, etc.)
	Increased erodibility of soils due to the removal of vegetation during the clearance of new opencast areas.
	Damage to the natural soil structure due to soil handling, removal and mixing of soil types and horizons.
Land Capability	Reduction in land capability in areas where surface subsidence and cracking occurs.
	Decreased land capability due to damage to the natural soil structure, soil loss through wind and water erosion and leaching of soil nutrients.
Surface water	Potential surface subsidence will alter drainage lines, while surface cracking results in the loss of surface water through cracks to surface, affecting Mean Annual Runoff (MAR) on a regional scale.
	Potential surface water contamination through decant of Acid Mine Drainage (AMD) formed due to the incorrect replacement of overburden during rehabilitation, from mining voids and from discard dumps.
Groundwater	Dewatering of adjacent and overlying perched aquifers.
	Disturbance and dewatering of shallow aquifers due to the removal of soft overburden.
	Exposure of acid generating overburden to air and water results in the generation of AMD and therefore potential groundwater contamination.
	Potential contamination of groundwater due to seepage from discard dumps.
	Potential groundwater contamination due to the formation of AMD following the incorrect replacement of overburden during rehabilitation.



Aspect	Impact Description
Air quality	Dust emissions due to vehicle entrainment of dust on haul roads, coal dust from Run of Mine stockpiles, discard dumps and during topsoil removal and stockpiling.
Noise	Sporadic and significant increase in noise due to drilling and blasting events.
Natural vegetation	Destruction and removal of natural vegetation during site clearance.
Wetlands	Dewatering of aquifers feeding hillslope wetlands will result in the total destruction of hillslope wetlands.
	Removal of vegetation results in reduced recharge of shallow aquifers that feed hillslope wetlands, reducing flow in wetlands.
	Topsoil removal for establishment of the Klippoortjie opencast intersects wetland areas and will cause the destruction and fragmentation of the wetland. Similarly wetlands will be impacted as part of the ATCOM East and AddCar mine plan as well as a pan and wetland areas around the North Pit at iMpunzi.
	Impairment of on-and off site wetland functioning due to formation of AMD due to the incorrect replacement of overburden during rehabilitation and siltation of surface water due to water erosion of replaced topsoil.
Visual	Alteration of the visual quality of the area due to growth of discard dumps that are visible to passersby.
Heritage	Relocation of cemeteries and the demolition of old farm buildings.
Socio-economic	Damage to roads and increase in traffic impacts safety risks
	Damage to houses due to blasting and/or subsidence.
	Perception that mining brings migrants into the area and that only these migrants are being employed by the mines.
	In-migration due to employment opportunities created by mining and increasing pressure on service infrastructure.
	Generation of nuisance dust that impacts on surrounding land users.
	Creation of employment opportunities
Creation of opportunities for human development and training.	

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DEPARTMENT OF MINERAL RESOURCES

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LIST OF TERMS AND ABBREVIATIONS

AMD	Acid Mine Drainage
ASPT	Average Score Per Taxon
ATC	Arthur Taylor Colliery
ATCOM	Arthur Taylor Colliery Open Cast Mine
BECSA	BHP Billiton Energy Coal South Africa
DMR	Department of Mineral Resources
DTJV	Douglas Tavistock Joint Venture
DWS	Department of Water and Sanitation
EIA/EMP	Environmental Impact Assessment and Environmental Management Programme
EIS	Ecological Importance and Sensitivity
ELM	Emalahleni Local Municipality
EMPR	Environmental Management Programme Report
ha	Hectares
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
IWULA	Integrated Water Use Licence Application
IWWMP	Integrated Water and Waste Management Plan
LAC	Low Ash Coal
LoM	Life of Mine
mamsl	metres above mean sea level
MAP	Mean Annual Precipitation
MAR	Mean Annual Runoff
MDEDET	Mpumalanga Department of Economic Development, Environment and Tourism
MPRDA	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
Mt	Million tonnes
MWP	Mining Work Programme
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
O/c	Opencast Mining
PCD	Pollution Control Dam
PSS	Power Station Smalls

RoM	Run of Mine
SASS5	South African Scoring System for invertebrates
SAWS	South African Weather Services
SFF	Strategic Fuel Fund
SWCM	South Witbank Colliery Mine
WMS	Waste Management System

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PART I: INTRODUCTION

1 INTRODUCTION

Xstrata South Africa (Pty) Ltd (Xstrata SA) has appointed Digby Wells Environmental (Digby Wells) as the independent environmental consultant to consolidate and amend all the existing approved Environmental Impact Assessment and Environmental Management Programme (EIA/ EMP) reports for the Tavistock mining area as part of the Section 102 Amendment. Tavistock is located south of Emalahleni in the Mpumalanga Province, South Africa.

The Tavistock mining area falls under the mining right held by Xstrata SA covering an area of 12 700 hectares (ha). For management purposes, Tavistock Colliery is divided into two mining complexes, namely the iMpunzi and Southstock (now known as Tweefontein South) Complexes and is depicted in Figure 1-1 below. Each of the complexes operates independently, with each of the operational areas having its own beneficiation plant.

Section 102 of the MPRDA states that: *“an approved EIA/EMP may not be amended without the written consent of the Minister of Mineral Resources”*. This report was compiled in support of an application for such consent, to consolidate the various parts of Tavistock Colliery and its new mining operations i.e. the Add Car mining operation into a single EIA/EMP document. This EIA/EMP will also include the ATCOM East area which currently falls under the BHP Billiton Energy Coal South Africa (formerly Ingwe Collieries Limited) (BECSA) Douglas operations to support an application in terms of Section 11 of the MPRDA, to cede the Mining Right.

This will aid in the integrated environmental management of the different operations, under **“Tavistock Colliery”**. Currently, the ATCOM East area falls under the Douglas Colliery EIA/EMP and is soon to be acquired by Xstrata SA falling under the Tavistock Mining Licence.

The substantial changes to the existing mining areas will require additional authorisation in terms of triggered listed activities under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). Xstrata SA is also required to compile an EIA/EMP in terms of the requirements of NEMA for authorisation.

Therefore this document incorporates all the current mining activities and the proposed mining activities and will be submitted to the Department of Mineral Resources (DMR) for authorisation. Separate applications have been compiled for NEMA authorisation and will be submitted to the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET).

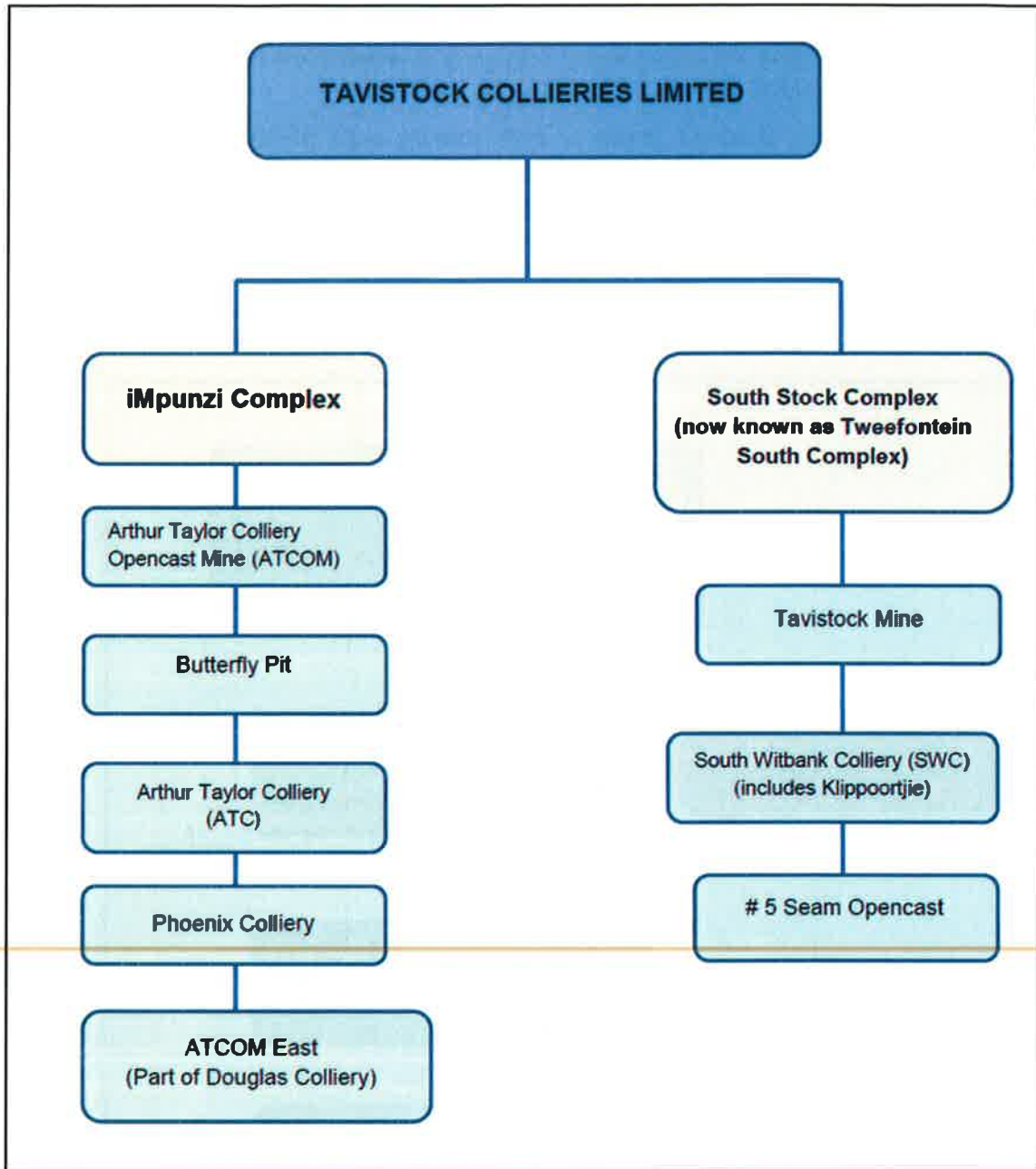


Figure 1-1: Xstrata SA – Tavistock Collieries Limited

1.1 Background

The original EMPR for Tavistock was approved in 2001 (Reference No. OT.6/2/2/132 and Mining Licence No. ML31/1994). Since then, several EIA/EMPs were compiled for the different mining areas, infrastructure developments and discard dump expansions at the various collieries to accommodate changes to the original plans.

Mining operations in the project area commenced in 1936 with the establishment of the Phoenix Colliery. During the next 70 years, the previous owners in this area which included

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JCI and Duiker, acquired Phoenix, Tavistock Mine, SWCM, ATC and ATCOM. Together these mining operations are known as the iMpunzi and Tweefontein South Complexes which are management units of Xstrata SA.

Douglas Colliery is operated under a joint venture with BECSA. Existing approved Environmental Management Plan Reports (EMPRs) compiled in terms of the Minerals Act, 1991, have also been submitted to the DMR (then the DME) by BECSA in respect of the Middelburg Douglas JV collieries. An application will be submitted to the DMR for consent to cede parts of BECSA Douglas Colliery’s mining rights to Tavistock Colliery. BECSA’s Douglas Colliery and the portions to be ceded to Tavistock Colliery are depicted in Figure 1-2 below. These areas will form part of the iMpunzi Complex ATCOM East operation.

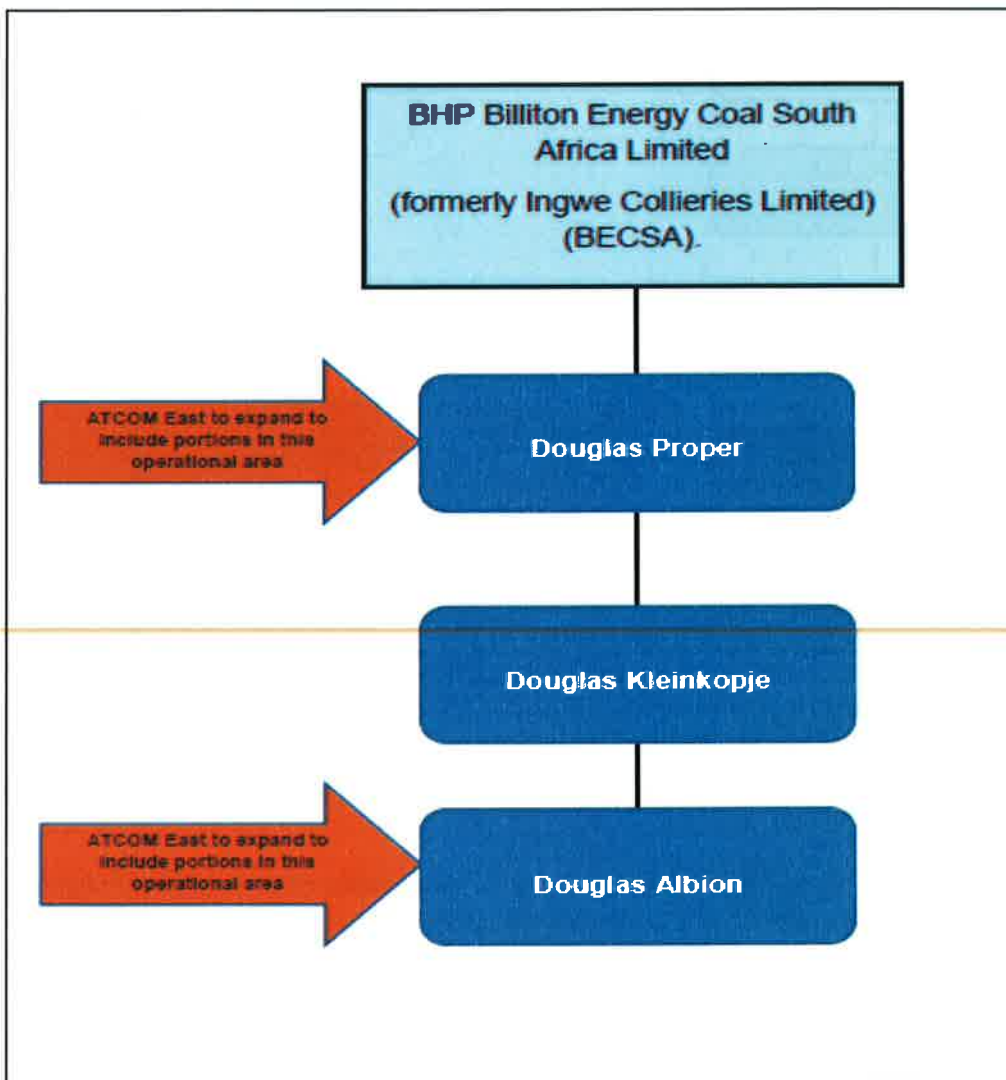


Figure 1-2: BECSA’s Douglas Colliery and areas to be ceded to Xstrata South Africa

Xstrata SA and BECSA have applied for the consent of the Minister of Mineral Resources in terms of the provisions of Section 11 of the MPRDA, to rationalize their mining title so that each party will hold 100% of the mining rights applicable to their sphere of operation. To this

end, BECSA has agreed that it will abandon its 84% shareholding in that part of Douglas Proper that is hatched and outlined in blue, and its 100% share in respect of that part of the Douglas Albion section that is hatched in brown, as depicted on Plan 4 in Appendix A. In exchange, Xstrata SA will abandon its 16% share in the Middelburg Mine and Douglas Kleinkopje in its entirety and that part of its 16% shareholding in the remaining part of Douglas Proper that is not hatched in blue. The above descriptions are summarized in Table 1-1 below.

Table 1-1: Summary of Agreements in place between Tavistock and BECSA

BECSA's Douglas Colliery			
Area	Mining Licence No.	Ownership	Agreement
Douglas Proper	11/99	BECSA (84%); and Tavistock Colliery (16%)	BECSA has agreed that it will abandon its 84% shareholding in that part of Douglas Proper. Xstrata SA will become the holder of a 100% interest in the balance of Proper.
Douglas Kleinkopje	22/2004	BECSA (84%); and Tavistock Colliery (16%)	Xstrata SA will abandon its 16% share in the Douglas Kleinkopje. BECSA will become the holder of a 100% interest in Kleinkopje Mine.
Douglas Albion	10/99	BECSA (100%)	BECSA has agreed that it will abandon its 84% shareholding in that part of Douglas Albion. Xstrata SA will become the holder of a 100% interest in the balance of Albion.
BECSA's Middelburg Mine			
Middelburg mine	9/99	BECSA (84%); and Tavistock Colliery (16%)	Xstrata SA will abandon its 16% share in the Middelburg Mine. BECSA will become the holder of a 100% interest in Middelburg Mine

*Highlighted sections will fall under ATCOM East

If such consent is granted, Xstrata SA will become the sole holder of a mining right in respect of ATCOM East.



1.1.1 Mining Licence Conversion Process

Xstrata SA and BECSA have applied for the consent of the Minister of Mineral Resources in terms of the provisions of Section 11 of the MPRDA, to rationalise their mining title so that each party will hold 100% of the mining rights applicable to their sphere of operation.

Xstrata SA is the holder of Mining Right 31/1994 (Plan 5a – Appendix A) which has been lodged for conversion in accordance with the requirements of the MPRDA includes the farms indicated Table 1-2 which fall under the Mining Licence.

Table 1-2: Tavistock: properties covered by Mining License 31/1994

Farm Name and Number	Sub-division or Mineral Area
Blesbokfontein 31 IS	Portion 2 and Remaining Extent; Mineral Areas 2, 3, 4 and 8
Blesbokfontein 38 IS	Portion 1, 10, 12, 13, 16, 17,20, 27, 28, 3, 38, 5, 6, 7, 8, 9, and Remaining Extent; Mineral Areas 1, 2, 3 and 4
Frischgewaagd 60 IS	Portions 4 and 9; Mineral Areas 6, 7, 8 and 9
Harbeestfontein 39 IS	Areas A, B, C, E, Y, ZE1, ZW1; Mineral Areas 2, 3, 4, 5, 6, 7, 8 and 9
Klipplaat 462 IS	The farm
Kromfontein 30 IS	Portions 10, 11, 13, 18, 19, 20, 21, 6, 8, 9, RE1 NW half, 2, 3, 4 and 5
Klipplaat 14 IS	Portions 11, 13, 14, 5, 1, 3, 4 and 6
Middeldrift 42 IS	Portions 2, 6, 1, 3, and 5; Mineral Area 2
Nooitgedacht 37 IS	Mineral Areas 2, and 3
Roodepoort 40 IS	Portions 9 and 3
Steenkoolpruit 18 IS	Portions 10, 11, 12, 6, 7, 8, 9 and Remaining Extent
Vierfontein 61 IS	Portion 7

The Klippoortjie area contains a separate mining licence and is shown in Table 1-3 below.

Table 1-3: Klippoortjie's Mining Licence Number

Klippoortjie	ML18/2001
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The relevant properties currently under BECSA are indicated in Table 1-4 below. These areas are described below and are depicted on Plan 5b. These portions will fall under the iMpunzi Complex ATCOM East operation under the Tavistock Mining Licence.

Table 1-4: BECSA's Douglas Colliery Properties and Mining Licences

Colliery	Portions of the farms	Mining Licence No.	Colour Code on Plan
Douglas Proper	Steenkoolspruit 18 IS Van Dyksdrift 19 IS	11/99	Outlined in purple
Douglas Albion	Kromfontein 30 IS	10/99	Outlined in orange

1.1.2 EIA/EMPs Submitted to Date

1.1.2.1 Previous Tavistock Colliery

The various EIA/EMPs for the previous Tavistock Colliery were consolidated into a single document detailing the environmental impacts and mitigation measures within the ambit of Tavistock. The aim of the report was to inform the DMR of the current mining activities, as well as potential future mining activities planned for the site.

Detailed EIA/EMP reports have previously been submitted to the DMR for each mining complex, including subsequent amendments for each mining operation. The details of the subsequent amendments and EMP reports under the MPRDA for each of Tavistock Colliery mining complexes are listed in Table 1-5.



Table 1-5: Details of EMP Reports and Amendments submitted for Tavistock Colliery mining Complexes as per MPRDA

No.	Title	Description	Date
TAVISTOCK COLLIERY			
1	EMPR for Tavistock Collieries Limited.	Includes existing mining operations at the Phoenix, Tavistock, SWCM, ATC and ATCOM collieries.	2001 Authorised
TWEEFONTEIN SOUTH			
Tavistock Mine (ML31/1994)			
2	EMPR Amendment for Rietspruit Colliery.	(Mine has been closed). Tavistock Co-disposal Discard Dump located on the Rietspruit property.	1999
3	Amendment to the EMPR for Tavistock Collieries Limited: Tavistock Co-disposal Discard Dump.	Construction of a co-disposal discard dump on land previously owned by Rietspruit Colliery.	2007
South Witbank Colliery (SWCM) (ML31/1994)			
4	Amendment to the EMPR for Tavistock Collieries Limited: SWCM Discard Dump Extension (new co-disposal dump).	Extension of the existing SWCM Discard Dump.	2003
5	Amendment to the EMPR for Tavistock Collieries Limited For addition of Crusher at SWCM.	Additional crusher to process GGV coal.	2004
6	New Life of Mine for Southstock AddCar Area	<i>Part of this Section 102 Amendment (2012) NEMA authorisation currently to be undertaken</i>	
IMPUNZI COMPLEX			
ATCOM (ML31/1994)			
7	Amendment to the EMPR for Tavistock Collieries Limited: North Pit.	Mining of two new opencast pits located adjacent to ATCOM.	2002
8	ATCOM South Pit Dump	<i>To be submitted as part of the amendment (2012).</i>	
ATC (ML31/1994)			
9	Amendment to the EMPR for Tavistock Collieries Limited: ATC Venture Void.	Construction of a discard dump in the ATC Venture Void.	2002

No.	Title	Description	Date
10	EMPR for the Butterfly Pit.	Opencast mining at the Butterfly Pit at the ATC colliery.	2004
11	EMPR for the Office Pits	Expansion of mining activities at ATC (Office pits)	Included in the approved Tavistock Collieries EMPR. Covered in this Amendment.
Phoenix Colliery (ML31/1994)			
12	Amendment to the EMPR for Tavistock Collieries Limited: Middeldrift Opencast Operations.	Expansion of mining activities south of the Phoenix Colliery. Covered in this amendment and area now falls under ATCOM	Included in the approved Tavistock Collieries EMPR. Covered in this Amendment.
ATCOM East			
13	ATCOM East: ATCOM Infrastructure expansion project and dewatering pipeline	<i>To be submitted as part of this amendment (2012). NEMA authorisation currently undertaken for mining activities. NEMA authorisation approved for infrastructure.</i>	

1.1.2.2 BECSA's Douglas Colliery

Existing approved EMPRs compiled in terms of the Minerals Act, 1991, were submitted by BECSA in respect of the Middelburg Douglas JV collieries.

The details of the EIA/EMP reports submitted the DMR for BECSA's Douglas Colliery is indicated in Table 1-6 below.

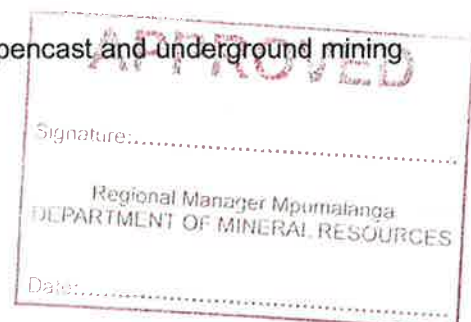
Table 1-6: Details of EIA/EMP Reports submitted to date for BECSA's Douglas Colliery

No.	Title	Description	Date
1.	EMPR for Douglas Colliery	EMPR Compilation for Douglas Colliery	2000

1.1.3 Current Mining Activities and Infrastructure

1.1.3.1 Tavistock Colliery

Tavistock is an existing coal mining operation where both opencast and underground mining takes place in each complex.



The current mining activities and infrastructure of iMpunzi Complex and Tweefontein South are detailed in Table 1-7 below. *Future mining activities, AddCar and ATCOM East, are not covered in the existing authorised EMPR and are discussed in Section 2.6.*

Table 1-7: Current Activities and Infrastructure on the iMpunzi Complex and the Tweefontein South Complex

Colliery	Operation	Infrastructure
iMpunzi Complex		
ATCOM	Opencast mining	<ul style="list-style-type: none"> ▪ Discard Dumps; ▪ Slurry Ponds; ▪ Shafts; ▪ Workshop; ▪ RoM stockpiles; ▪ Sewage treatment plant; ▪ PCD; ▪ Water treatment plant; and ▪ Wastewater purification plant.
ATC	Underground Opencast mining	<ul style="list-style-type: none"> ▪ Coal washing plant; ▪ Discard Dumps; ▪ Shafts; ▪ Workshop and store; ▪ RoM stockpiles; ▪ Sewage treatment plant; ▪ PCD; and ▪ Wastewater purification plant.
Tweefontein South		
Tavistock Mine	<ul style="list-style-type: none"> ▪ Underground mining ▪ Coal washing plant; 	<ul style="list-style-type: none"> ▪ Coal washing plant; ▪ Discard Dumps; ▪ Slurry Ponds; ▪ Shafts; ▪ RoM stockpiles; ▪ PCD; ▪ Water treatment plant; and ▪ Potable water plant.

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Colliery	Operation	Infrastructure
SWCM	<ul style="list-style-type: none"> ▪ Underground mining ▪ Coal washing plant; ▪ AddCar ▪ Opencast 	<ul style="list-style-type: none"> ▪ Discard Dumps; ▪ Slurry Ponds; ▪ Shafts; ▪ RoM stockpiles; ▪ PCD; ▪ Water treatment plant; and ▪ Potable water plant. ▪ Office buildings and associated infrastructure
Klippoortjie	<ul style="list-style-type: none"> ▪ Open cast ▪ Underground 	

1.1.3.2 BECSA's Douglas Colliery

Douglas Colliery (which includes Douglas Proper and Albion) is effectively an underground operation deploying seven Continuous Miner production sections partially extracting select coal horizons on the No. 4, No. 2 and No. 1 Seams with a small opencast operation. Underground RoM production was at around 6 Mt per annum until underground pit room constraints caused sections to be closed as scheduled in the Douglas Colliery LoM. A number of the older underground sections and some fringe coal are now being mined by opencast methods.

Douglas Colliery has an existing coal processing facility. The Douglas Plant is to close due to the fact that the Douglas plant is a single stage wash plant and it is constructed on top of high value coal seams.

1.1.4 Decommissioned Mining Activities

Operation Name	Current Activities	Infrastructure
iMpunzi Complex		
Phoenix Colliery	Underground mining	<ul style="list-style-type: none"> ▪ Coal washing plant; ▪ Slurry Ponds; ▪ Shafts; ▪ RoM stockpiles; ▪ Sewage treatment plant; and ▪ PCD.
Tavistock Mine	Coal Washing plant operation	<ul style="list-style-type: none"> ▪ Old discard dump
SWCM	5 seam Opencast Operation	<ul style="list-style-type: none"> ▪ Old discard dump

1.2 Legal Framework

This consolidation document is intended to serve as part of the supporting documentation for an application that will be submitted to the DMR for consent to cede the Mining Rights from BECSA for the applicable sections of Douglas Colliery to Xstrata SA. The following sections briefly introduce the principal legislation applicable.

1.2.1 Mineral and Petroleum Resource Development Act, Act No.28 of 2002 (MPRDA)

Section 11 of the MPRDA provides that –

“ - A mining right may not be ceded, transferred ... or otherwise disposed of without the written consent of the Minister”

Section 102 of the MPRDA provides that –

A ... mining right ... mining work programme [and] environmental management plan may not be amended or varied ... without the written consent of the Minister

Regulation 63 of the Regulations framed under the MPRDA provides that –

In accordance with applicable legislative requirements for pollution control and waste management, a holder of a mining right, prospecting right or mining permit in terms of the act must-

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- a.) *Avoid the generation and production of pollution, waste and mine residue at the source; or*
- b.) *Where the generation and production of pollution, waste and mine residue cannot altogether be avoided, it must be minimised, re-used or recycled; or*
- c.) *Where possible, dispose of pollution, waste and mine residue in a responsible and suitable manner.*

These are the primary guiding principles for the proposed consolidation. The required documentation will be prepared accordingly.

1.2.2 Other Applicable Legislation

The operation will need to comply with the following legislation of the Republic of South Africa:

- The National Water Act, Act 36 of 1998;
- The Mine Health and Safety Act, Act 29 of 1998;
- The National Heritage Resources Act, Act 25 of 1999;
- The National Environmental Management: Air Quality Act, Act 39 of 2004, NEMAQA;
- South African Ambient Air Quality Standards and Guidelines;
- National Environmental Management Act, Act 107 of 1998, NEMA; and
- Conservation of Agricultural Resources Act, Act 43 of 1983.

1.3 Methodology Followed

1.3.1 Proposed Activities (NEMA)

1.3.1.1 iMpunzi Complex – ATCOM East

A Basic Assessment (BA) report was compiled by Ezendalo Environmental solutions in 2011 for proposed infrastructure on ATCOM East in terms of the requirements of NEMA. The draft BA report was made available for public review to give Interested and Affected Parties (I&APs) an opportunity to comment on the proposed activities. Public participation has been conducted and registered I&APs participated in the process in 2011. The report has since been authorised. Jones and Wagener consultants are currently undertaking the NEMA Process for the mining activities of the east pits at ATCOM East. This process is currently in the scoping phase. The NEMA authorization for the additional South Pit dump activities have been approved however the IWULA is outstanding.

1.3.1.2 Tweefontein South – SWCM

An application for a Basic Assessment Report was submitted for the proposed activities to take place in the south eastern corner of SWCM in terms of the requirements of NEMA to the Mpumalanga Department of Economic Development Environment and Tourism. The

project in this area is referred to as AddCar which will involve high-wall mining in two directions away from a central boxcut. The activities triggered include the construction of haul roads as well as the proximity to water courses.

An application for a waste licence in terms of the sewage treatment plant is currently underway. This activity triggers an EIA process. The application and reports will be submitted to the Mpumalanga Department of Economic Development Environment and Tourism.

1.3.2 Current Activities (MPRDA)

The proposed and current activities at Tavistock have hereby been consolidated into a single document in terms of the requirements of the MPRDA.

Meetings with authorities have taken place as part of the Section 11 and Section 102 amendment process and are discussed in Section 4.3. This final consolidated EIA/EMP document will be submitted to the DMR. Public Participation will continue for the new mining areas (ATCOM East and AddCar area) in 2013.

1.4 Objectives

The EIA/EMP Consolidation Report has been updated to include changes in mine plans, additional infrastructure, potential future mining activities, as well as to include the new farm portions which Xstrata SA acquired from BECSA's Douglas Colliery to accommodate new mining reserves.

Focus was placed on current mining activities, as well as potential future mining activities to be undertaken within the ambit of the previously named Tavistock Colliery. All the EIA/EMP reports from the various Tavistock Colliery complexes will be integrated into a single document after which environmental management will be conducted under a uniform single EIA/EMP. The document can therefore be used for the environmental management of the entire Tavistock Colliery mining complexes.

2 PROJECT DESCRIPTION

2.1 Regional Setting

The Tavistock mining area is an existing large coal mining operation being managed as part of two mining complexes. The iMpunzi and Tweefontein South Complexes are located approximately 26 km south west of Emalahleni in the Emalahleni Local Municipality of the Nkangala District Municipality, Mpumalanga Province. The Witbank Coalfield, which is currently the biggest coal producing area in Africa, traverses the region in a general east-west direction. The regional setting and local setting are depicted on Plan 1 and Plan 2 (Appendix A) respectively.

The four closest towns to the two mining complexes are indicated in Table 2-1.

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Table 2-1: Closest Towns to the Mining Complexes

Town	Distance	Direction
Ogies	22 km	NW
Witbank	35 km	NE
Bethal	40 km	SE
Kriel	25 km	S

2.2 Land Tenure

The mining complexes are situated on land owned by different state, public and private entities. The land tenure of the iMpunzi and Tweefontein South Complexes is illustrated in Plan 3 respectively (Appendix A) and is shown in Table 2-2 below. The farms highlighted represent the farms which are to be transferred from BECSA's Douglas Colliery to the iMpunzi Complex ATCOM East operational area (Tavistock Colliery). These farms are depicted on Plan 4 (BECA farms and portions for cession).

Table 2-2: Surface Right Owners of the iMpunzi Complex and Tweefontein South Complex, Tavistock

Owner	Farms	Portions
iMpunzi Complex		
Tavistock Collieries (Pty) Ltd	Klipplaat 462 IS	RE
	Kromfontein 30 IS	25
Xstrata South Africa (Pty) Ltd	Steenkoolspruit 18 IS	1
Phoenix Colliery Ltd	Klipplaat 14 IS	1, 3, 4, 5, 6, 13 & 14
	Steenkoolspruit 18 IS	6, 8, 9, 10, 11 & 12
	Kromfontein 30 IS	2, 3, 4, 5, 6, 9, 11, 12, 14, 18, 19, 20, 21, 22, 23, 24, 26 & 28
Duiker Mining (Pty) Ltd	Klipplaat 14 IS	8 & 9
	Steenkoolspruit 18 IS	3 & 4
	Blesbokfontein 31 IS	2
Ingwe Surface Holdings Ltd	Steenkoolspruit 18 IS	2 & 5
	Van Dyksdrift 19 IS	1 & 3
Transnet Ltd	Klipplaat 14 IS	11 & 12
	Van Dyksdrift 19 IS	6

Owner	Farms	Portions
	Kromfontein 30 IS	13
Government of South Africa	Kromfontein 30 IS	29
	Middeldrift 42 IS	10
Emalaheni Municipality	Steenkoolspruit 18 IS	25, 26, 27 & 28
Middeldrift 42 Eiendomme (Pty) Ltd	Kromfontein 30 IS	31
S.J. Van Jaarsveld	Klipplaat 14 IS	2
S.J. Bronkhorst	Steenkoolspruit 18 IS	7
Twefontein South		
Tavistock Collieries (Pty) Ltd	Blesbokfontein 31 IS	RE
	Blesbokfontein 38 IS	1, 5, 6, 7, 8, 10, 12, 23, 25, 28, 29, 30 & 31
	Klippoortjie 32 IS	19
	Roodepoort 40 IS	4
	Frischgewaagd 60 IS	4 & 17
Xstrata South Africa (Pty) Ltd	Blesbokfontein 38 IS	3
	Vierfontein 61 IS	7
South Witbank Coal Mines Ltd	Blesbokfontein 31 IS	16, 17, 20, 27 & 38
	Frischgewaagd 60 IS	10 & 11
Duiker Mining (Pty) Ltd	Klipplaat 14 IS	8 & 9
	Steenkoolspruit 18 IS	3 & 4
	Blesbokfontein 31 IS	2
	Blesbokfontein 38 IS	13, 35 & 36
	Zaaiwater 11 IS	13
	Klippoortjie 32 IS	26
	Frischgewaagd 60 IS	9 & 12
Nooitgedacht 37 IS	11	
Eskom Holdings Ltd	Frischgewaagd 60 IS	13
Manhattan Syndicate Ltd	Blesbokfontein 38 IS	RE
	Hartbeestfontein 39 IS	RE
Shell South Africa (Pty) Ltd	Blesbokfontein 38 IS	32
J. M. Steenkamp	Blesbokfontein 38 IS	22

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Owner	Farms	Portions
G.J. Claassen	Nooitgedacht 37 IS	1
S.D. Hensley	Nooitgedacht 37 IS	12
BECSA's Douglas Colliery		
BECSA*	Vandyksdrift 19 IS	1
BECSA*	Vandyksdrift 19 IS	3
BECSA*	Vandyksdrift 19 IS	6
BECSA*	Steenkoolspruit 18 IS	A portion of portion S2 of Portion 2
BECSA*	Steenkoolspruit 18 IS	A portion of portion S1 of Portion 2
BECSA*	Steenkoolspruit 18 IS	1
BECSA*	Steenkoolspruit 18 IS	A portion of Portion 5
BECSA*	Kromfontein 30 IS	31

* Currently BECSA until Section 11 is finalised

2.3 Mining Reserves and Resources

Table 2-3: Seams mined

Seam and mining method	Area mined as in 2012 (ha)
5S OC	125
5S UG	200
4S OC	565
4C UG	8870
2S OC	854
2S UG	7719
1S OC	365
1S UG	1420

2.3.1 Coal Reserve

2.3.1.1 Tavistock Colliery

The coal mined at the iMpunzi and Tweefontein South Complexes is bituminous coal from the No. 1, No. 2, No. 4 and No. 5 seams of the Witbank Coalfield. The collieries produce 6000 kcal/kg high grade washed steam coal for the export market, as well as a 5100 kcal/kg lower grade coal for use in local power stations. The estimated coal resources and reserves of the complexes as was previously calculated in 2009 are summarised in Table 2-4 below.

2.4 Mining Method

2.4.1 iMpunzi Complex

Underground mining had been conducted using conventional drill and blast methods, as well as fully mechanised, continuous miner equipment on a bord and pillar system (including total extraction mining, i.e. stooping). The workings were accessed through decline shafts. No underground mining is currently taking place.

Currently all major opencast mining is undertaken using the strip mining method with draglines. All hard overburden (shale/sandstone) and coal is blasted using bulk explosives (heavy ANFO emulsion). The coal is transported by truck to the Crushing and Pillar Screening Plant. Smaller opencast areas are mined by truck-and-shovel techniques.

2.4.1.1 ATCOM

This opencast mine has 2 areas in which mining is being done – ATCOM North and the South Pit triangle (Plan 9e).

The North area has virgin No. 4 seam and No. 2 seam pillars which are mined by Dragline and truck and shovel operations. The overburden is removed down to the No. 4 coal seam which is then removed by a Company owned fleet. The interburden between the No. 4 and 2 seams is removed by Draglines. Coaling is again done by the company owned fleet.

The South Pit triangle contains all virgin coal on the No. 5, 4 and 2 seams. This area of operations will be done entirely by T&S fleets. The over and interburdens will be removed with the coaling undertaken by the company owned fleet. The rollover method will be done ensuring earlier and continuous rehabilitation. Currently a large area of the South Pit has been mined and a section has been rehabilitated. The remainder of the area forms part of the South Pit dump project and will therefore not be rehabilitated at this stage. The smaller triangle section will be mined once sufficient dewatering has been completed (2013) as per the license conditions.

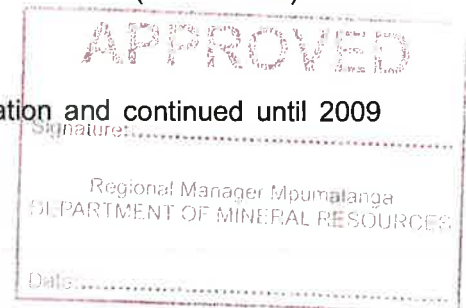
2.4.1.2 ATC

The underground operations had consisted of 3 conventional continuous miner operations. Two sections were stooping the No. 4 seam pillars and one completed the development on No. 2 seam. This mining was completed in late 2008 and the underground mine was closed. The sections equipment and crews were deployed elsewhere in the Xstrata Collieries.

The opencast area, the Butterfly, is being mined by contractors utilizing the truck and shovel – Rollover method. This operation should last until early 2013 and will then move to the Office Pit area utilizing the same method and will continue until 2018 (see Plan 9c).

2.4.1.3 Phoenix

One drill and blast section doing development was in operation and continued until 2009 when all underground coal was depleted. See Plan 9d.



2.4.1.4 ATCOM East

The mining operations at ATCOM East consist of opencast mining, both dragline and truck and shovel. Using T&S the topsoil and overburden is removed down to the No. 4 seam coal which is then removed by a Company owned T&S fleet. The interburden between the No. 4 and 2 seams is removed by draglines. The No 2 seam coaling is again done by the company owned truck and shovel fleet.

The mining area has been divided into 5 separate areas – Steenkoolspruit, Vandyksdrif South, Vandyksdrif West, River Shaft South and River Shaft West. River Shaft West may be extended within the LOM of ATCOM East towards the north east towards Steenkoolspruit. The Dragline, supported by the T&S operations will be utilized at the Steenkoolspruit and Vandyksdrif South areas while the other 3 areas will be done by Truck and Shovel only. See Plan 10a and Plan 10b.

The operations conform to well-practiced opencast mining methods applied throughout the coal mining industry.

The mining rates have been planned and scheduled to match the capacity of the ATCOM Colliery Beneficiation Plant. The mining schedule takes into account the fact that the various seams will be mined as and when required.

2.4.2 Tweefontein South Complex

Underground mining is conducted using conventional drill and blast methods (including total extraction mining, i.e. stooping), as well as fully mechanised, continuous miner equipment on a bord and pillar system. The workings are accessed through decline shafts. Ventilation to the working sections is coursed along the main development, up the centre of the panel and then split along the faces. The ventilation of the workings is achieved by the exhaust fans situated on surface at the Vertical Shaft sites.

Opencast mining is undertaken using the strip mining method with dragline. All hard overburden (shale/sandstone) and coal is blasted using bulk explosives (heavy anfo emulsion). The coal is transported by truck to the Crushing and Pillar Screening Plant. Smaller opencast areas are mined by truck and shovel techniques.

2.4.2.1 SWCM

The current underground mining method is conventional mechanised bord and pillar and stooping on both the No. 2 and 4 seams. This is expected to be completed in 2015, see Plan 9b or 11b. Plan 8 indicates the mined out areas.

2.4.2.2 # 5 Seam Opencast and AddCar

The No 5 seam opencast mini-pit areas will all be mined by truck and shovel – Rollover method. These will be done by contractors and the equipment will be moved between the respective areas as and when required.

The new 5 Seam AddCar project will be using a high wall mining method which incorporates both opencast and underground method. High wall mining was identified to be more suitable for mining coal seams with a high stripping ratio and thin seam thickness.

The previously open cast mined pits, East and West pits, were identified as the first pits to be mined with the high wall miner. East pit was previously used to mine the No 5 seam coal through a conventional board and pillar method. See Plan 11b.

Relatively high stripping ratios (>10) as well as relatively thin coal seams (+/- 1.6m) makes it difficult for conventional mining methods (opencast or underground board and pillar) to effectively extract the resource due to costs and safety reasons. The mining method can be divided into three basic elements:

2.4.2.2.1 Opencast Boxcut Development

The basic requirement for high wall mining is an opencast boxcut pit approximately 50m wide with vertical or close to vertical high walls, cut into the rock down to the coal seam floor. The depth of the pits is determined by the coal seam depth, which generally ranges from 20m to 60m. The length of the pits is determined by the resource layout as well as surface constraints, but can typically range from 200m to 4km depending on conditions.

It is also possible to mine both sides of the boxcut high wall if conditions allow it.

The opencast excavations of the boxcut pit need to happen before the high wall mining takes place. This process normally include excavation of top soil and sub soil, drilling and blasting of hards, stockpiling of material, building of access ramps, haul roads and construction of water management structures.

2.4.2.2.2 High Wall Mining

The high wall mining process consists of a continuous miner, which is logistically linked to a conveyor chain (multiple conveyor cars) that transport coal out to the launch base, onto which the coal falls on a belly conveyor, then stacker and then onto the in-pit run of mine (ROM) stockpile. The conveyor chain between the launch base and continuous miner is shorted or extended by taking out or adding conveyor cars in the chain.

Coal from the in-pit ROM is then loaded with a front end loader onto trucks and transported away to the processing plant.

The cutting width (i.e. 3.6m) of the continuous miner determines the hole width. The horizontal depth from the high wall is normally constrained by mechanical factors of which the conveyor chain plays the most important part. The typical horizontal mining depths range from +/- 200m to 450m.

The underground mining controls are done from inside the launch base which is positioned in the pit, which means that no persons are needed or allowed inside the underground workings for safety reasons.

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The operation requires water and electricity to function. Water is mainly used to cool down the mechanical mining equipment as well as dust suppression at the cutting face, but also to suppress dust on the haul roads.

The high wall mining machine require a power supply of 6.6kV (<5MVA). The majority of the power is used by the CM, conveyor cars and hydraulic system on the launch vehicle.

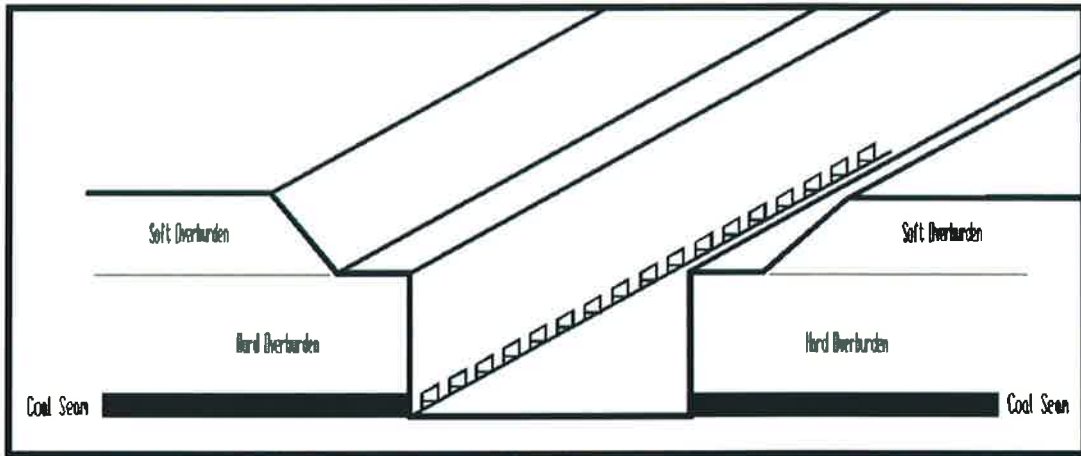


Figure 2-1: Typical cross section of boxcut pit and high wall mining holes

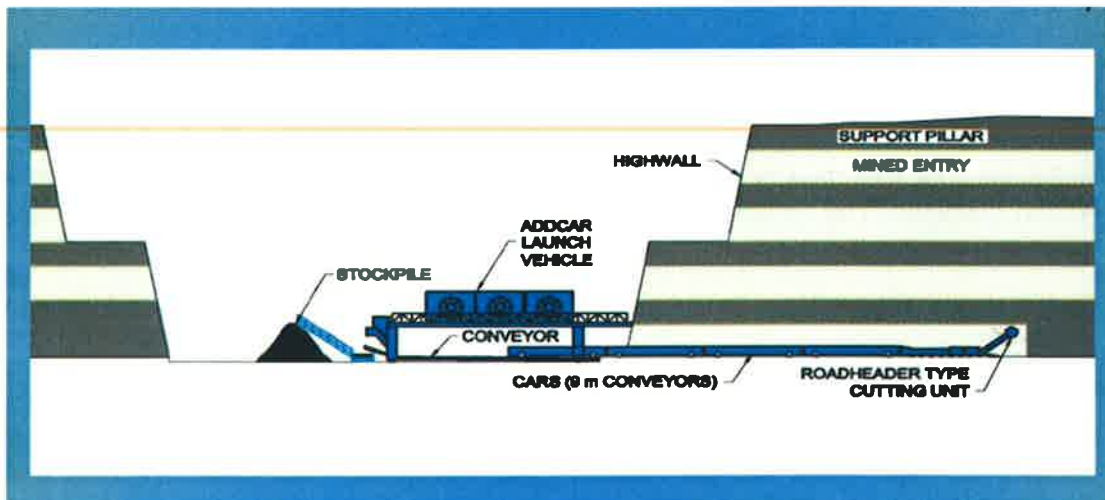


Figure 2-2: Typical cross section of the high wall mining process

2.4.2.2.3 Rehabilitation of the opencast boxcut

Once the high wall mining process is completed, the opencast boxcut rehabilitation can start. This will mainly include earth works to move material from the hards and subsoil stockpiles back into the boxcut pit. The final layer of topsoil will follow with the planting of the appropriate grass/vegetation to complete the rehab.

The holes cut into the underground are temporary closed in the heading as part of the high wall mining operation, and then permanently closed when the boxcut rehabilitation is done. This ensures that the unfilled cavities/holes cannot be accessed for safety reasons.

2.4.3 BECSA's Douglas Colliery

The mining methods employed include both opencast strip mining as well as underground bord and pillar mining. Total extraction has only been undertaken in limited areas in the past.

2.5 Project Life Description

The combined Life of Mine of Tavistock will be 26 years.

2.5.1 iMpunzi Complex

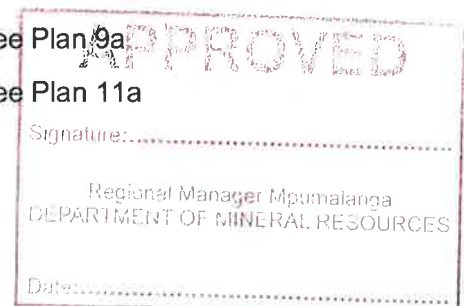
The planned Life of Mine (LoM) periods presented below are dependent on qualitative and quantitative requirements of the markets:

- Middeldrift (ATCOM): No. 4 seam opencast areas will be mined by Truck and Shovel - Rollover operations, potentially using Contractors, from late 2013 with a LOM of 1 year. If aligned with the four Middeldrift/Phoenix pits this will have a LOM of 4 years from 2020.
- ATC (Butterfly Pit): This operation should last until 2013 and will then move to the Office Pit area utilising the same method and will continue until 2018.
- ATCOM South pit triangle: The Life of Mine of ATCOM will be 16 years (2024).
- ATCOM East: The Life of Mine for the entire operation is 26 years.

2.5.2 Tweefontein South Complex

The planned Life of Mine (LoM) periods presented below are dependent on qualitative and quantitative requirements of the markets:

- Tavistock Mine This should be completed in approximately 2013.
- SWCM Underground Section LOM until 2015 – See Plan 9b
- The Klippoortjie OC LOM of 4 years (2015-2018) – See Plan 9a
- AddCar UG LOM of 9 years (2012-2020) – See Plan 11a



- 5 Seam OC & AddCar LOM of 10 years (2013-2022)
boxcuts

2.5.3 BECSA's Douglas Colliery

According to BECSA's MWP, 2011, the current underground operation at the Douglas Colliery will close and opencast mining equipment will be relocated. The employees and fleet will be relocated (refer to Figure 1-2) to suitable areas on the Douglas Colliery. The splitting of the reserves (between Xstrata SA and BECSA) will result in the mining plan for the BECSA to include the remaining 5 draglines and one dragline being transferred to Xstrata SA along with associated coal removal equipment. The new area will fall under ATCOM East's LoM Plan.

2.6 Mining Activities and Infrastructure

Xstrata SA is the third largest exporter of thermal coal in South Africa. The Tavistock Collieries have a total production capacity of more than 15 Mtpa (RoM) coal and a further 184.3 Mt estimated recoverable coal reserves.

BECSA's Douglas Colliery has an underground RoM production which was at around 6 Mtpa until underground pit room constraints caused sections to be closed.

In Appendix A - Plan 5a depicts Tavistock's current mining licence areas and Plan 5b depicts Tavistock's mining licence area after consolidation.

Plan 6 depicts the location of iMpunzi Tweefontein South Complex.

Plans 7a-d depicts the infrastructure on the Impunzi Complex and Plans 7e-g depicts the infrastructure on the Tweefontein South Complex respectively. Plan 26 depicts the current and proposed mining activities.

2.6.1 Current Mining Activities and Infrastructure

2.6.1.1 iMpunzi Complex

The iMpunzi Complex has an annual production capacity of more than 4 Mt RoM coal. A number of the existing operations within iMpunzi are nearing completion leading to the ATCOM East operations being the future of the iMpunzi Complex. iMpunzi Complex's operational areas are described below.

All Mine Residue Facilities (discard dumps) situated in the mining rights boundary of Impunzi are regarded as potential assets which may be part of mining operations in future.

2.6.1.1.1 ATCOM

The ATCOM South pit was mined through the Steenkoolspruit and a very large river diversion was constructed which has diverted the river around this pit. A temporary diversion has been permitted however Xstrata SA will investigate this being made permanent with the South Pit dump process.

Current mining activities occurring at ATCOM include dewatering for the opencast strip mining of the Triangle Pit, a small remaining portion of the South Pit. Additional opencast strip mining takes place at the North Pit and involves pillar extraction from past underground mining.

Mined coal is transported to the ATCOM Plant, where it is washed and conveyed to the rapid load-out silo at ATC. The coal product is transported via railway to the coast for export. Discard is placed on the existing ATCOM/ Phoenix dump, until all the necessary approvals have been obtained from a new disposal facility to be constructed at the South Pit.

The surface infrastructure on ATCOM is depicted below and located on Plan 7a in Appendix A.

2.6.1.1.1.1 ATCOM and Phoenix Plant and Discard Dump

The mined coal was originally transported to the Phoenix Plant, where it was washed and conveyed to the rapid load-out silo. Coal discard was placed on the combined Phoenix/ATCOM discard dump. Mining activities at the Phoenix Colliery ceased in 2008. The Phoenix Plant was decommissioned in 2008 and demolished in 2010.

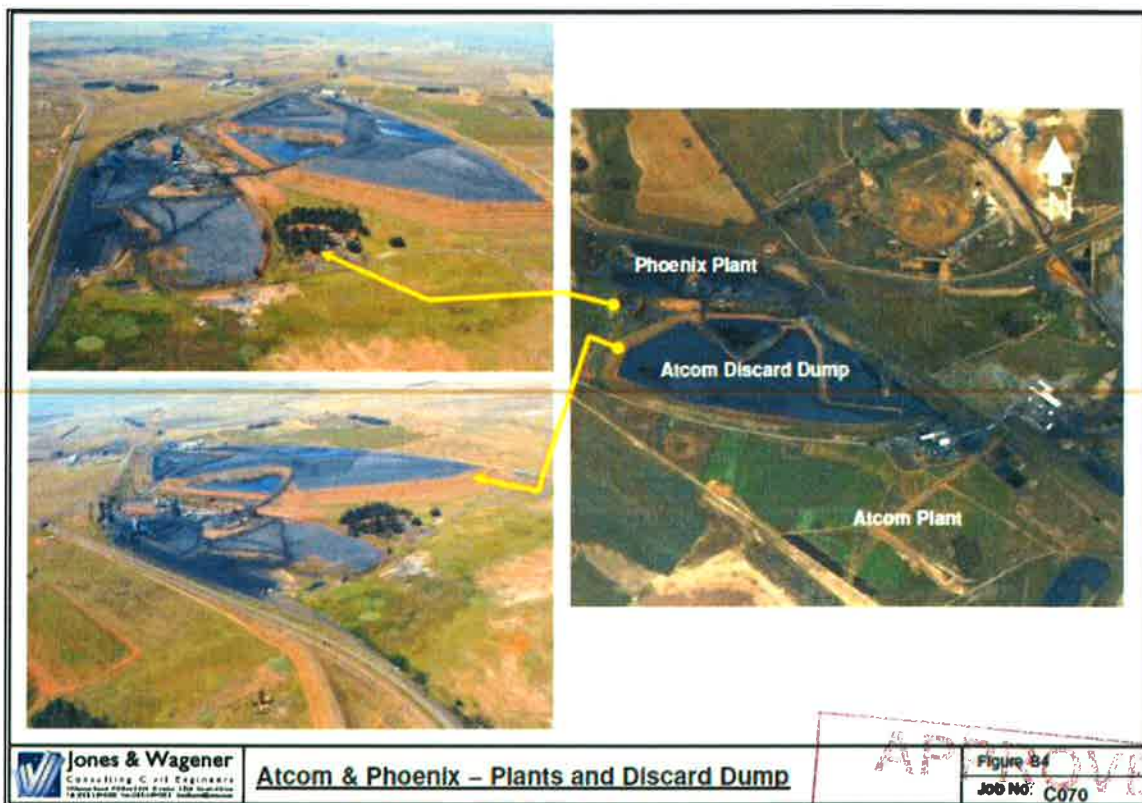


Figure 2-3: ATCOM and Phoenix Plant and Discard Dump

The discard dump is currently being extended with an associated return water dam and silt trap.

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2.6.1.1.1.2 ATCOM North Pit

Additional opencast strip mining takes place at the North Pit and involves pillar extraction from past underground mining that will include mining through a pan.



Figure 2-4: ATCOM North Pit

2.6.1.1.1.3 ATCOM Beath Pit and Dump

Beath Dump was rehabilitated in 2001 however this was not deemed to be successful and a new rehabilitation plan has been drawn up and will be implemented. Rehabilitation is still required for the Beath Pit.



Figure 2-5: ATCOM Beath Pit and Dump

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2.6.1.1.1.4 ATCOM South Pit

The ATCOM South pit was mined through the Steenkoolspruit and a very large river diversion was constructed which has diverted the river temporarily around this pit. A small remaining portion of the South pit will be mined by opencast mining (South Pit triangle) once dewatering has been undertaken. There is a planned discard dump named South Discard Facility which will be constructed on the portion of the south pit footprint. The remaining south pit will therefore be rehabilitated.

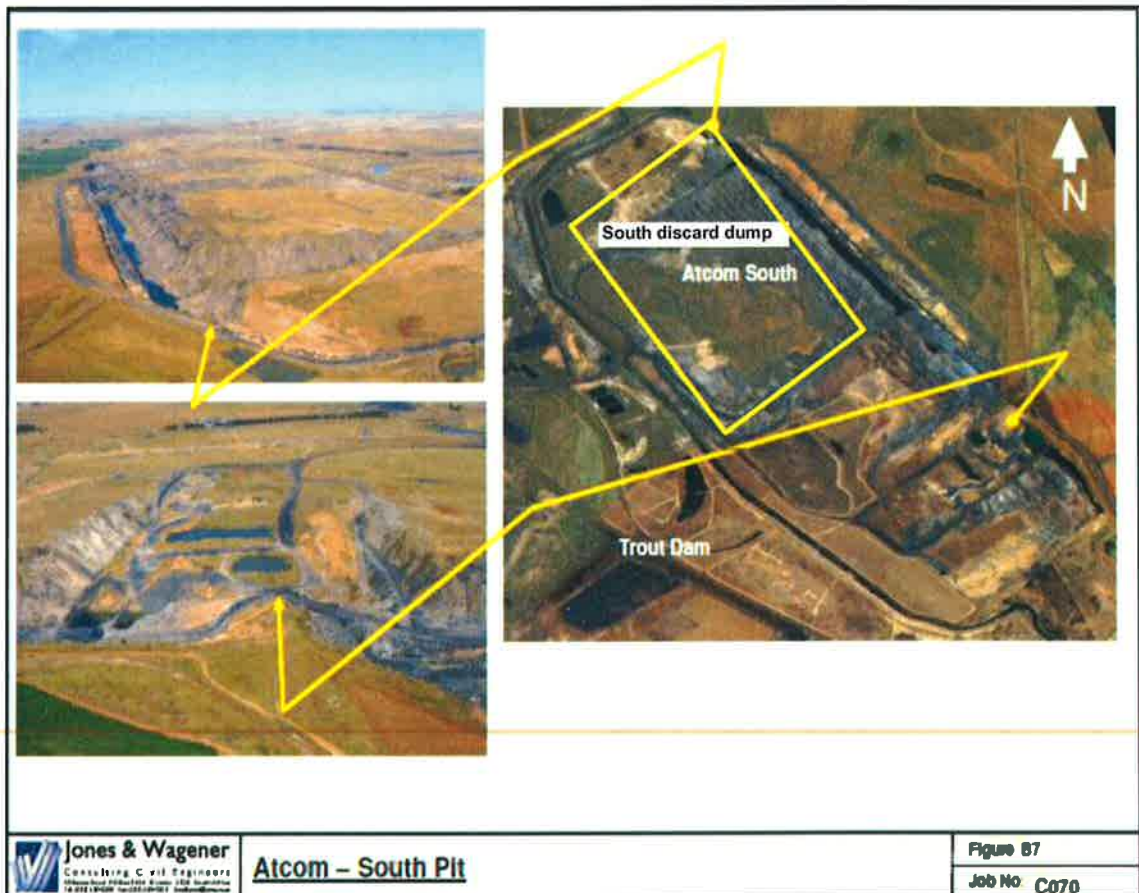


Figure 2-6: ATCOM South Pit

2.6.1.1.1.5 ATCOM Plant and Phoenix Shaft

Mined coal is transported to the ATCOM Plant, where it is washed and conveyed to the rapid load-out silo at ATC. The Phoenix Shaft closed in 2008. Two closed shafts are present between ATCOM Shaft and the location of the previous Phoenix Shaft– Shafts L81 and K72, these still need to be leveled and rehabbed.

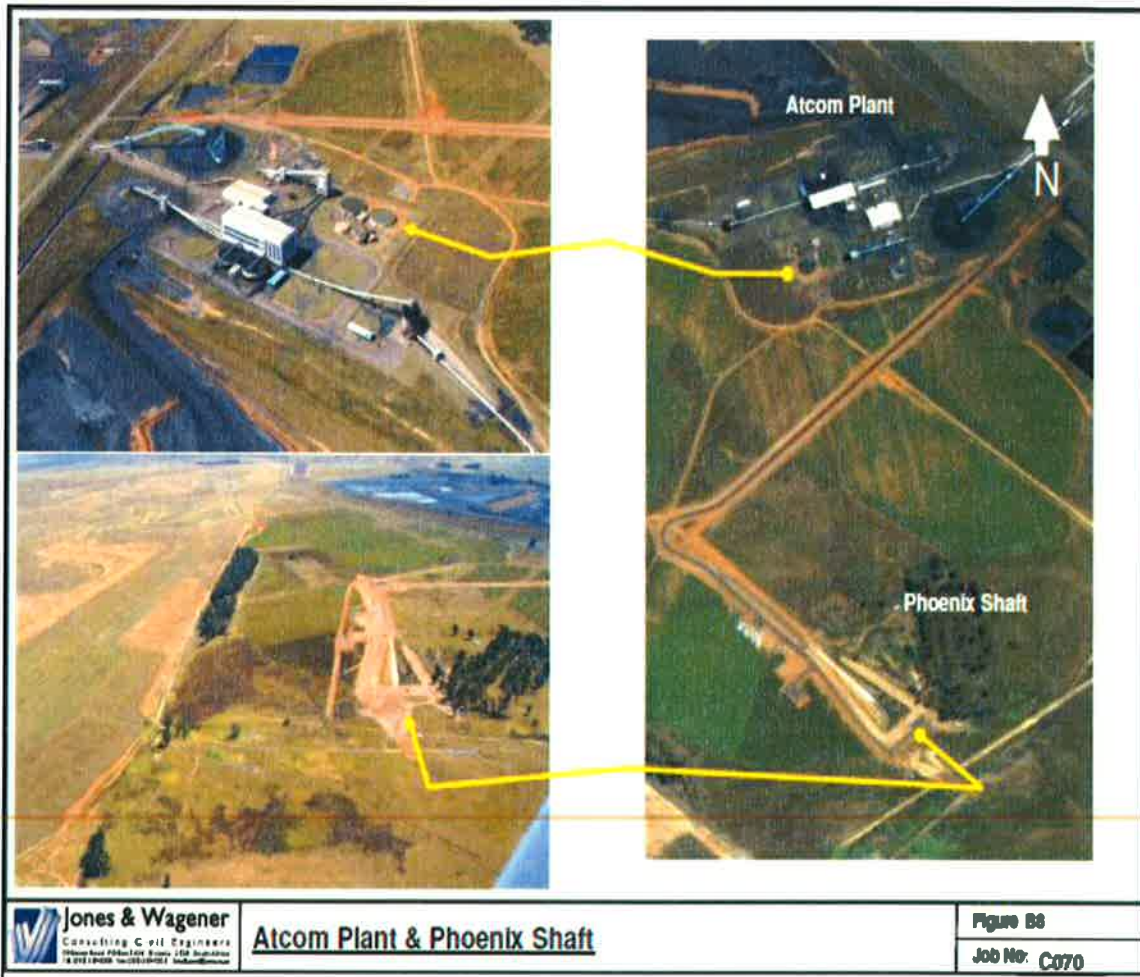


Figure 2-7: ATCOM Plant and Phoenix Shaft

2.6.1.1.1.6 ATCOM Plant Slurry Lagoons

Slurry lagoons at ATCOM were used to dispose fine discard coal. Tailings at the iMpunzi complex are discarded in the slurry lagoon. These have been designed to be able to handle the wet/dry material that is disposed on it. The slurry lagoon is located on Phoenix/ ATCOM. Lagoon 1 (named Fringe 1) is currently being re-mined whilst plans are in place for the future re-mining of Lagoon 2 (Fringe 2).

Currently only ATCOM/Phoenix dump fines paddocks are being used, until finalisation of the South dump and then fines paddocks will be available. Currently also mining out the Fringe 3



and Evoid slurry lagoons, which can then be used again for slurry disposal. Plan 7a depicts the infrastructure on ATCOM (Appendix A).

2.6.1.1.2 ATC

ATC was originally an underground mine that commenced operations in 1977 mining the No. 2 and No. 4 seams. Underground mining has since ceased. Opencast strip mining of the remaining barrier pillars of past underground operations at the Butterfly Pit has commenced in 2009 and is expected to be completed in 2013 from where operations will move to the Office Pit. The mining of the Butterfly Pit required the construction of a permanent diversion (permitted) of the SWCM and Alpha Streams. The coal mined is transported to the ATC Plant for processing and the coal discard placed in the ATC Venture Void, as authorised, located north of the railway siding. The LoM is approximately 5 years.

The complex comprises the following:

- A coal processing plant;
- Workshops,
- Conveyors,
- Stockpiles;
- Offices;
- Sewage treatment plant;
- Water treatment plant;
- A railway load-out station & silo's; and
- PCD's/silt traps.

The surface infrastructure on ATC is depicted on Plan 7c (Appendix A) and is discussed below:

2.6.1.1.2.1 Plant Area

The coal mined is transported to the ATC Plant for processing and the coal discard is placed in the ATC Venture Void. See Plan 7c (Appendix A) for other stockpile locations.

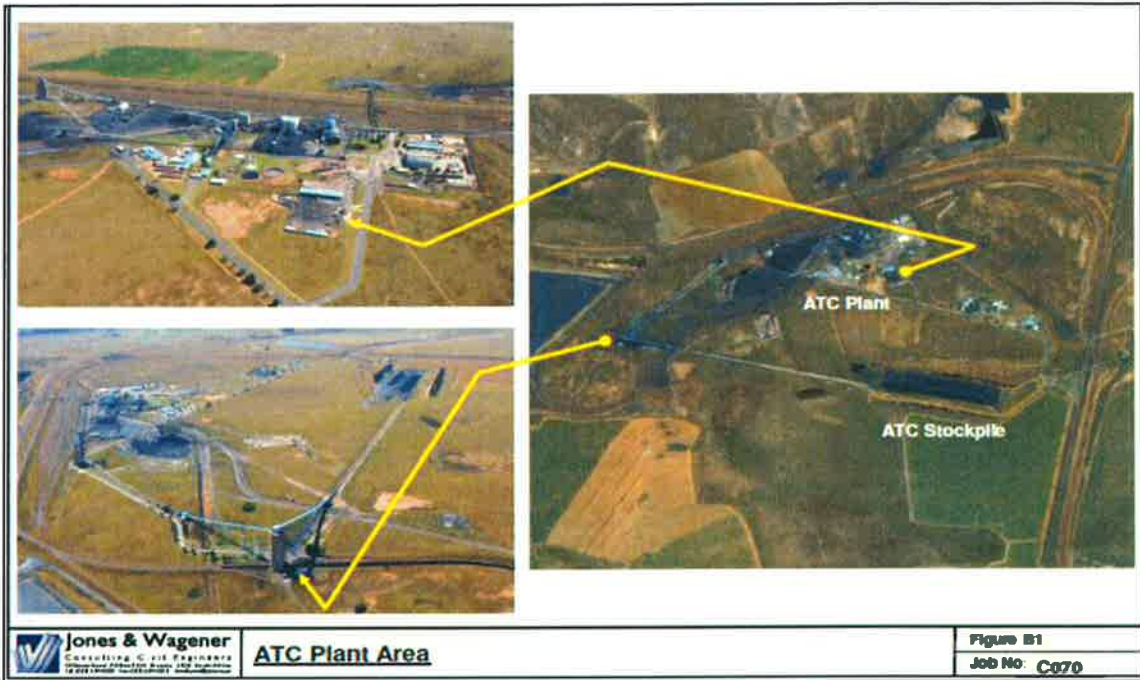


Figure 2-8: ATC Plant Area

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2.6.1.1.2.2 ATC Discard Dump

This dump is used for the disposal of coarse coal discard and involves the process of the final void being filled with discard. The coal mined is transported to the ATC Plant for processing and the coal discard is placed in the ATC Venture Void.

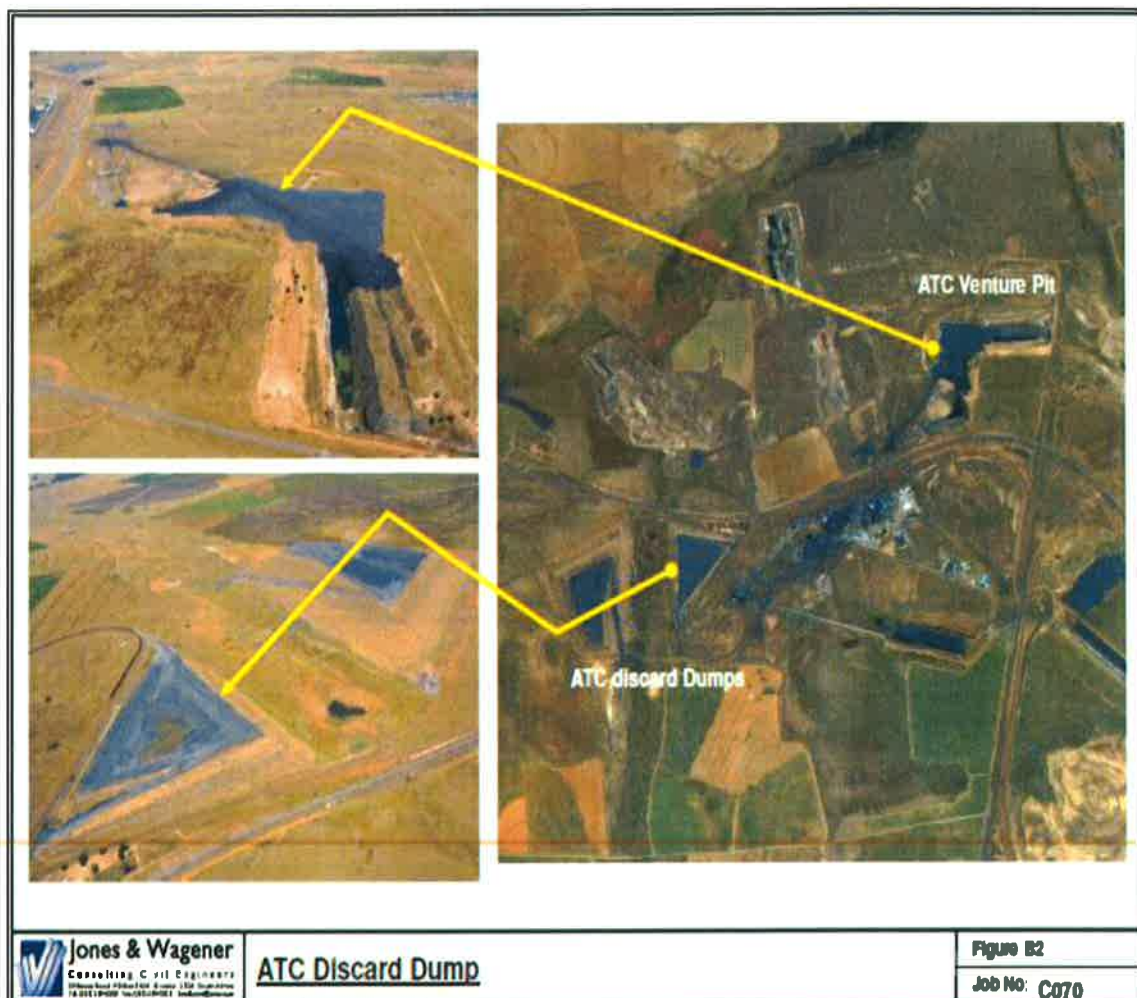


Figure 2-9: ATC Discard Dump

ATC discard dump 1 is currently being re-mined and no 2 is planned for re-mining in future. As discussed, the mining of the Butterfly opencast pit is almost nearing completion and the location is depicted on Plan 7c (Appendix A).

2.6.1.2 **Twefontein South Complex**

The Twefontein South Complex has an annual production capacity of more than 11 Mt RoM. Twefontein South's operational areas are described below (refer to Plan 8e – Plan 8h depicting the infrastructure on Twefontein South Complex in Appendix A).

2.6.1.2.1 Tavistock Mine

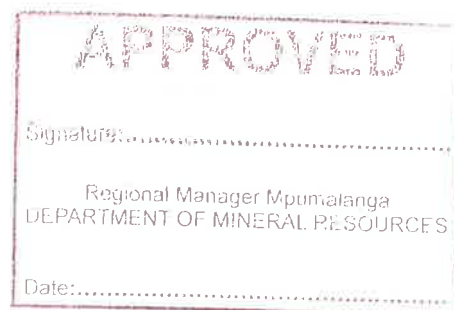
The Tavistock Colliery previously mined coal through bord and pillar and stooping of the No. 4 seam from which it was transported to the Tavistock Plant. The discard was placed on the old Tavistock co-disposal discard dump located on land previously owned by Rietspruit Colliery. Mining has been completed and the Tavistock Plant and old discard dump has been decommissioned.

2.6.1.2.2 SWCM

Remaining operations at SWCM, until 2015, include underground bord and pillar mining of the No. 4 seam and stooping of the No. 4 seam. Coal from the No. 4 seam is transported via conveyor to the SWCM processing plant. Additional underground activities are currently taking place along the highwall of the existing East and West pits, as discussed in Section 2.4. The coal from 5 Seam is transported by trucks to the 5 Seam plant for processing.

The complex comprises the following facilities:

- The coal processing plant;
- Stockpiles and railway load-out area;
- A series of PCDs; and
- An office complex.



2.6.1.2.2.1 South Witbank Plant and Dump 1 of 2

Infrastructure at the south Witbank plant area includes:

- Coal processing plant;
- Stockpile and railway load-out area;
- Old and current discard dumps; and
- A series of pollution control dams.

The SWC consists of an old discard dump no longer in use as well as a new discard dump.

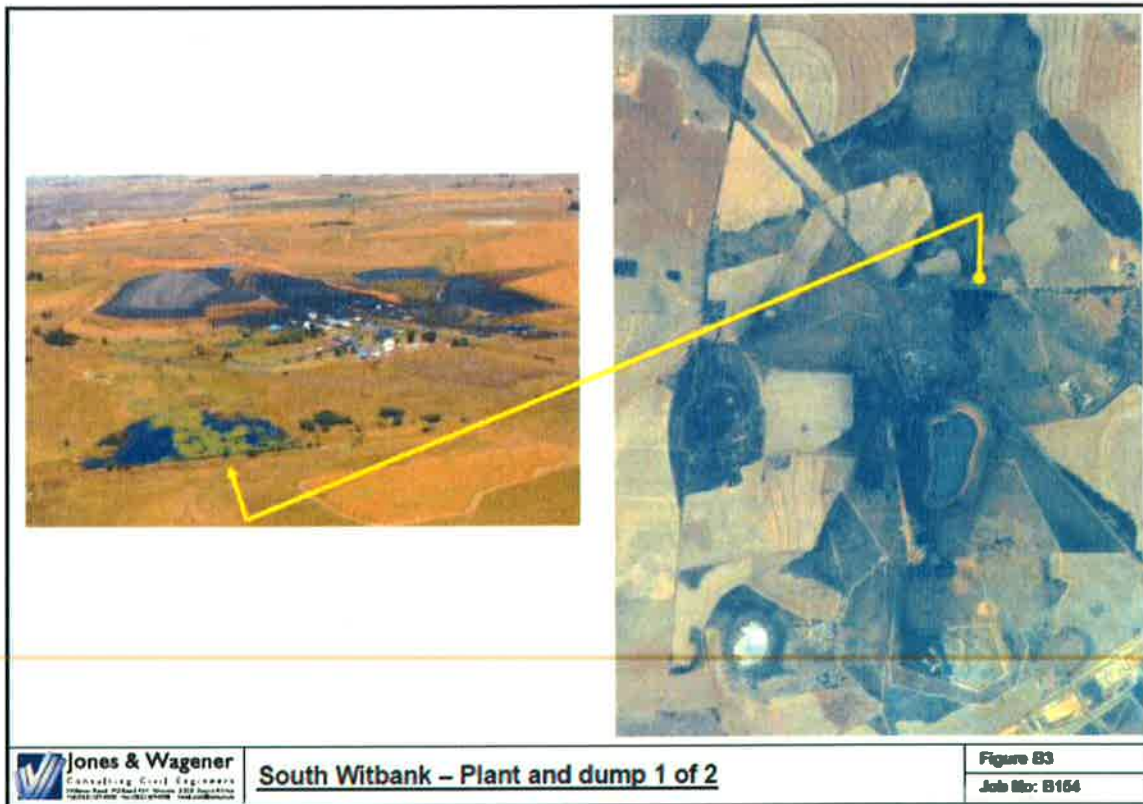


Figure 2-10: South Witbank Plant and Dump 1 of 2

2.6.1.2.2.2 South Witbank Plant and Dump 2 of 2

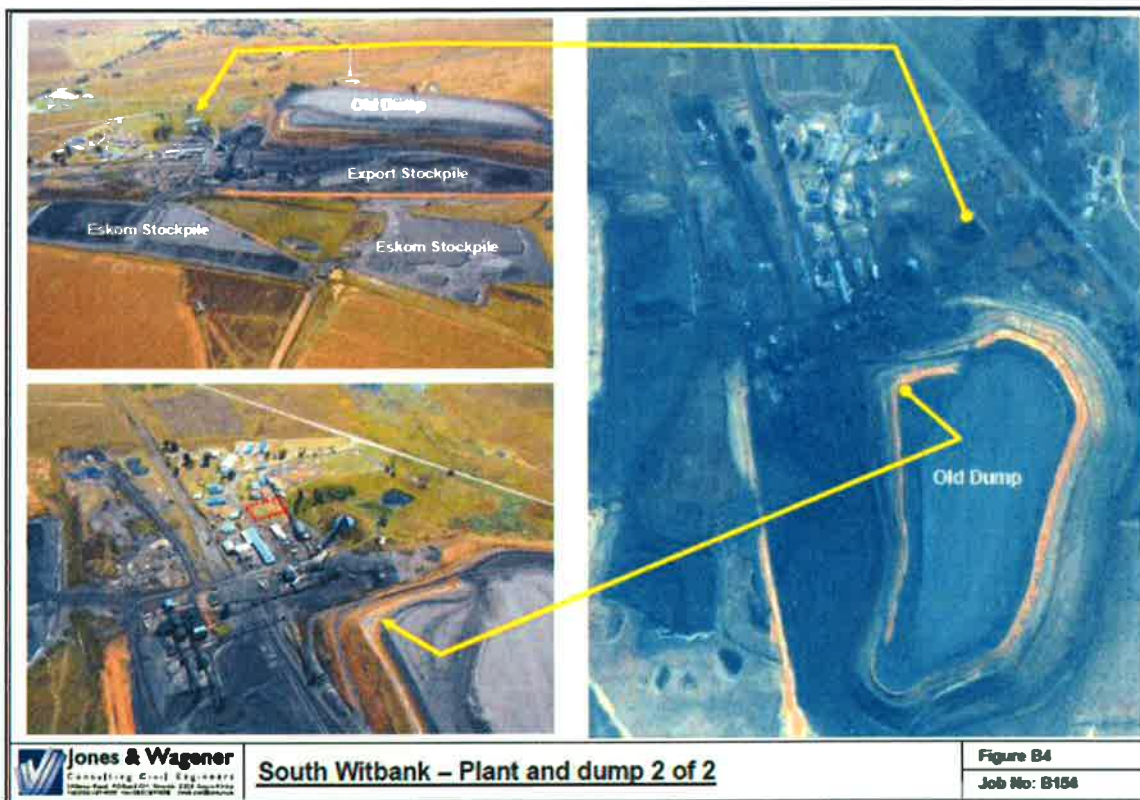


Figure 2-11: South Witbank Plant and Dump 2 of 2

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2.6.1.2.2.3 South Witbank Goedgevonden Crusher

Coal from Goedgevonden Colliery (GGV) was transported to the Goedgevonden Crusher by road, where it was crushed, and transferred down a shaft, onto a conveyor and transported to the plant for processing. The GGV crushing plant was used to feed GGV coal to South Witbank. Since the GGV plant has been commissioned, the crushing plant at South Witbank only worked for another few months before being shut down at the end of March 2011.



Figure 2-12: South Witbank Goedgevonden Crusher

2.6.1.2.3 # 5 Seam Operation

The pit area comprises the following:

- East and West opencast pits;
- Overburden stockpiles;
- A RoM coal stockpile; and
- Offices and workshops.

The surface infrastructure on # 5 Seam is depicted below.

The old 5 Seam opencast mine was located to the south of the South Witbank plant. The operations previously involved opencast strip mining operation of the No.5 seam and there now exists an East and West pit.

These previously open cast mined pits, east and west pits, were identified as the first pits to be mined with the highwall miner (method discussed in Section 2.4). Both pits are relatively close to the 5 seam office complex. The coal from 5 Seam is transported by trucks to the 5 Seam plant for processing.



Figure 2-13: South Witbank # 5 Seam Opencast

2.6.1.3 BECSA’s Douglas Colliery

Douglas Colliery is an underground operation deploying seven Continuous Miner production sections partially extracting select coal horizons with a small open cast operation. No secondary extraction of pillars from underground techniques has taken or will take place at the Douglas Colliery.

2.6.2 Proposed Mining Activities and New Developments

The splitting of the reserves (between Xstrata SA and BECSA) will result in the mining plan for BECSA to include the remaining 5 draglines and one dragline being transferred to Xstrata SA along with associated coal removal equipment. Xstrata SA will be responsible for the delivery of 1.5 Mtpa of coal for the Duvha power station contract (BECSA’s MWP, 2011).

The current and future mining activities as well as infrastructure on the iMpunzi Complex are shown in Table 2-10. The current and proposed mining activities as well as infrastructure on the Tweefontein South Complex are shown in Table 2-11.

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The new developments associated with the iMpunzi Complex and the Tweefontein South Complex are discussed below and indicated on Plan 10a and 10b as well as Plan 11a and 11b. Plan 26b summarises the proposed activities in the Tavistock mining area.

2.6.2.1 iMpunzi Complex

2.6.2.1.1 ATCOM East

The proposed new mining operations include opencast mining of historical underground bord and pillar operations, previously owned by BECSA. Mining at ATCOM East will be a combination of truck and shovel and dragline. There is an estimated 143 Mt of coal remaining at ATCOM East, the future of the iMpunzi Complex. Plan 10a depicts the proposed activities on ATCOM East.

The proposed new mining activities will trigger listed activities under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). Xstrata SA is therefore in the process of a NEMA application for the mining activities and several activities related to the infrastructure were approved in 2011 during a Basic Assessment process undertaken and these are listed below in Table 2-8.

Table 2-8: ATCOM East Listed NEMA Activities

Listing Notice No.	Activity No.	Description of listed activity (not as per the wording of the relevant Government Notice)
Government Gazette Notice No. 33306 of 18 June 2010, Regulation 544 – Listing Notice 1	13	<u>Bulk oil and coolant storage facility:</u> Storage area to handle approximately 150 000 litres of industrial and vehicle oils and coolants
	18	<u>Dredging from a watercourse >5m3:</u> 1. Crossing of a watercourse and four delineated wetland areas by the dewatering pipeline; and 2. Clean water diversion canals around the ATCOM Central Hard Park and the RoM Tip Areas will discharge directly into the Steenkoolspruit, therefore construction will take place within the 1:50 year floodline
	22	<u>Construction of road, outside urban areas, with a reserve wider than 13.5m:</u> Construction of proposed new haul road in order access the new reserves at Vandyksdrift (VDD) East Pit
	28	Amendment of a water use license application to include: 1. Phoenix dump return water dam; 2. Clean water diversion canals around the ATCOM Central Hard Park and the ROM Tip Areas which will discharge directly into the Steenkoolspruit; and 3. The dewatering pipelines will cross the Gilfillan stream by horizontal drilling below the stream bed. The remaining four delineated wetland areas will be crossed by trenching the pipeline through them. 4. Construction of the ROM Pollution control dams

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Mining will take place in the pits indicated in Table 2-9.

Table 2-9: ATCOM East Mining Reserves (Jones and Wagner, Scoping Report 2011)

Mining Pit	Estimated Reserves
Steenkoolspruit Pit	26 Mt
River West Pit (not including possible extension)	22 Mt
River South Pit	14 Mt
VDD West Pit	14 Mt
VDD East Pit	67 Mt
Total	143 Mt

2.6.2.2 Tweefontein South Complex

2.6.2.2.1 SWCM

Highwall mining activities are proposed to take place at the # 5 Seam area and will be known as AddCar. This mining method has been discussed in Section 2.4 and can be seen in Plan 11a in Appendix A.

NEMA authorisation will be applied for to authorise the supporting surface infrastructure.



Table 2-10: Mining activities and infrastructure of the iMpunzi Complex, Tavistock Collieries Limited (Current and Proposed Mining Activities)

iMpunzi Complex			
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC	Phoenix
<p><i>Current activities</i></p>	<p>Opencast Mining</p> <ul style="list-style-type: none"> ▪ ATCOM dump extension 	<p>Opencast Mining of remaining pillars and barrier pillar at Butterfly Pit.</p> <p>Dump reclamation operations on:</p> <ul style="list-style-type: none"> ▪ ATC Dump 1; and ▪ ATC Dump 2 (future). 	<p>No mining currently being undertaken;</p> <p>Reclamation of Fringe 1; and</p> <p>Re-mining of Fringe 3 and avoid.</p>
<p><i>Proposed activities</i></p>	<p>The proposed new mining operations include opencast mining of historical underground bord and pillar operations;</p> <p>Mining at ATCOM East will be a combination of truck and shovel and dragline;</p> <p>Expansion of mine at ATCOM East;</p> <p>Opencast Mining of Steenkoolspruit Pit;</p> <p>Opencast Mining of River South Pit;</p>	<ul style="list-style-type: none"> ▪ Opencast mining at Office Pits; and ▪ Mining of ATC No. 1 (current) and No.2 discard dumps. 	<ul style="list-style-type: none"> ▪ Opencast mining at Middeldrift; ▪ Opencast mining at K7/2 mini-pit; and ▪ Reclamation of Fringe 2.

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iMpunzi Complex			
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC	Phoenix
	<ul style="list-style-type: none"> ▪ Opencast Vandyksdrift (VDD) East Pit; ▪ Opencast River West Pit and possible pit extension; ▪ Opencast VDD West Pit; and ▪ South pit triangle. 		
Infrastructure			
<i>Washing plants</i>	<ul style="list-style-type: none"> ▪ Existing ATCOM plant; ▪ Existing Circular stockpile; and ▪ ESKOM stockpile (existing) and new ESKOM stockpile (proposed) 	<ul style="list-style-type: none"> ▪ Existing ATC coal washing plant; ▪ Existing Stockpile at coal reclaimer; and ▪ Existing Stockpile in plant area – clean coal. 	<ul style="list-style-type: none"> ▪ Existing Tar Plant – closed and demolished; ▪ Existing Closed plant; and ▪ Existing Stockpile area adjacent to plant.
<i>Discard dumps</i>	<ul style="list-style-type: none"> ▪ Existing ATCOM/Phoenix discard dump and proposed extension; ▪ Existing North dump; and ▪ Proposed South discard dump & fines paddocks. 	<ul style="list-style-type: none"> ▪ Existing Venture Void discard dump; ▪ Existing ATC Dump 1; and ▪ Existing ATC Dump 2. 	<ul style="list-style-type: none"> ▪ Existing Current Discard dump extension Phoenix/ ATCOM; and ▪ Existing Beach discard dump.
<i>Slurry ponds</i>	<ul style="list-style-type: none"> ▪ Existing ATCOM/Phoenix slurry 	<ul style="list-style-type: none"> ▪ Existing E-void; 	<ul style="list-style-type: none"> ▪ Existing Fringe 1 slurry dam (H7); and

impunzi Complex			
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC	Phoenix
<i>(with the potential to be reprocessed)</i>	lagoon.	<ul style="list-style-type: none"> Existing Fringe 3 slurry dam; and Existing Venture void 	<ul style="list-style-type: none"> Existing Fringe 2 slurry dam (H6 at H7).
<i>Shafts (Closed underground operations soon to be rehabilitated)</i>	<ul style="list-style-type: none"> 2 East; 3 West vent shaft; 3 east vent shaft; 3 east shaft; 2 east vent shaft; 2 West vent shaft; Wilge No. 1; and Wilge incline shaft 	<ul style="list-style-type: none"> Three vent shafts; Beynon; One incline shat; and ATC Fan no. 1. 	<ul style="list-style-type: none"> Beath fan; L8 vent shaft; 4 west vent (H6); 7 South vent (L4); 6 North vent (K3); L8 incline shaft; and K7 – 1 incline shaft; and Beath incline.
<i>Opercast operations</i>	<ul style="list-style-type: none"> Proposed North pit; Proposed South pit; Proposed Beath pit; and Proposed East pits. 	<ul style="list-style-type: none"> Existing Butterfly Pit. 	<ul style="list-style-type: none"> Existing Office pits; and Existing Middeldrift pits.
<i>Supporting infrastructure</i>	<ul style="list-style-type: none"> Existing PCD Dams; Workshop (extension currently taking place with new buildings); 	<ul style="list-style-type: none"> Existing Workshops; Existing Stores/Offices; 	<ul style="list-style-type: none"> Existing Coal stockpile area adjacent to plant.

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iMpunzi Complex		
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC
	<ul style="list-style-type: none"> ▪ Existing Water management measures and haul roads)/ Stores/ Offices; ▪ Existing Central hardpark (already constructed under a Basic Assessment Report); ▪ HDV/LDV re-fuel bay (existing and new being installed); ▪ Explosives Silo (proposed and current); ▪ Existing Secondary crusher; ▪ Existing Fuel bays; ▪ Existing ROM tip and conveyors ▪ Existing Primary crusher; ▪ Existing LDV wash bay; ▪ Existing HDV wash bay; ▪ Existing Water treatment plant at coal plant; ▪ Existing Water treatment plant 2; ▪ Existing Waste water purification 	<ul style="list-style-type: none"> ▪ Existing PCD's/silt traps; ▪ Existing ROM tip and conveyors and ▪ Existing Wastewater treatment plant and STP.
		Phoenix



iMpunzi Complex			
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC	Phoenix
	<p>plant below workshops;</p> <ul style="list-style-type: none"> ▪ Two New Wastewater purification plants (Sewage rx plants). One at new workshop area and one at hardpark; ▪ Proposed bridge at VDD West Pit; ▪ Proposed dewatering pipeline ▪ Proposed haul roads and poerline; and ▪ Proposed Dragline walk between the east pits. 		
	<ul style="list-style-type: none"> ▪ RoM PCD (awaiting IWULA); ▪ Construction of Phoenix discard dump PCD (awaiting IWULA); ▪ Clean/dirty water separation trenches for RoM tip; ▪ An approved dewatering pipeline which will include river/ stream crossings; ▪ Clean/dirty water separation 	<ul style="list-style-type: none"> ▪ Existing PCD; ▪ Existing Silt traps; ▪ Existing Clean/dirty water separation trenches; ▪ Existing Waste water purification plant; and ▪ Existing Butterfly stream diversions (alpha stream and south Witbank 	<ul style="list-style-type: none"> ▪ Existing PCD; ▪ Existing Clean/dirty water separation trenches & diversion of dirty water underground; and ▪ Existing Stream diversions.

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iMpunzi Complex			
Status/ infrastructure	ATCOM/ ATCOM EAST	ATC	Phoenix
	measures around Fringe 2 and Fringe 2; <ul style="list-style-type: none">▪ Other existing PCD's (ramp2, workshop, plant); and▪ Steenkoolspruit stream diversion.	stream)	



Table 2-11: Mining Activities and infrastructure of the Tweefontein South (Tweefontein) Complex, Tavistock Collieries Limited

Tweefontein South Complex			
Status/ infrastructure	Tavistock Mine	SWCM	# 5 Seam Operation
<i>Current activities</i>	Underground has been completed	Underground	Opencast has been completed
<i>Future activities</i>		An area (known as the AddCar Project area) is to be mined and the required NEMA authorisation has been applied for and the water and waste applications are underway. The proposed mining will make use of high-wall mining.	High wall mining is planned for the no. 5 Seam south east pit and 5 Seam south west pit. The AddCar Project area will include several underground sections and will require additional ramps and haul roads.
Infrastructure			
<i>Washing plants</i>	<ul style="list-style-type: none"> Existing Coal Washing Plant – no longer operational 	<ul style="list-style-type: none"> Existing Coal Washing Plant 	<ul style="list-style-type: none"> Existing 5 Seam plant
<i>Discard dumps</i>	<ul style="list-style-type: none"> No longer operational 	<ul style="list-style-type: none"> Existing New Discard Dump; and Old Discard Dump (now decommissioned) 	

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Tweefontein South Complex				
Status/ infrastructure	Tavistock Mine	SWCM	# 5 Seam Operation	
Shafts (underground operations)	<ul style="list-style-type: none"> ▪ No longer operational 	<ul style="list-style-type: none"> ▪ Existing Vent shaft (C14, D14); ▪ Existing Vent shaft (B11); ▪ Existing Vent shaft (B11); ▪ Existing Vent shaft (C11); ▪ Existing Vent shaft (Taylor); ▪ Existing C 11 Incline Shaft; and ▪ Existing Incline shaft No. 2 		
Supporting infrastructure	<ul style="list-style-type: none"> ▪ Existing PCD below dump, North East side; ▪ Existing PCD near explosive magazine; ▪ Coal Stockpile; ▪ Water Treatment Plant; and ▪ Waste Water Purification Plant 	<ul style="list-style-type: none"> ▪ Existing ventilation shaft; ▪ Proposed PCD; ▪ Proposed Stockpiles; ▪ Proposed Waste Water Purification Plant; ▪ Proposed bus shelter and taxi rank; 	<ul style="list-style-type: none"> ▪ Existing opencast pits; ▪ Overburden stockpiles; ▪ A RoM coal stockpile; and ▪ Offices and workshops. 	

Tweefontein South Complex			
Status/ infrastructure	Tavistock Mine	SWCM	# 5 Seam Operation
		<ul style="list-style-type: none"> ▪ Proposed parking area; ▪ Proposed security building; ▪ Proposed offices; ▪ Proposed change house; ▪ Proposed mining store; ▪ Proposed cable store; ▪ Proposed workshop; ▪ Proposed industrial washbay; ▪ Proposed Proposed ISO bin waste yard; ▪ Proposed sub station; ▪ Proposed brake test ramp; ▪ Proposed sweage treatment plant; ▪ Proposed parking area; ▪ Proposed canteen and seating; ▪ Proposed Joy/Sandvik store; ▪ Proposed storage yaerd; ▪ Proposed stone dust silo; and ▪ Proposed haul roads and boxcut areas. 	

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Tweefontein South Complex			
Status/ infrastructure	Tavistock Mine	SWCM	# 5 Seam Operation
Clean and dirty water management	<ul style="list-style-type: none"> Plant and Discard Dump complex: Diversion of clean catchment from the west of the export plant stockpile and north of the new dump to the east into the watercourse draining towards Reitspruit Colliery. Discard Dump Facility: No clean catchment diversion 	<ul style="list-style-type: none"> Existing Plant and Discard Dump complex: Diversion of clean catchment around the plant, old dump and dam into the South Witbank stream. Existing Discard Dump Facility: Diversion of clean catchment around southern, eastern and western perimeter of the dump to South Witbank stream. Existing Goedgevonden crusher: No diversion of clean runoff. Existing C11 Shaft: Diversion of clean catchment around the shaft. 	<ul style="list-style-type: none"> 5 Seam opencast: Diversion of clean catchment around the pit by berms.

2.7 Other Existing Infrastructure and Servitudes

The iMpunzi and Tweefontein South Complexes have well-developed infrastructure. Several public and private roads, railway lines, conveyor systems and power lines service the area. Plan 5a and Plan 5b indicate the location of infrastructure and servitudes in the mining areas. The complexes are described separately below.

2.7.1 Public Roads

There are two provincial roads servicing the mining area, namely the R547 and the R545. The R547 connects the mining area with the N12 national road to the north and Bethal and the Kriel Power Station to the south.

2.7.1.1 iMpunzi Complex

Infrastructure and servitudes that are still in use and are relevant to water and waste management are provided in the sections below.

The roads currently in use include the R547, local road to Onverwacht which links the R547 and R545 north / south, local road to Frischgewaagd which links the R547 and R545 east / west, and local road between Klipplaat and Leslie.

2.7.1.2 Tweefontein South Complex

The R545 connects the mining area with Ogies to the northeast and Bethal in the south and provides access to the Tweefontein South Complex.

2.7.1.3 BECSA's Douglas Colliery

The R544 and R575 Provincial Roads, bypass the Douglas Colliery complex on the west and north of the property respectively.

2.7.2 Railway Lines


The mining area is well serviced by an extensive railway system. The main railway line to Richards Bay passes through the mining area and is used for the transport of export coal to the coast. The Phoenix Colliery, ATC, Tavistock and SWCM have adjoining railway sidings, while ATCOM is linked to the rapid load-out silo at ATC via an overland conveyor.

2.7.2.1 BECSA's Douglas Colliery

A Transnet railway line serves both the Boschmanskrans and Vandyksdrift complex.

2.7.3 Power Lines

Due to the presence of several large coal-fired power stations in the region, several Eskom power lines and substations dot the landscape in the mining area. The power lines supply the mining operations, processing plants and surrounding agricultural community with electricity or transport the power to consumers further afield. The complexes contain Eskom 132, 88, 33, 21 and 11 kV power lines with substations.


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2.7.3.1 BECSA's Douglas Colliery

Two Eskom 400 kilovolt (kV) lines intersect the north section of the Boschmanskrans property.

2.7.4 Servitudes

There are several Eskom, Gascor, Transnet and Strategic Fuel Fund (SFF) servitudes scattered over the mining area. Many of these are not registered.

2.8 Waste Management

2.8.1 Coal Discard Management

There are currently nine discard dumps at the iMpunzi and Tweefontein South Complexes, of which only three are operational. As summarised in Table 2-12, the older dumps allow for the integrated disposal of coarse discard and fine slurry, while newer dumps make use of various methods. The newer dumps at Tavistock and SWCM have separate coarse and slurry deposition areas whilst the ATCOM/Phoenix dump is a coarse discard dump. Slurry deposition areas have been created within these dumps. The stockpiling of slurry on surface in separate areas is relatively new and previously, slurry was also deposited in underground workings. The location of the existing discard dumps are shown in Plans 7 (infrastructure plans for all the sites).

The integrated disposal discard dumps were designed with slopes and ledges to cover the smallest possible area and to minimise erosion of the side walls. In addition, the design maximises water retention on the slope ledges, thereby encouraging evapotranspiration and the growth of vegetation.

Table 2-12: Existing Discard dumps at the iMpunzi and Tweefontein South Complexes, Tavistock Collieries Limited

No.	Discard dump	Technology	Shape
iMpunzi Complex			
1.	Beath dump (to be rehabilitated)	Integrated disposal	Whaleback
2.	Phoenix/ATCOM Discard Dump	Integrated disposal	Terraced
3.	ATC Discard Dump No. 1 (currently being re-mined)	Integrated disposal	Terraced
4.	ATC Discard Dump No. 2 (to be re-mined)	Integrated disposal	Terraced
5.	ATC Venture Dump	Integrated disposal	In a final void (will be positive)

No.	Discard dump	Technology	Shape
6.	Old North Dump (to be rehabilitated)	Integrated disposal	Terraced
Twefontein South Complex			
7.	Old Tavistock Discard Dump (to be rehabilitated)	Integrated disposal	Terraced/whaleback
8.	New Tavistock Discard Dump (Rietspruit Dump)	Co-disposal	Terraced/whaleback
9.	Old SWCM Discard Dump (to be rehabilitated)	Integrated disposal	Terraced
10	New SWCM Discard Dump	Co-disposal	Terraced/whaleback

The ATC Venture Dump is constructed within an old opencast pit located to the north of the ATC Plant. It entails filling the underground voids below the pit with slurry and filling the opencast pit with coarse discard and slurry from the ATC Plant. Once at ground level, the discard will be placed on top of the filled void in the shape of a whale back, with an outer slope of 1:4 up to 28 m in height, 1:10 up to 32 m height and 1:50 thereafter. Stormwater berms will be constructed around the dump at each slope change, in order to prevent erosion. The outer slopes and top of the dump will be covered with a minimum of 300 mm of soil and vegetation.

The Tavistock Rietspruit and SWCM Co-disposal Discard Dumps have been designed to maximise the return of water to the plants for reuse as process water. Water contained in the slurry collect in supernatant pools located at the centre of the slurry paddocks. The water is then harvested from the pools via decant-and interconnected pipelines which feed into the return water dams. From here, the water is pumped back to the plants. For a detailed description of the discard dump designs, please refer to the EIA/EMP Addendums for the Tavistock Discard Dump (2007) and the SWCM Discard Dump Extension (2003).

Xstrata SA is currently also planning a new discard dump at ATCOM South in order to accommodate discard generated from washing of coal from the new ATCOM East mining area. A separated EIA/EMP was compiled for the proposed dump and approved in 2012.

2.8.1.1 iMpunzi Complex

Tailings at iMpunzi are discarded in the Phoenix/ATCOM slurry lagoons. These have been designed to be able to handle the wet/dry material that is disposed on it. The slurry lagoons are located on Phoenix and ATCOM and include Fringe 1,2,3 and void and Venture void.

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2.8.1.2 Tweefontein South Complex

Tailings were historically transported as slurry to a tailings facility for dewatering and disposal.

Discard is disposed of at the various discard dumps which exist at each of the collieries. These must be designed to engineering standards and incorporate elements such as slope and height to ensure that it is a stable facility.

2.8.2 Sewage Treatment

Each colliery is served by separate facilities for the handling and treatment of sewage. These are described in Table 2-13. In addition there are several small septic tanks and French drain systems serving the change houses and other outlying facilities. Waste Licences are awaiting approval for two new sewage treatment facilities at ATCOM and Tweefontein South.

Table 2-13: Sewage treatment facilities for the iMpunzi and Tweefontein South Complexes and Tavistock

Colliery	Treatment process	Capacity ²
iMpunzi Complex		
ATCOM	Extended Aeration (Floating) (to be upgraded)	Contributors population = 500
ATC	Extended Aeration (Floating)	Contributors population = 500
Tweefontein South		
Tavistock	Extended Aeration (Orbal & Floating)	Contributors population = 2000
SWCM	Extended Aeration (Orbal)	Contributors population = 1000

2.8.3 Coal Stockpiles

Coal mined at the Phoenix Colliery was placed on RoM stockpiles located at the Phoenix Plant. Two new stockpiles are located at ATC and ATCOM for coal mined from the Butterfly Pit and new ATCOM East, respectively. These are:

- ATC – linear stockpile & stockpile at the wash plant; and
- ATCOM – circular stockpile and 2 smaller ROM stockpiles for ESKOM product as well as new stockpile for east coal. All with water management measures in place to separate clean/dirty water. Also part of old ROM stockpile still left – in process of removing.

² Contributors population based on 225 litres per person per day.

minimising wastes at the source and to recover or reuse wastes. Where this is not possible, waste should be treated, destroyed or disposed of in an environmentally sound manner.

At each colliery, wastes are segregated and placed in colour-coded containers located around the site. Waste removal is outsourced to a specialist waste management company which disposes of the wastes at an appropriate landfill site.

In general, hazardous wastes cannot be re-used or recycled and would therefore end up being disposed of to a permitted hazardous waste facility. These waste types would include such wastes as; chemicals, chemical containers and bags, mercury containing waste such as fluorescent tubes, any transformer oils that may contain polychlorinated biphenyls (PCB's), hydrocarbons etc. A registered waste removal company is also responsible for removing this type of waste, which is then disposed of at Holfontein, near Delmas.

Domestic waste is removed by the registered waste removal company and then dumped at the Witbank General Waste Landfill Site.

Industrial waste is also removed by registered waste removal company and dumped at a licensed waste disposal site. Scrap metal and rubber components are sent to the reclamation yard to be sold or recycled.

The WMS for the collieries is discussed in more detail in Section 10.3.

2.8.4.2 BECSA's Douglas Colliery

The mine disposes of domestic off site at the Kriel Municipal Domestic Site. A contractor collects and removes the waste.

The mine disposes of domestic waste at a site situated on Vandyksdrift in the PSS discard dump. All scrap metal is taken to a central storage area and sold to scrap dealers. Used oil is stored in drums and sold to refinery contractors.

2.8.5 Existing Clean and Dirty Water Management

2.8.5.1 Potable Water Supply

2.8.5.1.1 iMpunzi Complex

Potable water is abstracted from the Olifants River and Phoenix dam and treated in the water treatment plants. The potable water is then stored in the following potable water tanks:

- TK 3;
- ATC header tanks.

2.8.5.1.2 Tweefontein South Complex

Raw water for potable use is sourced from ATC via ATCOM pump station and then purified at Tavistock. The Tavistock water purification plant has capacity of 1 200 m³/day and uses clariflocculation/autonomous sand gravity filters and chlorination. SWCM and the 5 Seam operations receive potable water from Tavistock.

and species such as mongoose appear to be persecuted according to the flight behaviour of individuals seen. Many larger mammals are likely to be transient due to the lack of refuges and persecution. All mammals observed in the area fall into the least concerned Red Data category.

Mammal species encountered at the collieries were all common residents of the Highveld Grassland and furthermore, none of these were protected species. All species were found at sites in areas where natural habitat was available, and not in rehabilitated areas. Animals were found within areas of preference, e.g. Water mongoose (*Atilax paludinosus*) was found close areas where permanent water is available, while the Common duiker (*Sylvicapra grimmia*) was found within dense tall grass stands, also close to permanent water. No particular site was found to contain a high percentage of mammals; however the amount of mammals seen on each site will increase with the amount of observation time spent on the particular site.

During the 2006, 2007 and 2011 surveys undertaken the following species were seen:

- Black-backed jackal (*Canis mesomelas*)
- Cape clawless otter (*Aonyx capensis*)
- Serval (*Felis serval*)
- Yellow mongoose (*Cynictis penicullata*)
- Slender mongoose (*Galerella sanguinea*)
- Water mongoose (*Atilax paludinosus*)
- Dwarf mongoose (*Helogale parvula*)
- Aardvark (*Orycteropus afer*)
- Warthog (*Phacochoerus aethiopicus*)
- Grey duiker (*Sylvicapra grimmia*)
- Steenbok (*Raphicerus campestris*)
- Springbok (*Antidorcas marsupialis*)
- Cape Porcupine (*Hystrix africaeaustralis*)
- Greater Canerat (*Thryonomys swinderianus*)
- Common Molerat (*Cryptomys hottentotus*)
- Brants' (Highveld) Gerbil (*Tatera brantsii*)
- Vlei Rat (*Otomys irroratus*)
- Angoni Vlei Rat (*Otomys angoniensis*)
- Striped mouse (*Rhabdomys pumilio*)
- Water Rat (*Dasymys incomtus*)
- Namaqua Rock Mouse (*Aethomys namaquensis*)

- Single-striped Mouse (*Lemniscomys rosalia*)
- Multimammate mouse (*Mastomys coucha*)
- Scrub hare (*Lepus saxatilis*)
- Jameson's red rock rabbit (*Pronolagus randensis*)

3.1.9.2 Bird species

Bird species that were observed in the study area include three near threatened bird species, the Melodius Lark (*Mirafra cheniana*), the Grass Owl (*Tyto capensis*) and the Blue Korhaan (*Eupodotis caerulescens*). One vulnerable species, the Greater Flamingo (*Phoenicopterus ruber*) was also sighted.

The Blue Korhaan has decreased in numbers in the east of its range in the face of dense human settlement and extensive agriculture and other threats that impinge on its grassland habitat. Given that the future of the Grassland Biome is under severe threat, this endemic species should be monitored. The Grass Owl has a preference for wet grassland and vleis areas where it nests on the ground. Its main threats include habitat degradation and destruction and disturbance to its nesting sites by people and various farm stock animals. To preserve this species its breeding habitat will need to be preserved. The Greater Flamingo has its core range in the central areas of South Africa where its occurrence matches the distribution of endorheic pans. A decline in the populations can be attributed to soda ash and salt mining at breeding sites, disturbance by low-flying aircraft, fences across water bodies, collision with utility lines, fluctuating water levels and other forms of human interference (Barnes, 2000).

A total of 88 and 102 bird species were observed at iMpunzi and Southstock (Tweefontein south) respectively during surveys in 2006, 2007 and 2011.

3.1.9.3 Reptile and amphibian species

The herpetofauna of wetlands in general tends to be poor due to a paucity of habitat diversity. In addition they are difficult to see in a dense field layer in grasslands and go into hiding when disturbed. Among the rocky outcrops special attention was given to them but no sightings were recorded. It is therefore difficult to assess their presence or absence.

Given the abundance of wetlands in the area and the diversity of aquatic habitats it is expected that amphibian diversity is high. The same can be said for reptiles with regard to the diversity of terrestrial habitats and the availability of food.

The frequency of grass fires is detrimental to the existence of reptiles and amphibians not only directly, but also indirectly as they are exposed to predation following the removal of cover, which will result in reduced abundance and possibly in local extinctions of some species.

The lack of reptile and amphibian sightings are by no means an indication of their absence, the abundance of favourable habitat and remoteness of many of the areas is actually an indication of a high probability of their presence. The reason for the very few reptile and

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amphibian diversities recorded within the area of interest, is because of the degraded state in which the area is. This low species diversity may be attributed to mining and associated activities that have occurred in the area historically and currently.

3.1.9.4 Terrestrial invertebrates

The number of represented families collected during the Biodiversity Assessment was relatively high for the Grassland Biome, based on other assessments done in grasslands in the Witbank Coalfields area. The reason for this is that areas sampled are still relatively natural sites and a diversity of habitats were sampled within the area such as rocky outcrops, pans and areas along rivers. See Plan 16c.

3.1.9.5 Endangered or Rare Species

Based on the information presented in the Red Data books regarding present distribution and habitat, the following intermediate, vulnerable and rare species could possibly exist in the area.

Bird species that were observed in the study area include three near threatened bird species, the Melodius Lark (*Mirafra cheniana*), the Grass Owl (*Tyto capensis*) and the Blue Korhaan (*Eupodotis caerulescens*). One vulnerable species, the Greater Flamingo (*Phoenicopterus ruber*) was also sighted. See Plan 16d.

3.1.10 Aquatic environment

The following existing studies are available in Appendix D.

Title	Author	Date	Operation
SWC, Tavistock, Klippoortjie			
Aquatic biodiversity and baseline biomonitoring assessment	Clean Stream	2011	Southstock
Biodiversity Assessment: Aquatic Ecological Specialist Study (Draft)	ECOSUN	2006	South Witbank
Biodiversity Assessment: Aquatic Ecological Specialist Study (Draft)	ECOSUN	2006	Tavistock Colliery
iMpunzi complex			
Biodiversity management plan for XCSA iMpunzi Complex	Clean Stream Biological Services (CSBS)	2011	iMpunzi Complex
Wet season biomonitoring assessment for the iMpunzi Complex	Clean Stream Biological Services (CSBS)	2012	iMpunzi Complex
Dry season biomonitoring assessment	iMpunzi Complex	2012	iMpunzi Complex

for the iMpunzi Complex			
Second quarterly toxicity testing survey for 2012 iMpunzi Complex	iMpunzi Complex	2012	iMpunzi Complex
Baseline Environmental Study and Impact Assessment - BECSA	Nepid Consultants	2009	Vandyksdrift South
An investigation into the ecological integrity of the Olifants River - BECSA	Strategic Environmental Services	2009	Douglas Colliery
Draft aquatic biomonitoring report (Draft)	Golder Associates	2008	ATCOM
Aquatic ecological assessments and wetland delineation of the Alpha and South Witbank streams	Digby Wells	2007	Butterfly Pit

3.1.10.1 iMpunzi Complex

The Olifants River catchment is well documented and this system is considered to be one of the most polluted systems in southern Africa, largely attributed to the high number of anthropogenic stressors that are present. Sources of stressors imposed onto the system include intensive coal mining activity, coal-fired power generation, industrial activities and agriculture, combined with a general decline in the operation and management of waste water treatment infrastructure, especially sewage treatment. Owing to this, the current state of the system should be monitored in light of the associated operation in order to identify any impacts caused to the system as a result of the mining operation. Potential risks should also be assessed in order to manage activities proactively to avoid further deterioration of the catchment.

An aquatic biomonitoring programme was conducted at two sites associated with the iMpunzi Complex during August 2008 (Golder, 2008). The most recent data is from a wet season biomonitoring programmes conducted by Clean Stream in 2011.

Plan 17 depicts the biomonitoring points.

3.1.10.1.1 In-situ water quality

In situ water quality measurements were recorded using field instruments. The results are shown in Table 3-14. In situ water quality has a direct influence on aquatic life forms and should thus be considered during the interpretation of biological results.

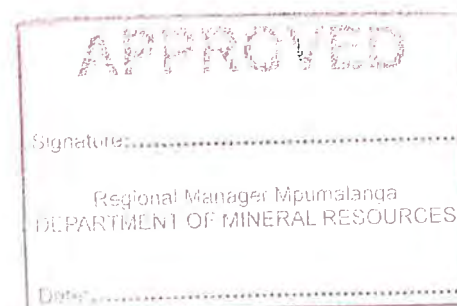


Table 3-13: Location of biomonitoring points at iMpunzi Complex

Site	Description	Latitude (S)	Longitude (E)
OLIF-US	Olifants River, upstream of the Steenkoolspruit confluence and hence upstream of potential iMpunzi Complex impacts.	26° 3'48.55"S	29° 15'0.03"E
SK-US	Steenkoolspruit upstream of potential iMpunzi impacts.	26° 8'4.12"S	29° 15'59.26"E
SK-DS	Steenkoolspruit in downstream reaches of iMpunzi study area.	26° 3'59.23"S	29° 14'56.56"E
OLIF-DS	Olifants River at pump station, downstream of potential iMpunzi impacts.	26° 3'32.31"S	29° 15'8.50"E
South-Witbank stream	Site on South-Witbank stream, a stream to be diverted in near future for mining purposes.	26° 06.925	29° 09.217
ZW-US	Zaaiwaterspruit upstream of Phoenix Dam, upstream of potential iMpunzi impacts.	26° 4'23.40"S	29° 10'37.08"E
GILF	Downstream reaches of Gilfillan stream before its confluence with the Zaaiwaterspruit (Downstream of potential iMpunzi impacts).	26° 4'12.28"S	29° 11'49.55"E
NORTH PAN	Pan wetland in northern section of iMpunzi study area.	26° 3'29.43"S	29° 14'16.42"E

Table 3-14: *In situ* water quality at monitoring sites, February 2011 (Clean Stream, Wet Season Biomonitoring Survey)

Monitoring site	Conductivity (mS/m)	Oxygen (mg/l)	Oxygen (%)	pH	Water Temp. (°C)	Turbidity (visual)
OLIF-US	43.3	5.7	76.8	7.98	25.9	Turbid
SK-US	45.7	12.51	183	8.91	26.6	Slight
SK-DS	50.3	5.92	84.2	7.90	28.6	Turbid
OLIF-DS	46.8	5.80	80.0	7.73	22.2	Slight to turbid
SWS	90.7	4.98	81.2	8.21	32.2	Clear
ZW-US	60.4	3.24	48.9	6.98	23.8	Slight
GILF	118.0	3.30	45.7	7.37	21.3	Clear
NORTH PAN	146.60	8.06	129.4	9.41	32.0	Green

Available information indicates that the water quality of most aquatic ecosystems in the study area has been reduced as a result of various human activities, which includes mining, agriculture and residential area.

Electrical conductivity increased downstream in the Steenkoolspruit after flowing through the iMpunzi study area, resulting in a slight increase in salt levels of the Olifants River. It must be noted that non-iMpunzi activities also impact on this section of the Steenkoolspruit. The Steenkoolspruit and the Olifants River System is also in a deteriorated state when entering the iMpunzi study area. Electrical conductivity levels in the Gilfillan, South Witbank Stream, Alpha stream and Zaaiwaterspruit also indicated altered water quality prevailing in these systems, which may be related to both iMpunzi and non-iMpunzi related activities.

3.1.10.1.2 Habitat assessment and SASS5

The SASS5 index indicated that in the Olifants River ecosystem, it was highly likely that the downstream improvement in biotic integrity (based on invertebrates) were the result of

improved habitat, and hence no conclusion could be drawn whether water quality deterioration had a notable impact on the invertebrate habitat assemblage between these two sites. The SASS5 index furthermore indicated that biotic integrity may have deteriorated in this ecosystem between the March 2009 and February 2011 surveys.

In the Steenkoolspruit, the most comparable biotope was identified to be vegetation, and the SASS vegetation scores were higher at the downstream site, therefore confirming that biotic integrity did not deteriorate further after flowing through the iMpunzi study area. It must however be noted that the biotic integrity of the upstream site was already in a highly deteriorated state as a result of extensive upstream mining and agricultural activities. Temporal trends indicated that conditions may have improved at the upstream site (SK-US) between the March 2009 and February 2011 surveys, while conditions remained fairly similar at the downstream site over this period.

Based on the application of the SASS5 protocol it seems that conditions have not deteriorated between the March 2009 and February 2011 surveys (based on site ZW-US).

The SASS5 protocol also indicated that conditions have remained similar or at worst have deteriorated only slightly in the Gilfillan stream since the March 2009 survey. This is promising since EC values reflected a significant increase in salt levels at this site since the previous survey.

Table 3-15: SASS5, ASPT scores per biotope IHAS index scores (Clean Stream 2011)

Monitoring site	SASS5 score	ASPT	SASS5-score per biotope			Biotope availability and suitability (%)			
			Stones	Vegetation	GSM	Stones	Vegetation	GSM	Combined
OLIF-US	54	4.50	n/a	54	5	0	47	20	22
SK-US	70	4.38	29	35	9	40	88	27	40
SK-DS	43	4.30	n/a	43	3	0	0	27	27
OLIF-DS	66	4.71	n/a	65	15	0	80	47	42
SWS	56	3.63	38	33	n/a	27	13	47	29
ZW-US	66	4.40	n/a	45	n/a	0	47	0	16
GILF	54	4.50	n/a	44	28	0	40	27	22

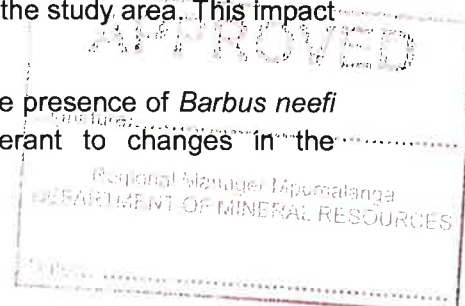
3.1.10.1.3 Ichthyofauna

Based on available fish distribution information and the availability of preferred habitats under pre-disturbance conditions, seven indigenous fish species may be expected under natural conditions in the iMpunzi study area.

The presence of six of the expected seven indigenous fish species have been confirmed in the iMpunzi study area. The reason for the absence of the seventh species (Straightfin barb) is uncertain, and may be related to natural causes as it is not expected that water quality, flow or habitat availability is currently a limiting factor for this species.

Of some concern for the biodiversity of the aquatic ecosystems of the study area is the presence and abundance of six alien and translocated species in the study area. This impact is not related to iMpunzi mining activities.

A promising observation during the February 2011 survey was the presence of *Barbus neefi* (Sidespot barb), a species that is overall moderately intolerant to changes in the



environment (including alteration to water quality) in the Zaaiwaterspruit that is known to have deteriorated water quality at times. The very low abundance (only one individual sampled during 2011) however is an indication that this species is not abundant and may be struggling to survive. Its presence is however promising and should conditions improve, this species should become more abundant.

3.1.10.2 Tweefontein South

An aquatic biomonitoring survey was conducted at eight sites associated with the Tweefontein South Complex during February 2011 (Clean Stream, 2011). The sites sampled were the following:

- Site in a tributary of the Rietspruit in southern section of study area (RS-Trib);
- Site in Rietspruit along the southern boundary of the Tweefontein South Complex study area (RS);
- Site in the Klippoortjiespruit in the western section of the study area (KP-US);
- Site in a tributary of the Klippoortjiespruit in the western section of the study area; KP-Trib)
- Site in the South Witbank Stream, downstream of dam in central section of study area (SWS);
- Site in Alpha stream at road crossing to west of Tweefontein South Environmental office complex (AS);
- Site on Zaaiwaterspruit at R545 road crossing, lying outside of Tweefontein South surface rights area. Objective of this site is to reflect the condition of the Zaaiwaterspruit upstream of potential Tweefontein South complex impacts (ZW-US); and
- Site on Zaaiwaterspruit lying outside of Tweefontein South surface rights area. Objective of this site is to reflect the condition of the Zaaiwaterspruit downstream of potential Tweefontein South complex impacts (ZW-DS).

In order to determine the ecological integrity of the aquatic environment certain ecological indicators were selected to represent each of the responding habitat, stressor and response components of the aquatic environment. Plan 17 depicts the Biomonitoring points.

3.1.10.2.1 In Situ Water Quality

In situ water quality measurements were recorded using field instruments. The results are shown in Table 3-16. In situ water quality has a direct influence on aquatic life forms and should thus be considered during the interpretation of biological results.

Table 3-16: *In situ* water quality at monitoring sites, February 2011 (Twefontein South complex)

Monitoring Site	Conductivity (Ms/M)	pH	Dissolved Oxygen (mg/l)	Oxygen Saturation (%)	Water Temp. (°C)	Clarity (Visual)
RS-Trib	32.4	7.38	601	79.5	19.3	Clear
RS	20.2	6.92	5.50	76.2	23.1	Slight
KP-US	36.2	6.98	6.42	92.0	23.7	Clear
KP-Trib	25.1	7.02	7.25	103.0	27.2	Clear
SWS	136.8	6.97	6.10	97.5	30.1	Clear
AS	31.5	6.80	3.33	60.2	30.6	Clear
ZW-US	31.5	7.04	6.81	97.00	23.1	Clear
ZW-DS	60.4	6.98	3.24	48.9	23.8	Slight

3.1.10.2.2 *Habitat Assessment*

The Integrated Habitat Assessment System (IHAS) scores recorded during the February 2012 survey of monitoring sites are summarised in Table 3-17. The habitat integrity of the South Witbank Stream, as determined at site SWS was moderate to poor, with water abstraction, flow-, bed- and channel-modification all being responsible for deterioration. These were all the direct result of a dam and mining area directly upstream of the site. The Alpha stream in the vicinity of site AS had good to moderate habitat integrity, with flow modification associated with farm dams and road crossing being the primary identified impacts. The IHI indicates that flow modification and bed modification both had a moderate impact (site ZW-US) to a large impact (site ZW-DS) on the habitat integrity of the Zaiwaterspruit sites. These were all associated to the presence of dams (flow modification) and sedimentation related to soil disturbance in the catchments (especially mining). It can be expected that the flow and bed modification at the sites would have a negative impact on the biota and may have contributed to changes from the natural condition.



Table 3-17: Site Index of Habitat Integrity Results for Stream sites in the Tweefontein South Complex

Activity/ Impact on habitat	Sampling site							
	RS-Trib	RS	KP-US	KP-Trib	SWS	AS	ZW-US	ZW-DS
Water abstraction	1	3	1	0	3	1	1	3
Flow modification	1	5	1	3	5	3	3	5
Bed modification	0	5	3	1	5	1	3	5
Channel Modification	0	5	3	1	3	1	1	0
Inundation	0	0	0	5	0	0	0	0
Exotic macrophytes	0	0	0	0	0	0	0	0
Solid waste disposal	0	0	1	0	0	0	0	0
Indigenous vegetation removal	0	3	3	0	0	1	0	0
Exotic vegetation encroachment	0	0	1	0	0	0	1	0
Bank Erosion	1	5	1	0	0	1	0	0

Key:

- 0 = no impact on fish habitat
- 1 = small impact on fish habitat
- 3 = moderate impact on fish habitat
- 5 = large impact on fish habitat

3.1.10.2.3 Aquatic macro-invertebrates

The SASS5 aquatic macroinvertebrate index scores ranged between 30 (site ZW-US) to 74 (KP-US and KP-Trib) (Table 3-18) during the February 2011 survey. The scores reflect poor to moderate biotic integrity, based on aquatic macroinvertebrates, prevailing in the lotic ecosystems of the study area. Those areas that seem of moderate integrity include the Rietspruit tributary (site RS-Trib), the Klippoortjiespruit ecosystem (as reflected by site KP-US and KP-Trib), the upper reaches of the Alpha stream (site AS) and South Witbank Stream (SWS) and the lower reaches of the Zaiwaterspruit (ZW-DS). Areas of poor integrity

that was measured in the two rainy seasons preceding the field investigation, has resulted in extensive saturation of this perched aquifer horizon. This observation is mainly supported by the low TDS - and other hydro-chemical values observed at springs unaffected by mining activities, suggesting that water emanating from springs are probably not from deep circulation, but rather from the saturation of the shallow and/or perched aquifers, both of which are more susceptible to rainfall recharge.

- The shallow depths to the water table observed in rehabilitated opencast pits, and around some of these pits, especially those close to the Olifants River, suggest a real possibility for post closure decant.

3.1.13.2.3 Groundwater Quality

Assessment of the background ground water quality, was based on information generated by the ground water quality monitoring system, for the greater Douglas area, compiled into the above data sets and graphs. A process of elimination, subject to the criteria listed below, resulted in the selection of 20 boreholes and springs, believed to represent background ground water quality, for the greater Douglas area:

- Hydro-chemical imaging, was used as a first screening tool to eliminate boreholes, possibly influenced by any pollution source. This also meant that boreholes close to pollution sources (surface and sub-surface) were carefully scrutinised from this study group, if deemed necessary.
- After a statistical evaluation of Electrical Conductivity values, all boreholes with Electrical Conductivity values in excess of 70 mS/m were discarded. This value is regarded as marginal in terms of the SA Drinking Water Standard.
- Since only boreholes affected by pollution had a drastic change in pH values, all boreholes that did not fully comply with the SA Drinking Water Standard for pH values, were discarded.
- Indicators, including NO₃, Na and Cl were used to assess possible agricultural related influences, on external users' boreholes and springs. Very little, if any, influences from agricultural activities were found.
- Elevated values for SO₄ and Fe are the first indicators for possible mine-related pollution occurring. It was however discovered that the groundwater of the area (including the chosen "background quality") has moderately elevated Fe values. Because of this only SO₄ was used as a further screening tool discarding all boreholes with an SO₄ value exceeding 20 mg/l.
- The remainder of the boreholes was screened for elevated values of any constituent that might form a distinct outlier. Where the natural background value of any constituent was present at a natural elevated value (like Fe), it was included in the study group.
- Through this process of elimination, a certain background image emerged. This image is distinct, both in terms of hydro-chemical image, as well as water quality ranges, for the different water quality variables.

- Finally, all localities which obviously did not fit this background ground water quality profile, were eliminated.

3.1.13.2.4 Groundwater Use

The following observations are relevant to the 50 boreholes and 9 springs:

- 9 of the 50 boreholes are destroyed.
- Of the remaining 41 boreholes, 19 are not currently used. Douglas Colliery is the owner of 2 boreholes and 4 springs, leaving only 20 boreholes and 5 springs, currently in use by external users.
- User application information obtained for the 20 boreholes, indicate use related primarily to domestic purposes, with 3 boreholes used exclusively for stock watering.
- User application information obtained for the 5 springs, indicate use related mostly to stock watering, with only one spring, used solely for domestic purposes.
- No record exists to indicate that ground water resources are being used for irrigation purposes. JMA Consulting's assessment is that the aquifers in the area will not support sustainable irrigation practices.
- Reports of mining related impacts on the boreholes of external users were restricted to boreholes located in aquifers overlying the underground mining activities of the Welverdiend section, estimated to be well beyond the potential influence radius of any existing/proposed open-cast mining.

3.1.13.2.5 Groundwater Zone

In describing the ground water zone for the total Douglas mine area, attention will be given to the physical and hydraulic characteristics of the aquifer(s). The geohydrological regime for the greater Douglas area, represents an impacted zone due to the extent of historical and current mining activities. Certain aspects of the geohydrology, e.g storativity, permeability and ground water flow directions will be discussed in section 29 (Impact Assessment).

3.1.13.2.6 Groundwater use

Groundwater use within the Witbank Coalfield generally occurs from the weathered aquifer or the fractured Karoo aquifer to provide domestic water supply and for stock watering during winter. Irrigation does not generally occur due to the low yields of the two aquifers in question. The lack of groundwater use is due to the change in land use due to the mining activity. The only user of groundwater will be the ecological reserve that relies on the base flow of the local streams to maintain dry weather flow and associated ecological processes.

3.1.13.2.7 Groundwater zone

Mining of the coal seams has resulted in the introduction of an artificial aquifer system which generally dominates the groundwater flow on a regional and local scale. The board and pillar workings allow the overlying fractured and weathered aquifer flow systems to generally remain in place, except in areas where subsidence occurred due to stooping or pillar

collapse (generally older workings). The workings act as an aquifer with a very high transmissivity and storage and flow is generally controlled by the floor contours of the mined seam and the layout of the mine workings themselves.

Opencast workings have resulted in the total destruction of the natural aquifer system. The rehabilitated opencast workings have replaced the weathered and fractured Karoo aquifer systems with the opencast spoil, effectively a porous aquifer with a significantly increased transmissivity and storability.

Mines fill up with water after closure. As a result, hydraulic gradients develop between them and different hydraulic water pressures are exerted onto peripheral areas or compartments within mines. This results in regional water flow between mines, or onto the surface.

3.1.13.2.8 Annual Monitoring

The Annual Monitoring Reports (2011/2012) are included in Appendix K.

The figures below illustrate the monitoring result from 2011 sampling.



Figure 3-9: ATC Groundwater 2011 results (Annual Monitoring report)



Figure 3-10: SWC Groundwater 2011 results (Annual Monitoring report)

For the detailed results of groundwater monitoring at the iMpunzi and Tweefontein South Complexes, please refer to the *Annual Environmental Monitoring Report (2011/2012)* for the Xstrata iMpunzi and Tweefontein South Complex.

3.1.14 Air Quality

The following existing studies are available in Appendix H.

Title	Author	Date	Operation
Review and optimization of the Xstrata Coal South Africa's (XCSA) ambient air quality monitoring system for the Witbank group	Airshed Planning Professionals (Pty) Ltd for Xstrata Coal South Africa	May 2012	Whole area
Air quality impact assessment for the proposed ATCOM East coal mining project near Witbank	Airshed Planning Professionals (Pty) Ltd for Jones and Wagener (Pty) Ltd	Feb 2010	ATCOM East

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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:

3.1.14.1 Tavistock Colliery

Air pollution in the region arises from the numerous mining operations, farming activities and coal-fired power stations. Sources of dust pollution include dust entrainment from haul roads, blasting in opencast sections, discard dumps and soil stockpiles.

Xstrata SA currently has a dust fallout monitoring network at its mining complexes. Dust fall-out monitoring takes place on a monthly basis as part of the iMpunzi and Tweefontein South air quality monitoring programme. The locations of air quality monitoring points are illustrated in Plan 22. The most recent dust fallout monitoring results have been compared to the SANS 1929 particulate fall-out guidelines and indicate that the majority of dust fall-out values at the collieries fall within the residential and industrial bands (May 2012). Values that warrant action has been recorded adjacent to the ATC discard dumps, the ATC plant and the ATC railway siding; as well as southeast and northwest of the ATCOM/Phoenix discard dump. Dust fallout levels that fall within the alert band were also recorded at the Tavistock discard dump. The monitoring points are depicted on Plan 22.

3.1.14.2 BECSA's Douglas Colliery

Dustfall monitoring started in November 1998. Areas with the highest potential of causing an impact on air quality were identified namely, the Vlaklaagte opencast, the Vlaklaagte tip area, the pit 4 haul road and the VDD Plant. A monitoring point was commissioned at each site in November 1998.

At the present all sites exceeds the value of 1200 mg/d/m² during the winter months apart from the plant area It is, however, to soon to establish a trend and monitoring will have to continue at these sites for at least another two years before meaningful trends can be established (Douglas EMPR, 2000).

Annual Monitoring Report for 2011/2012 has been included in Appendix K.

3.1.15 Noise

The following existing studies are available in Appendix I.

Title	Author	Date	Operation
The development of a long term environmental monitoring programme	M ² Environmental Connections cc	2012	Whole area
Noise impact assessment	M ² Environmental Connections cc	2010	ATCOM East

3.1.15.1 Tavistock Colliery

Mining activities in surrounding areas contribute to noise levels. A limited amount of noise pollution from mining activities arises from opencast blasting, movements of haul trucks, conveyors, ventilation fans and beneficiation plants. Plan 23 depicts the noise monitoring points.

The noise impacts, although causing little public nuisance, are specific to the various sites throughout the property, as there are numerous roads through it, residential areas and the metallurgical plants.

3.1.15.2 BECSA's Douglas Colliery

No pre-mining noise studies were undertaken and ambient background noise levels are not measured.

3.1.16 Sites of Archaeological and Cultural Interest

The following existing studies are available in Appendix J.

Title	Author	Date	Operation
SWC, Tavistock, Klippoortjie			
Counting of graves located in cemeteries affected by the AddCar project	PGS Heritage & Grave Solutions (Birkholtz, P)	2012	AddCar
iMpunzi complex			
Heritage Impact Assessment: Klippoortje 32 IS, Nkangala District, Mpumalanga Province	Matakoma (Fourie, W)	2007	Phoenix
Heritage specialist study on the farms Vandyksdrift 19 IS, Steenkoolspruit 18 IS, Middeldrift 42 IS, Kromfontein 30 IS and Rietfontein 43 IS. Middeldburg region, Mpumalanga Province	Cultmatrix CC (de Jongh, R)	2009	BECSA
Archaeological impact survey report for the farms Vandyksdrift 19 IS, Steenkoolspruit 18 IS, Middeldrift 42 IS, Kromfontein 30 IS and Rietfontein 43 IS. Middeldburg region, Mpumalanga Province	van Schalkwyk	2009	BECSA

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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:

Title	Author	Date	Operation
Progress statement in terms of the ATCOM East grave relocation project	PGS Heritage & Grave Solutions (Birkholtz, P)	2010	Impunzi
ATCOM East Expansion of the Impunzi Colliery, on Portions of the Farms Steenkoolspruit 18 IS, Van Dyksdrift 19 IS and Kromfontein 30 IS, Emalahleni, Mpumalanga Province	PGS Heritage & Grave Solutions (Fourie, W)	2012	Impunzi

3.1.16.1 Tavistock

The archaeological and cultural history of the study area can be divided into three time periods, namely the Stone Age, Iron Age and the Historical Period. Plan 24 (in Appendix A) depicts the sites of archaeological interest.

The Stone Age can be divided in the Early, Middle and Late Stone Age. This period refers to the earliest people of South Africa who mainly relied on stone for their tools. The Early Stone Age ranged from \pm 2.5 million to \pm 250 000 years ago and was dominated by the archaeological industry of stone tools known as Acheulean. The Middle Stone Age had various lithic (stone or rock) industries dating from \pm 250 000 to 22 000 years before present. The Late Stone Age was the period between \pm 22 000 years ago and the period of contact with either Iron Age farmers or European settlers.

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. The Historic Period intermingles with the later parts of the Stone and Iron Age, and can loosely be regarded as times when written and oral recounts of incidents became available.

3.1.16.1.1 Cemeteries – SWC and AddCar

In an assessment currently being done (PGS, 2012) it was identified that eight cemeteries will be affected by the AddCar mining operation. These are currently being investigated and their locations are identified in Figure 3-11 (illustrated by red stars).

During an archaeological survey of the Klippoortjie area in 2007, several cemeteries were found. These cemeteries range from well-maintained cemeteries with inscribed tombstones to poorly maintained cemeteries located in maize fields. The graves date back to 1922 with the most recent date being 1996. Cemeteries located in areas which are to be impacted on by mining will be relocated prior to the commencement of mining activities. Several dwellings which represent numerous architectural timeframes from the early to late 20th century are

found in the area. An old school dating back to 1908 is located on the border of the Klippoortjie area.

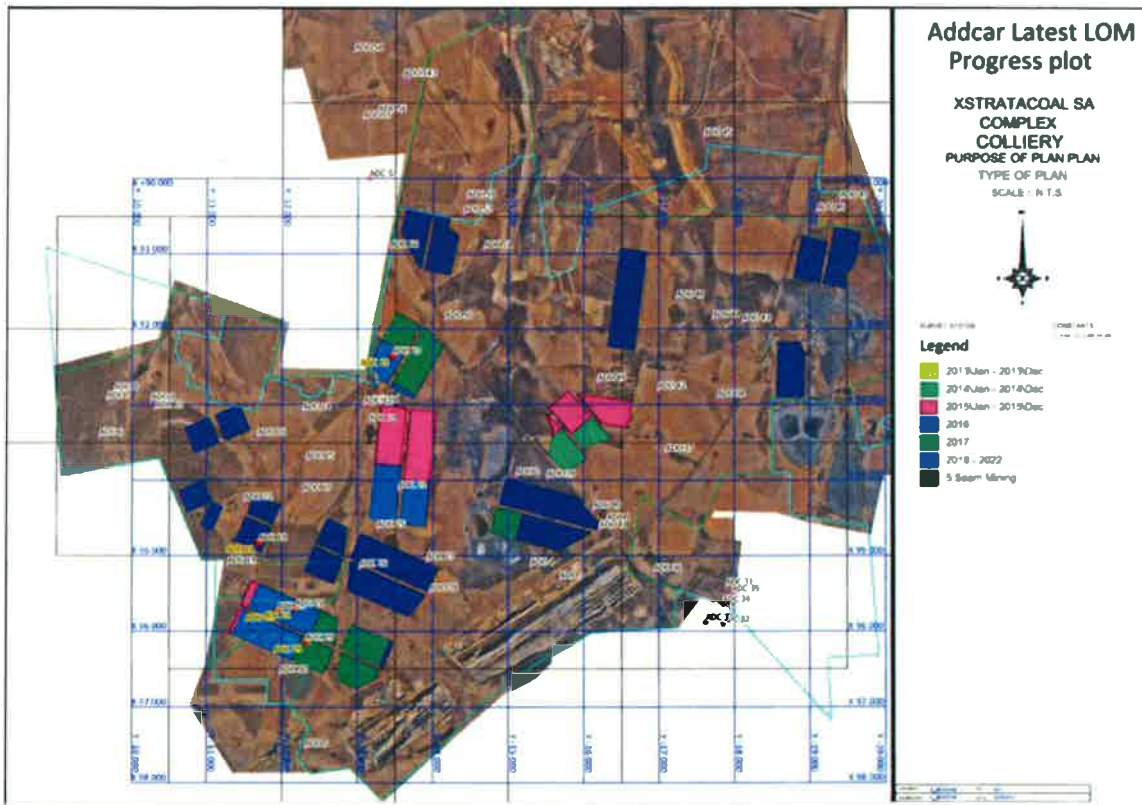


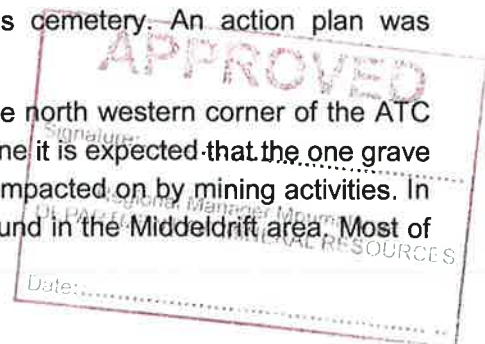
Figure 3-11: Preliminary identified graves at AddCar (2012)

3.1.16.1.2 Cemeteries – iMpunzi

Eleven cemeteries were identified in or close to the boundary of the ATCOM East, of which two are already part of a grave relocation process. The commencement of three cemetery relocations began in December 2009. These cemeteries are located at the Phoenix mine site and to at the Steenkoolspruit farm.

Two cemeteries were identified at the ATC Collieries. The first cemetery was surrounded by a fence, however not well maintained. Most of the graves did not have tombstones and could not be identified, but it became evident that more than one grave belonged to the Mahlangu family. Although visibility during the field visit was relatively poor, it is estimated that this cemetery consisted of approximately 16 to 20 graves. The second informal cemetery was not fenced and the graves were located in open veld next to an existing road and agricultural field. An estimated 8 to 10 graves were found in this cemetery. An action plan was developed to ensure that these graves are relocated.

Two other graves with bare tombstones are located at the north western corner of the ATC Venture Discard Dump. Judging from the smaller tombstone it is expected that the one grave is that of an infant. These graves are not currently being impacted on by mining activities. In addition to the above, a single ruin and graveyard was found in the Middeldrift area. Most of



the inscriptions on the graves were not clearly visible. These graves were relocated during the course of 2007.

Over 40 graves were identified in the ATCOM game camp area. These graves were earmarked for relocation during 2009 in line with all applicable legal requirements.

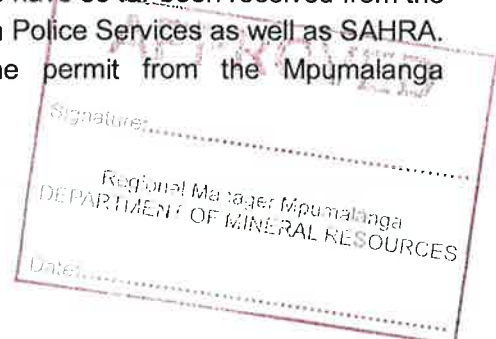
3.1.16.1.2.1 Current Status of Grave Relocation

- **ATCOM Game Park 1 (S26° 07' 31.7" E29° 15' 08.5")**
 - This cemetery was successfully relocated during November 2010. A total of 65 graves were originally identified and exhumed, of which four proved to be no graves. As a result the human remains of 61 graves from this cemetery were reburied.
- **ATC Cemetery (S26° 05' 50.1" E29° 10' 37.9")**
 - This cemetery was successfully relocated during November 2010. A total of 25 graves were originally identified and exhumed. During the exhumation a family representative indicated that another unmarked grave is also located in proximity to the cemetery. Test excavations were undertaken during which the remains of this individual was also identified, exhumed and reburied. As a result, a total of 26 graves were relocated from this cemetery.
- **Koos Cemetery (S26° 05' 59.4" E29° 15' 44.1")**
 - This cemetery forms part of the ATCOM East cemeteries. With the exception of two families (represented by Mr. Hans Mahlangu and his daughter Ms. Simphiwe Mahlangu respectively) associated with five graves, the social consultation process for this cemetery has been completed. A number of meetings (attended by mine representatives) between myself and the family representatives took place and subsequently I believe further meetings between the mine and the family representatives also took place. I am not aware of any positive results that were achieved from any of these meetings. The cemetery contains 134 graves.

We are in the process of applying for permits for the 129 graves not associated with the two family representatives.
- **Nhlapo Cemetery (S26° 04' 22.0" E29° 14' 03.1")**
 - The cemetery was successfully relocated during October 2011. A total of 55 graves were originally identified and exhumed, of which two proved to be no graves. As a result the human remains of 53 graves from this cemetery were reburied.
- **Phoenix Grave (S26° 06' 05.3" E29° 12' 43.8")**
 - The grave of Alfred Sejega was located here. The grave was successfully relocated on Monday, 24 January 2011.
- **Bierman Cemetery (S26° 06' 17.4" E29° 12' 33.0")**



- The cemetery was successfully relocated during September 2011. It originally contained 14 graves.
- **ATCOM Game Park 2 (S26° 07' 09.1" E29° 14' 32.9")**
 - The cemetery comprises four graves, of which two graves are covered by small rectangular concrete dressings from which the names Linah Mhalangu and M. Mtshweni could be read. The other two graves are those of stillborn babies buried in the remains of a homestead in the vicinity of the graves. Mr. Moses Mtshweni, the family representative for all four graves, agreed to the relocation and signed the permission forms. The permit application process has commenced and permissions have so far been received from the Emalahleni Municipality as well as the South African Police Services. We are currently compiling the SAHRA and Mpumalanga Department of Health permit applications.
- **ATCOM Game Park 3 (S26° 07' 11.6" E29° 14' 26.3")**
 - The site comprises seven stone concentrations which may be graves. Although no additional supportive information could be found with which the site can positively be identified as a cemetery, the safest option would be to mitigate it in exactly the same way one would do with a normal cemetery. The permit application process has commenced and permissions have so far been received from the Emalahleni Municipality as well as the South African Police Services. We are currently compiling the SAHRA and Mpumalanga Department of Health permit applications.
- **Hlumbane grave (S26° 04' 33.4" E29° 14' 06.6")**
 - The site comprises one grave where the son of Mr. Richard Sipho Hlumbane lies buried. The deceased was buried adjacent to where Mr. Hlumbane's house used to stand. Mr. Hlumbane has already identified the grave and has also provided written permission for the grave to be relocated. The permit application process has commenced and permissions have so far been received from the Emalahleni Municipality as well as the South African Police Services. We are currently compiling the SAHRA and Mpumalanga Department of Health permit applications.
- **Haul Road grave (S26° 04' 44.7" E29° 13' 54.0")**
 - One grave is located here. Ms. Bessie du Toit, who grew up in the nearby farmstead, was located after several attempts in the Witbank area. She indicated that she was told by her mother that the grave was that of Ms. Poppie Coetzee who drowned in the Steenkoolspruit. The permit application process has commenced and permissions have so far been received from the Emalahleni Municipality, the South African Police Services as well as SAHRA. We are currently only waiting for the permit from the Mpumalanga Department of Health.



- TAV16 (S26° 04' 44.0" E29° 13' 50.0")
- The grave of Mr. Grassman Kgoga Mahlangu is located here. The family representative Mr. Mnyamani Paulus Mtshweni was identified and agreed to the relocation. He also signed the permission form. The permit application process has commenced and permissions have so far been received from the Emalahleni Municipality and the South African Police Services. We are in the process of compiling the permit applications for SAHRA and the Mpumalanga Department of Health.
- Khumalo Cemetery (S26° 06' 00.0" E29° 15' 40.6")
 - The cemetery was mentioned in one of my weekly progress emails. It was identified by one of the family representatives of the Koos Cemetery. Mr. Dutywa Simon Khumalo indicated that one of his family members were buried here, and that the cemetery contains two other graves as well. It is an interesting cemetery in that no graves are marked.



Figure 3-12: Location of graves for relocation (PGS, 2012)

3.1.16.2 BECSA's Douglas Colliery

No sites of archaeological or cultural interest are known to exist at the mine, other than some graveyard sites in the Boschmanskrans area, Douglas Section.

wetlands, as well as reduces the overall biodiversity support function of the remaining wetlands on site.

- Decreased water yield to downstream wetlands – Loss of wetland habitat within the opencast footprint could result in decreased water yield to downstream wetlands. Hillslope seepage wetlands are typically considered to play a role in flow regulation, i.e. the temporary storage and slow release of flows to downslope wetlands and water courses. In this regard the dependence of the hillslope seepage wetlands on the deeper terrestrial soils adjacent to the wetlands as a source of water is highlighted, as the hillslope seepage wetlands reflect the water moving from these terrestrial soils towards the valley bottom wetlands, with the terrestrial soils likely being more important than the hillslope seepage wetlands themselves in flow regulation.
- Loss of wetland ecosystem functions – Wetlands are generally considered to perform a number of ecosystem services, ranging from flood attenuation and water quality enhancement, to biodiversity support and direct human benefits (e.g. provision of natural resources). In the case of the wetlands on site, the most important function performed by the pans is that of biodiversity support (addressed under point 1 above). The hillslope seepage wetlands are considered to be most important in terms of water quality maintenance, through the discharge of good quality water to the already stressed Olifants River system.
- Deterioration in water quality – Post-mining, the backfilled voids are likely to fill with water and start decanting. Decanting water is likely to be acidic as well as metal (e.g. Aluminium and Iron) and sulphate rich, resulting in further deterioration of water quality within the tributaries draining the site, as well as the remaining pans on site.

13.4.3.6 ATCOM East

13.4.3.6.1 Impacts of Existing Mining Activities

Due to the Project area being located in an area of both intensive agricultural and coal mining activities, impacts on the wetlands in the Project area have arisen. This has led to the wetlands being modified to a greater or lesser degree. The factors impacting on wetlands in the Project area are listed below:

- Operating coal mines adjacent to some of the wetlands on site and within the upstream catchment of the Steenkoolspruit and Olifants Rivers;
- Previous mining activities on site;
- Changes in landuse, including extensive cultivation along and within the wetland boundaries on site;
- Conversion of natural moist grasslands to planted pasture;
- Numerous road and railway crossings over the wetlands; and
- Presence of alien invasive vegetation.

These impacts have resulted in the PES of the wetlands on site departing significantly from the reference condition or un-impacted state of the wetlands. This is reflected in the results of the PES assessment which classes the wetlands on site as being mostly moderately to largely modified (PES categories C and D), with 52 % classed as moderately modified and 45 % as largely modified.

The largely natural wetlands on site (PES category B), which make up less than 2 % of the wetlands in the Project area,, consist of a number of small footslope seepage wetlands located along the Olifants River and associated with rocky outcrops. The rocky outcrops have prevented cultivation in these areas and thus protected the primary vegetation, while the hydrology has also remained largely intact.

Most of the moderately modified wetlands in the Project area are hillslope seepage wetlands. In many cases the vegetation of these seepage wetlands has been largely modified due to past cultivation (conversion to planted pasture) and disturbance. However, the hydrology of these systems (infiltration of rain water and subsequent interflow) still remains relatively intact, resulting in an overall PES rating of moderately modified (refer to Section 6.2, page 17 of the Wetland Impact report, Appendix E).

In total, the proposed mining activities will result in the direct destruction of 321.4 hectares of wetland, consisting mostly of hillslope seepage wetlands (304.55 ha), but including 14.5 ha of pan habitat, 12.8 ha of which makes up the northern pan (refer to Section 7, page 26 of the Wetland Report, Appendix E).

13.4.3.6.2 Impacts of proposed Activities

The potential impacts of the proposed infrastructure on wetlands are discussed below (refer to Section 7, pages 28-29 in the Wetlands report describing the mitigation and management measures, Appendix E):

- **Loss of Biodiversity** - The loss of the wetlands within the opencast footprint will result in the loss and/or displacement of the species supported by the affected wetlands, as well as reduces the overall biodiversity support function of the remaining wetlands on site;
- **Decreased water yield to downstream wetlands** - Loss of wetland habitat within the opencast footprint could result in decreased water yield to downstream wetlands. Hillslope seepage wetlands are typically considered to play a role in flow regulation, i.e. the temporary storage and slow release of flows to downslope wetlands and water courses. In this regard the dependence of the hillslope seepage wetlands on the deeper terrestrial soils adjacent to the wetlands as a source of water is highlighted, as the hillslope seepage wetlands reflect the water moving from these terrestrial soils towards the valley bottom wetlands, with the terrestrial soils likely being more important than the hillslope seepage wetlands themselves in flow regulation;
- **Loss of wetland ecosystem functions** – Wetlands are generally considered to perform a number of ecosystem services, ranging from flood attenuation and water quality enhancement, to biodiversity support and direct human benefits, (e.g. provision of

natural resources). In the case of the wetlands on site, the most important function performed by the pans is that of biodiversity support (addressed under point 1 above). The hillslope seepage wetlands are considered to be most important in terms of water quality maintenance, through the discharge of good quality water to the already stressed Olifants River system; and

- Deterioration in water quality – Post-mining, the backfilled voids are likely to fill with water and start decanting. Decanting water is likely to be acidic as well as metal (e.g. Aluminium and Iron) and sulphate rich, resulting in further deterioration of water quality within the tributaries draining the site, as well as the remaining pans on site.

13.4.4 Surface Water

13.4.4.1 Impacts of Proposed Mining Activities

During the operational phase, the opencast areas will effectively be removed from the various catchments. Small areas will gradually be added to the catchment as rehabilitation commences during the operational phase and these areas are allowed to discharge. During mining, whenever rainwater is trapped by the opencast areas it will be re-used and this will reduce the run-off water reporting to local streams and dams.

If the seepage from the opencast spoils emerges on the surface, it will impact on the water quality, potentially in terms of dissolved salts. This water must be contained and kept within a closed circuit in order to minimise the impact. All water used on site is considered to be polluted and thus must be contained to ensure it does not reach the local water sources. Coal spillages from trucks will require mitigation to ensure that the coal does not negatively impact on water quality of the surrounding areas.

Roads and spoil heaps must be kept vegetated and stabilised to ensure the potential for erosion and siltation is decreased.

Surface water quantity will be restored after decommissioning and closure due to the rehabilitation of the opencast and underground workings. Catchments will be restored, although potentially altered, and water will no longer be extracted from local water resources.

There is a potential for groundwater in the underground workings to rise and seep into the environment and contaminate downstream water sources. This impact is potentially significant and mitigation is required. Rehabilitation must be adequate to ensure erosion is reduced and slopes of a natural gradient to reduce fast flowing run-off.

The underground mining sections may impact the groundwater flow and quality however drainage and wetland areas may be impacted by the construction of boxcuts and roads.

13.4.5 Groundwater

The larger Tavistock project area is already altered from its natural state due to decades of coal mining. The severity of the potential impacts as a result of new mining activities will not

be as detrimental to the current state of affairs; however the duration of the impacts may be prolonged due the continuation of mining activities.

The cumulative effect is likely to impact negatively on the larger catchment.

13.4.5.1 Impacts of Proposed Mining Activities

Potential impacts of new mining activities on the groundwater regime are likely to be on groundwater quality and quantity.

13.4.5.1.1 Operational

Mining of new rock face during underground and opencast mining increase the exposure of pyrite rich material to oxygen and water, which in turn result in the oxidation of the pyrite material and causes acid mine drainage (AMD). The extent of the formation of AMD can be determined through geochemical testing of the overburden, coal roof and coal floor material.

Groundwater levels and flow direction is likely to be altered as new underground mine voids are created during the mining process.

13.4.5.1.2 Decommissioning and post closure

After the operational phase the mine void create large underground storage space for groundwater, thus forming artificial aquifers. The quality of the groundwater that collect in these artificial aquifers is usually in a poor state. In the long term it is possible that the groundwater quality may improve as the mine void gets saturated and depleted of oxygen. This in turn inhibits the formation of AMD.

Mine decant may occur in topographically low areas or at entrances (adits) to underground workings as the open mine voids start to flood and fill up after closure. Once the decant daylight and it is not contained it is likely to flow towards the nearest stream and impact on the surface water and aquatic environment.

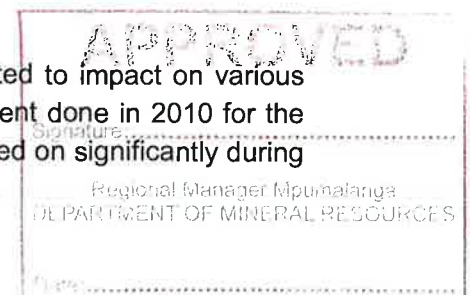
13.4.6 Air Quality

13.4.6.1 Impacts of Existing Mining Activities

The existing mining operations in the Tavistock area have negatively impacted on the ambient air quality pollution levels of the area. The existing impacts on the ambient air quality levels include, but are not limited to: transport of coal via haul roads, opencast mining activities and the coal processing facilities in the area. The expected air quality levels of the pre-mining environment was that of rural districts, which is likely to have been low, but with the numerous coal mining operations that make up Tavistock, the ambient air quality pollution levels have increased in the area.

13.4.6.2 Impacts of Proposed Mining Activities

The proposed expansion of the ATCOM East operations is expected to impact on various sensitive receptors. As indicated by the air quality impact assessment done in 2010 for the proposed ATCOM East operations, various receptors will be impacted on significantly during



the operational phase, especially if the new, stricter, standards for PM₁₀ and newly adopted PM_{2.5} standards (2015 and 2016 respectively) are taken into account.

The proposed new AddCar underground mining area might have negative impacts that will most likely be localised (underground operation), but nevertheless should be quantified. Depending on the method of mining, and transport of coal to the washing plants, the impact could be significant. The proposed underground mining area is situated in the South Witbank Colliery area. The boxcuts and haul roads will have a negative impact on the air quality, as vehicle entrainment is the main contributor to the particulate matter loading within mining areas, especially if the haul roads are unpaved. The expected air quality impacts include, but are not limited to the boxcuts, dust from vehicular activity on the haul roads and the operation of mining activity. This will probably add to the existing negative air quality impact of the Tavistock mining area.

13.4.7 Noise

13.4.7.1 Impacts of Existing Mining Activities

The existing mining operations in the Tavistock area have negatively impacted on the ambient noise levels of the area. The existing impacts on the ambient noise levels include but are not limited to: opencast mining activities and the coal processing facilities in the area. The expected noise levels of the pre-mining environment was that of rural districts, which is likely to be low, but with the numerous coal mining operations that make up Tavistock, the ambient noise levels have increased in the area.

13.4.7.2 Impacts of Proposed Mining Activities

The proposed expansion of the ATCOM East operations is expected to impact on various noise sensitive receptors. As indicated by the noise impact assessment done in 2010, various receptors will be impacted for a short to medium term during construction phase, but that only one receptor will be impacted on significantly during the operational phase.

It is expected that the proposed AddCar underground mining activities will not impact significantly on the surrounding ambient noise levels already impacted by the existing mining activities in the area. The limited surface activities with regards to constructing the various ramps that will service the underground mining areas as well as the limited duration of the surface activities is expected to have a low significant impact on the surrounding area.

13.4.8 Heritage

13.4.8.1 Impacts of Proposed Mining Activities

- NHRA Section 34(Any building, works, device or other facility made by people that is fixed to land older than 60 years, including any associated fixtures, fittings and equipment):
 - More than 150 Section 34 resources were identified by previous heritage assessments. Proposed opencast pits will result in destruction of the majority

of these. Intangible heritage that may be associated with such sites will in addition be lost.

- NHRA Section 36 (Any place of human interment including contents, headstone or other markers of such a place, and any other structure on or associated with such place: Burial grounds and graves):
 - More than 20 Section 36 burial grounds were identified in previous surveys. Proposed opencast pits will result in the destruction (therefore relocation) of most sites. See Section 3.1.6.
- Intangible or Living heritage (Intangible aspects of inherited culture including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems; and a holistic approach to nature, society and social relationships):
 - Proposed open cast pits may change, alter or destroy aspects of the landscape that have cultural significance to various communities. This may be the destruction of places that are associated with cultural tradition, oral histories, rituals or popular memory. In addition, proposed development may result in limiting access to or destruction of natural resources that may be utilized in communities indigenous knowledge systems, for example harvesting of plants used in traditional medicines or rituals or access to sacred water sources.

13.4.9 Social

Potential impacts both in relation to Tavistock and AddCar could not be quantified as no formal studies are available on which to base such predictions. Nevertheless, it is possible to make general predictions regarding the types of socio-economic impacts that are likely to be associated with a project of this nature.

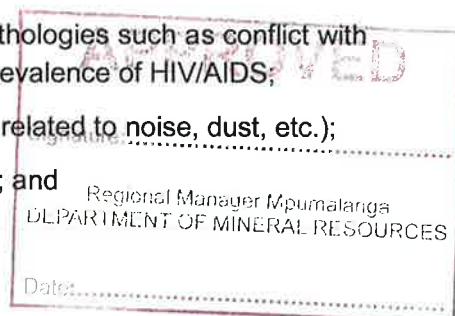
These include:

Positive impacts, such as:

- Temporary job creation during the construction phase;
- More permanent job creation during the operational phase;
- Indirect and induced benefits to the local economy; and
- Social investment and infrastructure development undertaken as part of the mine's SLP commitments.

Negative impacts such as:

- In-migration of job-seekers, which may lead to social pathologies such as conflict with the local population, higher crime rates and increased prevalence of HIV/AIDS;
- Physical intrusion impacts on surrounding communities (related to noise, dust, etc.);
- Negative effects on the values of surrounding properties; and



- Potential displacement of households or communities living on or adjacent to the project footprint.

13.5 Proposed and current Activities

The proposed activities are detailed in Table 13-4 below. These activities are to occur on:

- iMpunzi Complex: ATCOM East and Middeldrift, Office Pits; and
- Tweefontein South Complex: # 5 Seam and AddCar (SWC)

Table 13-4: Identified Impacts for the Proposed and current activities on iMpunzi Complex and Tweefontein South Complex

Phase	No	Activity
Construction	1	Operation of construction equipment (Current and proposed activities)
	2	Removal of topsoil & vegetation for infrastrucutre(current and proposed activities)
	3	Construction of haul roads (Including proposed haul roads for ATCOM East and AddCar)
	4	Construction of pipes (including proposed dewatering pipeline)
	5	Construction of storm water diversion berms.
	6	Construction of topsoil stockpiles
	7	Construction of overburden stockpiles
	8	Construction of a bridge
	9	Establishment of access and ventilation shafts (incl underground sections proposed for AddCar)
	10	Removal of topsoil and vegetation for the initial boxcut
	11	Removal (by blasting/drilling) and storage of overburden for the initial boxcut and underground access
	12	The extraction of coal from initial boxcut
Operational	13	Storage of hydrocarbons, chemicals and explosives (current and proposed activities including explosive silo at iMpunzi)
	14	Operation and maintenance of haul roads
	15	Operation and maintainance of pipes (including proposed dewatering pipeline)
	16	Operation and maintainance of storm water diversion berm
	17	Operation and maintainance of topsoil stockpiles
	18	Operation and maintainance of overburden stockpiles
	19	Operation and maintenance of bridge
	20	Operation and maintenance of mining equipment
	21	Underground bord and pillar mining (current and proposed activities)
	22	Underground total/partial extraction mining (current and proposed activities)
	23	Progression in mining of opencast pits with the removal of topsoil and vegetation (current and proposed activities)
	24	Removal and storage of overburden for the expansion of the opencast pits (by drilling/blasting methods)
	25	The extraction of coal from opencast

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	26	The transportation of coal on haul roads
	27	Operation of transport infrastructure
	28	Coal stockpiles (including existing and proposed stockpiles)
	29	Crushing and screening method
	30	Operation of Washing plant
	31	Discard dumps (Including extensions of discard dumps)
	32	Operation of Pollution control dams
	33	Waste generation, disposal and sewage handling
Decommissioning	34	Backfilling and compaction of void with overburden
	35	Replacement and shaping of topsoil
	36	Seeding and revegetation of disturbed areas
	37	Rehabilitation of discard dumps
	38	Waste generation and disposal
Post - closure	39	Identification of post-closure impacts

13.6 Impact and Mitigation Table

Impact assessments have been conducted for the iMpunzi complex as well as the Tweefontein South complex for the current activities and proposed activities. The final activity impact register for the proposed and current activities during construction, operational, decommissioning and post-closure phases of the iMpunzi Complex and Tweefontein South Complex are detailed in Table 13-5 below.

Table 13-5: Activity, impact and mitigation register for the proposed activities and current on the Impunzi and Tweefontein South Complexes

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
CONSTRUCTION PHASE															
1.	Operation of construction equipment (Current and proposed activities)	Soils	Potential soil contamination due to spillage of hydrocarbons from operating construction equipment.	N	3	1	2	6	5	30	Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly to check for leaks. In the event of spillage, the spill must be cleaned and any contaminated soil must either be ameliorated or removed off-site; and Implement the emergency spill response procedure after the occurrence of a spill. 	As per maintenance schedule, immediate response after occurrence of spill	Contractor/ project owner, environmental coordinator	Low
			Soil compaction due to the repetitive movement of construction equipment within and outside construction areas.	N	3	1	2	6	5	30	Low	<ul style="list-style-type: none"> Construction equipment will be restricted as far as possible to construction areas to ensure that soil compaction outside construction areas does not occur. 	Continuously during construction	Contractor/ project owner	Low
		Land capability	Decreased land capability due to soil contamination and compaction. Potential soil contamination due to spillage of hydrocarbons from operating construction equipment. Soil compaction due to the repetitive movement of construction equipment within and outside construction areas.	N	4	1	2	7	5	35	Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly to check for leaks. In the event of spillage, the spill must be cleaned and any contaminated soil must either be ameliorated or removed off-site; Implement the emergency spill response procedure after the occurrence of a spill; and Construction equipment will be restricted as far as possible to construction areas to ensure that soil compaction outside construction areas does not occur. 	Continuously during construction	Contractor/ project owner	Low
		Surface water	Potential contamination of surface water due to the spillage of hydrocarbons from operating construction equipment.	N	3	3	2	8	5	40	Medium-Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly to check for leaks. In the event of spillage, the spill must be cleaned to prevent 	As per maintenance schedule, immediate	Contractor/ project owner, environmental coordinator	Medium - Low

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No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
												further impacts.	response after occurrence of spill		
			Potential siltation of surface runoff due to soil erosion caused by increased runoff over compacted areas. Soil compaction due to the repetitive movement of construction equipment within and outside construction areas.	N	3	3	2	8	5	40	Medium-Low	<ul style="list-style-type: none"> Construction equipment will be restricted as far as possible to construction areas to ensure that soil compaction outside construction areas does not occur, construction equipment will be inspected regularly to check for leaks. 	Continuously during construction phase	Contractor/ project owner	Medium-Low
		Groundwater	Potential groundwater contamination due to the infiltration of water contaminated by spilled hydrocarbons from operating construction equipment. Potential contamination of surface water due to the spillage of hydrocarbons from operating construction equipment.	N	3	3	2	8	4	32	Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly to check for leaks. In the event of spillage, the spill must be cleaned and any contaminated soil must either be ameliorated or removed off-site. 	Continuously during construction phase	Contractor/ project owner	Low
		Air quality	Increased dust emissions due to entrainment of dust particles by the movement and operation of construction equipment. Increased atmospheric greenhouse gas emissions due to operating construction equipment.	N	2	2	2	6	5	30	Medium-Low	<ul style="list-style-type: none"> Apply dust suppression as and when necessary. 	As necessary during construction phase	Contractor/ project owner	Low
		Natural vegetation	Damage and/or loss of natural vegetation due to unrestricted movement of construction equipment in areas with remaining natural vegetation.	N	1	3	1	5	4	20	Medium-Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly and maintained. 	As per maintenance schedule	Contractor/ project owner	Low
		Animal life	Potential injury or death to animals due to movement of construction equipment.	N	4	1	2	7	5	35	Low	<ul style="list-style-type: none"> Construction equipment will be restricted as far as possible to construction areas to ensure that no damage or death occurs to natural vegetation or animals outside the construction areas. 	Informing during induction, continuously during construction	Contractor/ project owner	Low

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual impact
		Wetlands	<p>Impairment of on- and off-site wetland functioning due to potential surface water contamination and siltation.</p> <p>Potential contamination of surface water due to the spillage of hydrocarbons from operating construction equipment.</p> <p>Potential siltation of surface runoff due to soil erosion caused by increased runoff over compacted areas.</p>	N	5	4	2	11	5	55	Medium-Low	<ul style="list-style-type: none"> Construction equipment will be inspected regularly to check for leaks. In the event of spillage, the spill must be cleaned to prevent further impacts; Construction equipment will be restricted as far as possible to construction areas to ensure that soil compaction outside construction areas does not occur; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	Informing during induction, continuously during construction	Contractor/ project owner	Medium-Low
			<p>Potential soil compaction in areas traversed by heavy machinery.</p>	N	5	4	2	11	6	66	Medium-Low	<ul style="list-style-type: none"> A construction stormwater management plan should be compiled and implemented. The main focus of such a plan should be to prevent sediment movement off site and into adjacent wetlands. The footprint of vegetation clearing should be kept as small as possible; Vegetation clearing should only be done immediately prior to the commencement of construction activities and should be phased so as to limit the extent of bare soil areas at any one time; Shallow berm or other sediment barrier should be constructed downslope of the proposed opencast pits to attenuate/slow down sheet flow and create a 	Informing during induction, continuously during construction	Contractor/ project owner	Medium-Low

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No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
2.	Removal of topsoil & vegetation for infrastructure (current and proposed activities)	Soils	Increased erodibility of soils due to the removal of vegetation during site clearance.	N	5	1	2	8	6	48	Medium-Low	<ul style="list-style-type: none"> depositional environment to trap sediments; Direct discharge of sediment rich runoff from the construction sites into wetland areas should be avoided; Concentrated runoff from cleared areas should be avoided. Any preferential flows paths that do develop should be plugged and repaired as soon as possible; Clean and dirty water separation should be maintained at all times. No dirty water should be discharged into the environment without a Water Use Licence; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use Licence. 	As required during construction phase	Contractor/ project owner	Low
		Land capability	Decreased land capability due to removal of vegetation and the loss of soil through wind and water erosion. Increased erodibility of soils due to the removal of vegetation during site clearance.	N	5	1	2	8	6	48	Medium-Low	<ul style="list-style-type: none"> Vegetation will only be removed just prior to physical construction in order to reduce the time soil is exposed to wind and water. Vegetation will only be removed just prior to physical construction in order to reduce the time soil is exposed to wind and water. Where possible, vegetation will be reestablished upon completion of construction (e.g. offices) to improve soil stability. 	Upon completion of construction	Environmental coordinator and contractor/ project owner	Low

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
												<ul style="list-style-type: none"> Concentration and accumulation of flows along the servitude should be prevented by regularly providing for surface runoff to flow into the adjacent grassland rather than along the construction servitude and into the wetlands; Closure and rehabilitation of the pipeline servitude should commence as soon as the pipeline has been laid in the trench; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 			
			Potential loss and disturbance of wetland habitat	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> This impact cannot be avoided; however, it can be limited in extent and magnitude. The construction servitude needs to be kept to a minimum to limit vegetation destruction, and needs to be clearly demarcated in the field. No activities should be allowed outside the construction servitude. Access routes should be limited to existing access tracks along the railway line; All materials stockpiles and construction camps should be located outside wetland areas. It should not be necessary to re-plant any areas, but rather allow natural re-vegetation to occur; The areas where vegetation is 	Informing during induction, continuously during construction	Contractor/ project owner	Low

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
15	Operation and maintenance of pipes (including proposed dewatering pipeline)	Soils	Permanent compaction of soil in areas of infrastructure construction.	N	3	1	2	6	6	36	Medium-Low	<p>destroyed and disturbed will however need to be monitored against invasion by alien vegetation and, if encountered, will need to be removed. If natural re-vegetation is unsuccessful, seeding and planting of the area will need to be implemented in consultation with an appropriate wetland vegetation specialist; and</p> <ul style="list-style-type: none"> No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	During rehabilitation	Contractor/project owner	Medium-Low
			Altered surface flow dynamics around surface infrastructure.	N	3	1	2	6	6	36	Medium-Low	<ul style="list-style-type: none"> In areas of high surface runoff, trenches and drains will be constructed to divert runoff around infrastructure. The objective is to avoid damming of water during rainfall events; The watercourse crossings will be constructed by horizontal drilling which will limit the impacts on the surface soils at the crossing; Construction activities and construction workers to remain 	Pre-construction and as required during construction	Contractor/project owner	Low

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No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact	
												<p>in a demarcated area to minimise the footprint of the loss of habitat, and</p> <ul style="list-style-type: none"> Monitor surface and ground water quality to detect any changes in quality. 				
		Wetlands	Potential loss of wetland vegetation and destruction of wetland habitat in the footprint of the opencast pits and stockpiles, not restricted to wetland type.	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> This impact cannot be avoided; however, it can be limited in extent and magnitude; The construction servitude needs of pipelines and roads to be kept to a minimum to limit vegetation destruction, and needs to be clearly demarcated in the field. No activities should be allowed outside the construction servitude of pipelines and roads. Access routes should be limited to existing access tracks along the railway line; All materials stockpiles and construction camps should be located outside wetland areas. It should not be necessary to re-plant any areas, but rather allow natural re-vegetation to occur; The areas where vegetation is destroyed and disturbed will however need to be monitored against invasion by alien vegetation and, if encountered, will need to be removed. If natural re-vegetation is unsuccessful, seeding and planting of the area will need to be implemented in consultation with an appropriate wetland 	Informing during induction, continuously during construction	Contractor/ project owner	Medium-Low	

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
			Potential increased sediment movement off the site due to erosion on bare soil surfaces and increased sediment load in the valley bottoms.	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> vegetation specialist; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	Informing during induction, continuously during construction	Contractor/ project owner	Low

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Date:.....

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
			Potential loss and disturbance of wetland habitat	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> This impact cannot be avoided; however, it can be limited in extent and magnitude; The construction servitude needs to be kept to a minimum to limit vegetation destruction, and needs to be clearly demarcated in the field. No activities should be allowed outside the construction servitude; Access routes should be limited to existing access tracks along the railway line. All materials stockpiles and construction camps should be located outside wetland areas. It should not be necessary to re-plant any areas, but rather allow natural re-vegetation to occur; The areas where vegetation is destroyed and disturbed will however need to be monitored against invasion by alien vegetation and, if encountered, will need to be removed. If natural re-vegetation is unsuccessful, seeding and planting of the area will need to be implemented in consultation with an appropriate wetland vegetation specialist; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	Informing during induction, continuously during construction	Contractor/ project owner	Low

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
16	Operation and maintenance of storm water diversion berm	Soils	Permanent compaction of soil in areas of infrastructure construction.	N	3	1	2	6	6	36	Medium-Low	<ul style="list-style-type: none"> Impact is unavoidable and cannot be mitigated during the construction phase. In areas where infrastructure will be demolished upon closure of the mine, the soil will be assessed and rehabilitated to an acceptable state. 	During rehabilitation	Contractor/project owner	Medium-Low
		Surface water	Altered surface flow dynamics around surface infrastructure.	N	3	1	2	6	6	36	Medium-Low	<ul style="list-style-type: none"> In areas of high surface runoff, trenches and drains will be constructed to divert runoff around infrastructure. The objective is to avoid damming of water during rainfall events; The watercourse crossings will be constructed by horizontal drilling which will limit the impacts on the surface soils at the crossing; Construction activities and construction workers to remain in a demarcated area to minimise the footprint of the loss of habitat; and Monitor surface and ground water quality to detect any changes in quality. 	Pre-construction and required during construction	Contractor/project owner	Low
		Wetlands	Potential loss of wetland vegetation and destruction of wetland habitat in the footprint of the opencast pits and stockpiles, not restricted to wetland type.	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> This impact cannot be avoided; however, it can be limited in extent and magnitude; The construction servitude needs of pipelines and roads to be kept to a minimum to limit vegetation destruction, and needs to be clearly demarcated in the field. No activities should be allowed outside the 	Informing during induction, continuously during construction	Contractor/project owner	Medium-Low

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Signature:.....
Regional Manager, Environmental Management
DEPARTMENT OF MINING AND PETROLEUM RESOURCES
Date:.....

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact	
												<p>construction servitude of pipelines and roads. Access routes should be limited to existing access tracks along the railway line.</p> <ul style="list-style-type: none"> All materials stockpiles and construction camps should be located outside wetland areas. It should not be necessary to re-plant any areas, but rather allow natural re-vegetation to occur. The areas where vegetation is destroyed and disturbed will however need to be monitored against invasion by alien vegetation and, if encountered, will need to be removed. If natural re-vegetation is unsuccessful, seeding and planting of the area will need to be implemented in consultation with an appropriate wetland vegetation specialist; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 				
			Potential increased sediment movement off the site due to erosion on bare soil surfaces and increased sediment load in the valley bottoms.	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> Undertake construction activities in the dry season; Limit the extent of the construction servitude to as small an area as possible; Excavated soils should be stockpiled on the upslope side of the excavated trench so that eroded sediments off the 	Informing during induction, continuously during construction	Contractor/ project owner	Low	

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
			Potential loss and disturbance of wetland habitat	N	4	4	2	10	5	50	Medium-Low	<ul style="list-style-type: none"> stockpile are washed back into the trench; Concentration and accumulation of flows along the servitude should be prevented by regularly providing for surface runoff to flow into the adjacent grassland rather than along the construction servitude and into the wetlands; Closure and rehabilitation of the pipeline servitude should commence as soon as the pipeline has been laid in the trench; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	Informing during induction, continuously during construction	Contractor/ project owner	Low

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Signature:

Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES


Date:

No	Activity	Affected environment	Impact description	Status	Severity	Spatial Scale	Duration	Consequence	Probability	Significance / 100	Significance rating	Mitigation measure	Schedule	Responsibility	Residual Impact
17	Operation and maintenance of topsoil stockpiles	Soils	Permanent compaction of soil in areas of infrastructure construction.	N	3	1	2	6	6	36	Medium-Low	<p>but rather allow natural re-vegetation to occur;</p> <ul style="list-style-type: none"> The areas where vegetation is destroyed and disturbed will however need to be monitored against invasion by alien vegetation and, if encountered, will need to be removed. If natural re-vegetation is unsuccessful, seeding and planting of the area will need to be implemented in consultation with an appropriate wetland vegetation specialist; and No mining activities will take place in wetland areas without necessary authorisation from the Department of Water and Sanitation by means of an approved Water Use License. 	During rehabilitation	Contractor/project owner	Medium-Low
		Surface water	Altered surface flow dynamics around surface infrastructure.	N	3	1	2	6	6	36	Medium-Low	<ul style="list-style-type: none"> In areas of high surface runoff, trenches and drains will be constructed to divert runoff around infrastructure. The objective is to avoid damming of water during rainfall events; The watercourse crossings will be constructed by horizontal drilling which will limit the impacts on the surface soils at 	Pre-construction and required during construction	Contractor/project owner	Low

Xstrata Coal Consolidated EIA/EMP for Tavistock

ATCOM Infrastructure

Legend

-  Mineral Rights Boundary
-  Atcom East Project Area
-  Proposed South Pit Discard Dump
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan

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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:



















Projection: Transverse Mercator Ref #: scc.XST1364.201210.187
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 12/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Collieries

Legend

-  Mineral Rights Boundary
-  Atcom East Project Area
-  SWC Project Area
-  Other Town
-  Settlement
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan

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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date: _____
















Projection: Transverse Mercator Ref #: scc.XST1364.201210.156
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 12/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock

ATC Infrastructure

Legend

-  Mineral Rights Boundary
-  SWC Project Area
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan

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DEPARTMENT OF MINERAL RESOURCES

Date:



Projection: Transverse Mercator Ref #: scc.XST1364.201210.189
 Datum: Cape Revision Number: 3
 Central Meridian: 29°E Date: 12/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Regional Geology

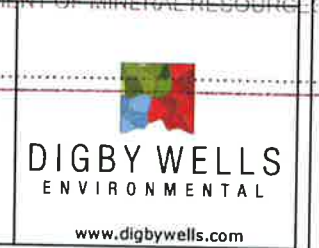
Legend

- Mineral Rights Boundary
- Atcom East Project Area
- SWC Project Area
- Arterial / National Route
- Main Road
- Minor Road
- Track
- Railway Line
- Non-Perennial Stream
- Perennial Stream
- Dam Wall
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

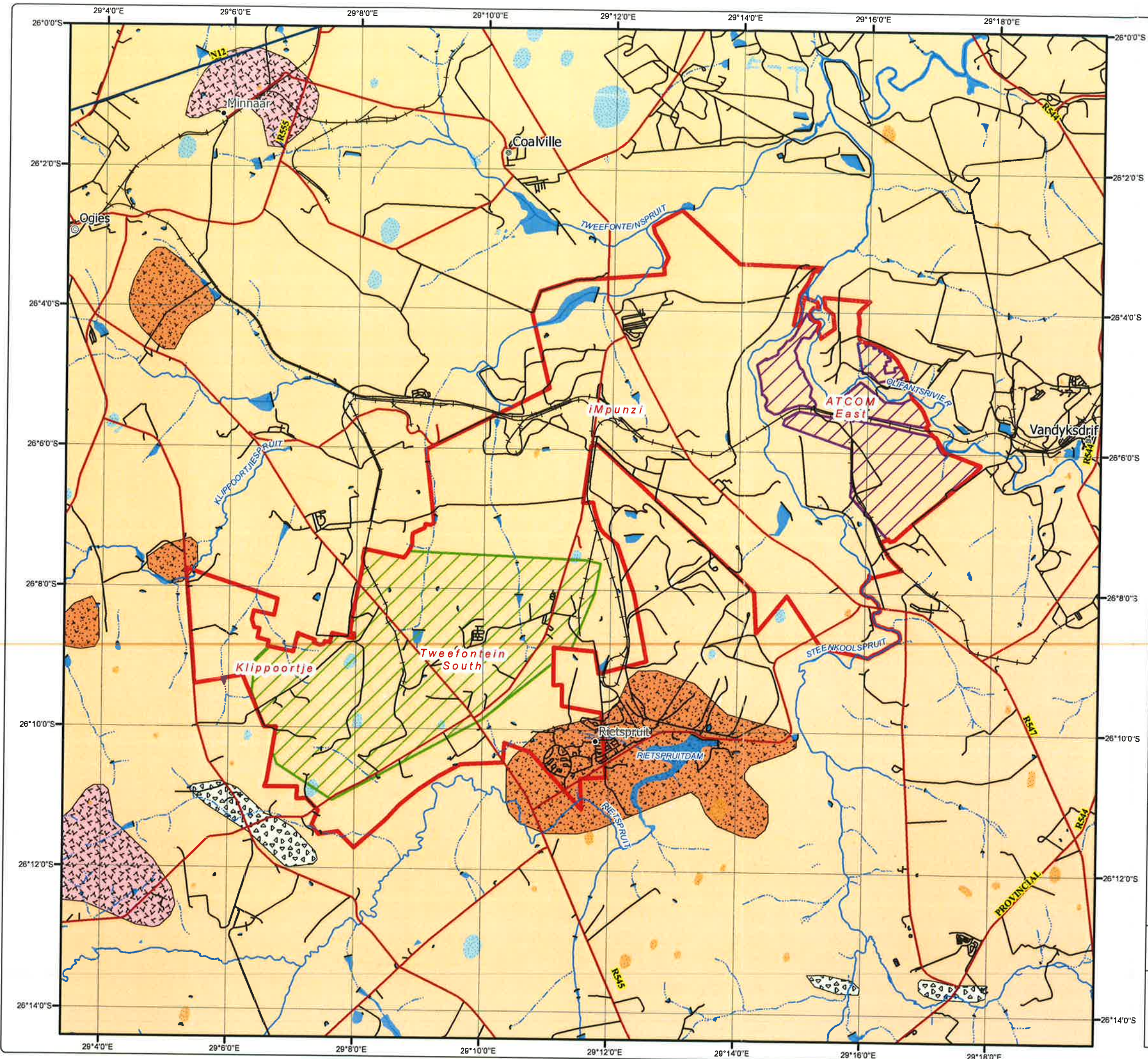
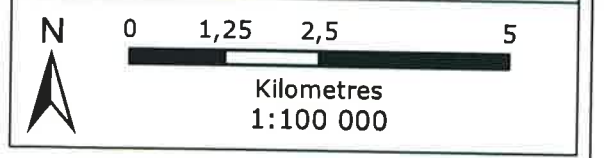
- ### Geology
- Karoo Dolerite Sui
 - Lebowa Granite Sui, Bushveld Cplx
 - Madzaringwe Fm, Karoo Spgrp
 - Rooiberg Grp, Transvaal Spgrp

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Signature: _____
 Date: _____
 Regional Manager Mpumalanga
 DEPARTMENT OF MINERAL RESOURCES










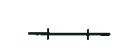






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 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock

Regional Land Types & Soils

Legend

-  Mineral Rights Boundary
-  Atcom East Project Area
-  SWC Project Area
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan

Land Type

-  Ab9
-  Ba4
-  Bb13
-  Bb4
-  Bb5

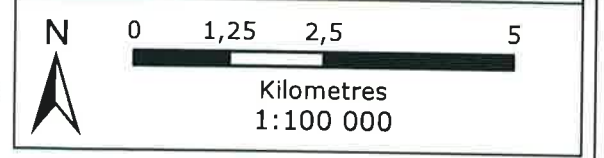
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Signature: _____
Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

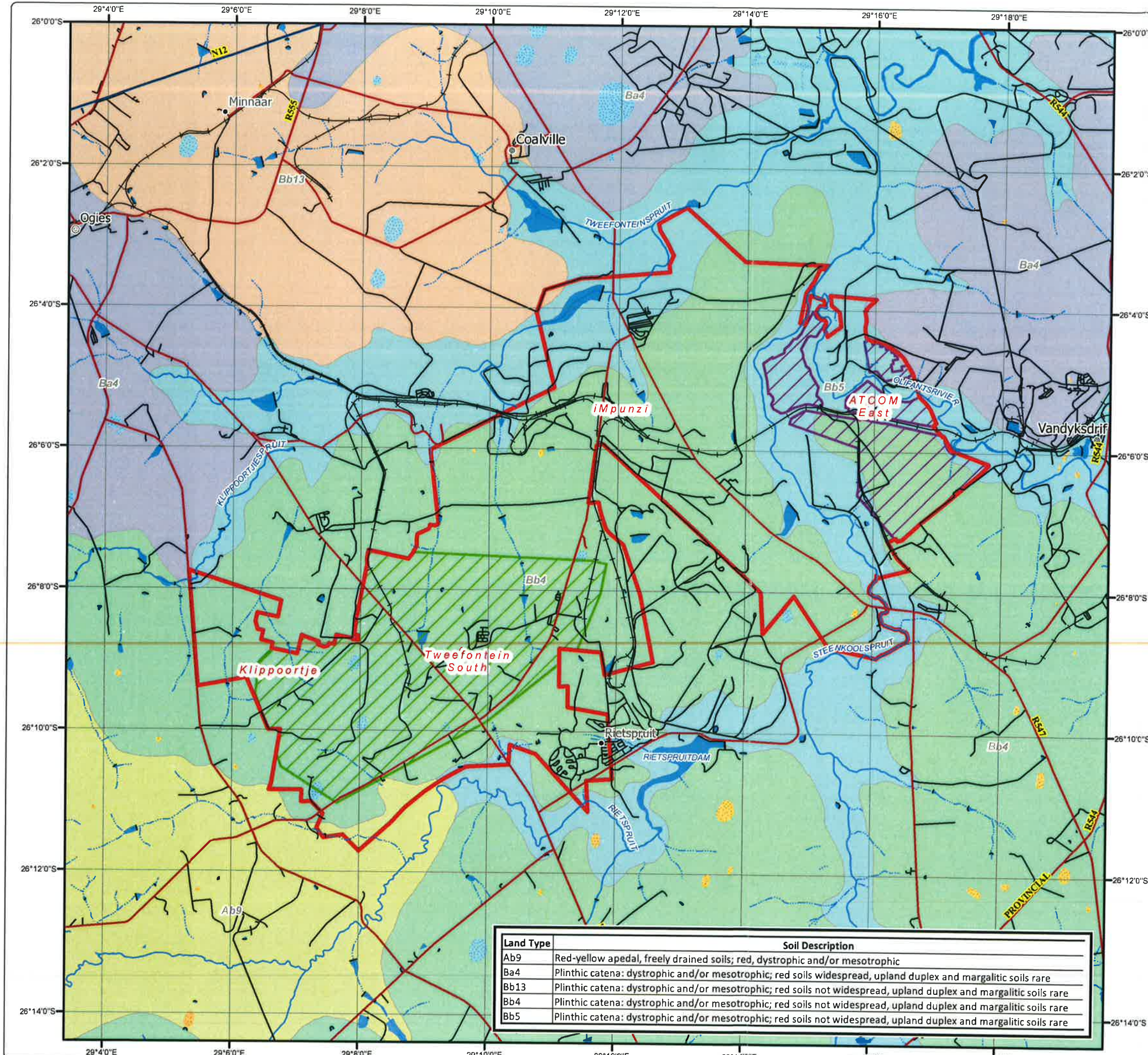
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Projection: Transverse Mercator Ref #: scc.XST1364.201210.168
Datum: Cape Revision Number: 2
Central Meridian: 29°E Date: 16/06/2014



Land Type	Soil Description
Ab9	Red-yellow apedal, freely drained soils; red, dystrophic and/or mesotrophic
Ba4	Plinthic catena: dystrophic and/or mesotrophic; red soils widespread, upland duplex and marginalitic soils rare
Bb13	Plinthic catena: dystrophic and/or mesotrophic; red soils not widespread, upland duplex and marginalitic soils rare
Bb4	Plinthic catena: dystrophic and/or mesotrophic; red soils not widespread, upland duplex and marginalitic soils rare
Bb5	Plinthic catena: dystrophic and/or mesotrophic; red soils not widespread, upland duplex and marginalitic soils rare



Xstrata Coal Consolidated EIA/EMP for Tavistock Mpumalanga C-Plan

Legend

- Mineral Rights Boundary
- Atcom East Project Area
- SWC Project Area
- Arterial / National Route
- Main Road
- Minor Road
- Track
- Railway Line
- Non-Perennial Stream
- Perennial Stream
- Dam Wall
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

Terrestrial Biodiversity

- Irreplaceable
- Highly Significant
- Important & Necessary
- Least Concern
- No Natural Habitat Remaining
- Protected Areas

(Source: Mpumalanga C Plan 2008)



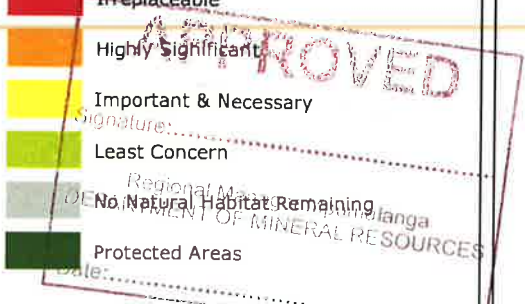
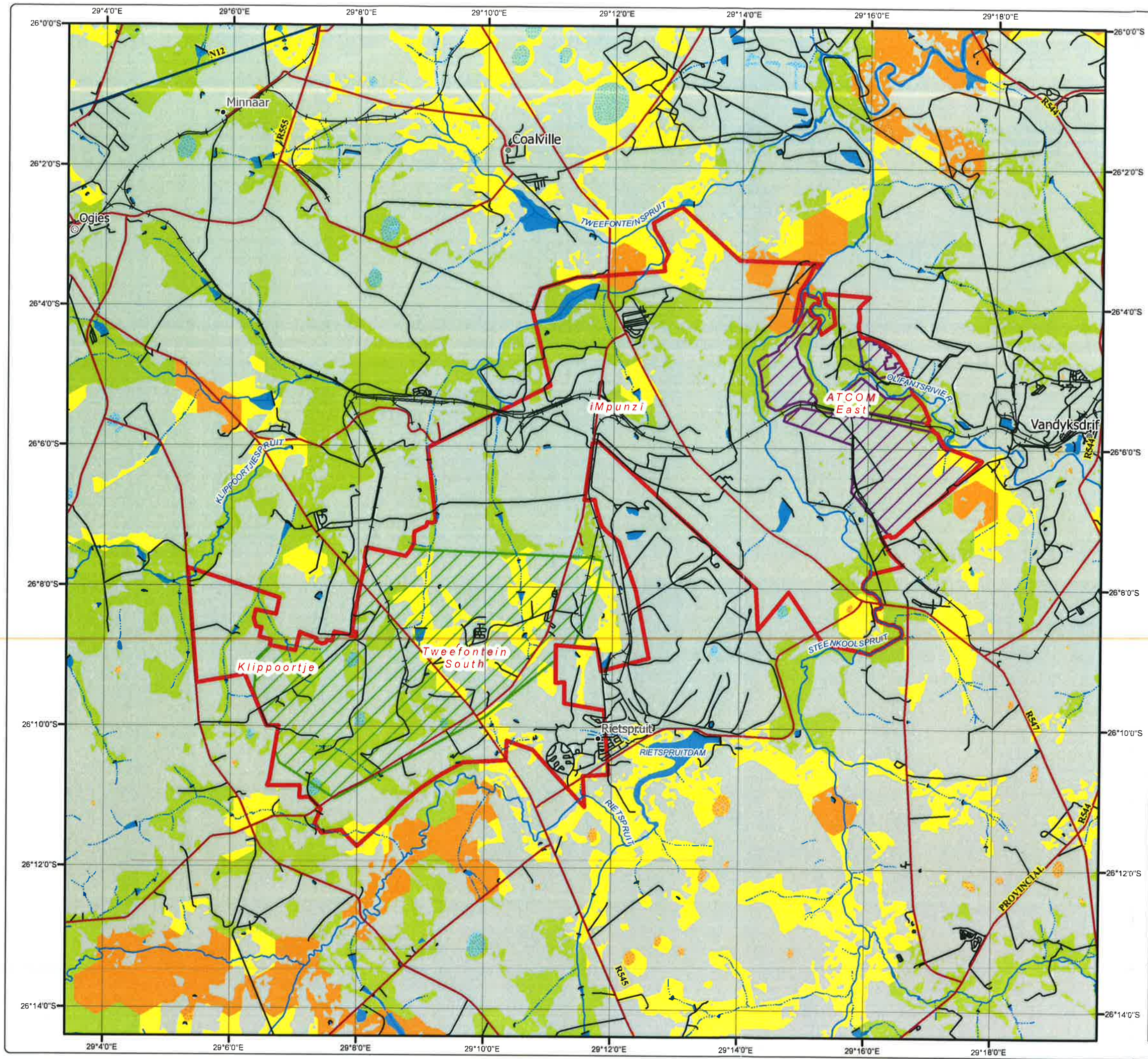
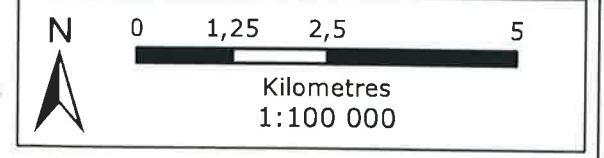
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coal



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ENVIRONMENTAL
















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Projection: Transverse Mercator Ref #: scc.XST1364.201210.174
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Biodiversity Management Units

Legend

-  Mineral Rights Boundary
-  Atcom East Project Area
-  SWC Project Area
- Rivers**
-  BMU3b Rivers + Streams
- Biodiversity Management Units**
-  BMU1 Primary Grasslands
-  BMU2 Rocky Habitats
-  BMU3a Seasonal Marsh Wetlands
-  BMU4 Pan Wetlands
-  BMU5 Secondary Grassland
-  BMU6 Alien Trees + Plantations
-  BMU7a Infrastructure
-  BMU7b Secondary Wetlands
-  BMU7c Cultivation
-  BMU7d Rehabilitation
-  BMU7e Recreational Infrastructure

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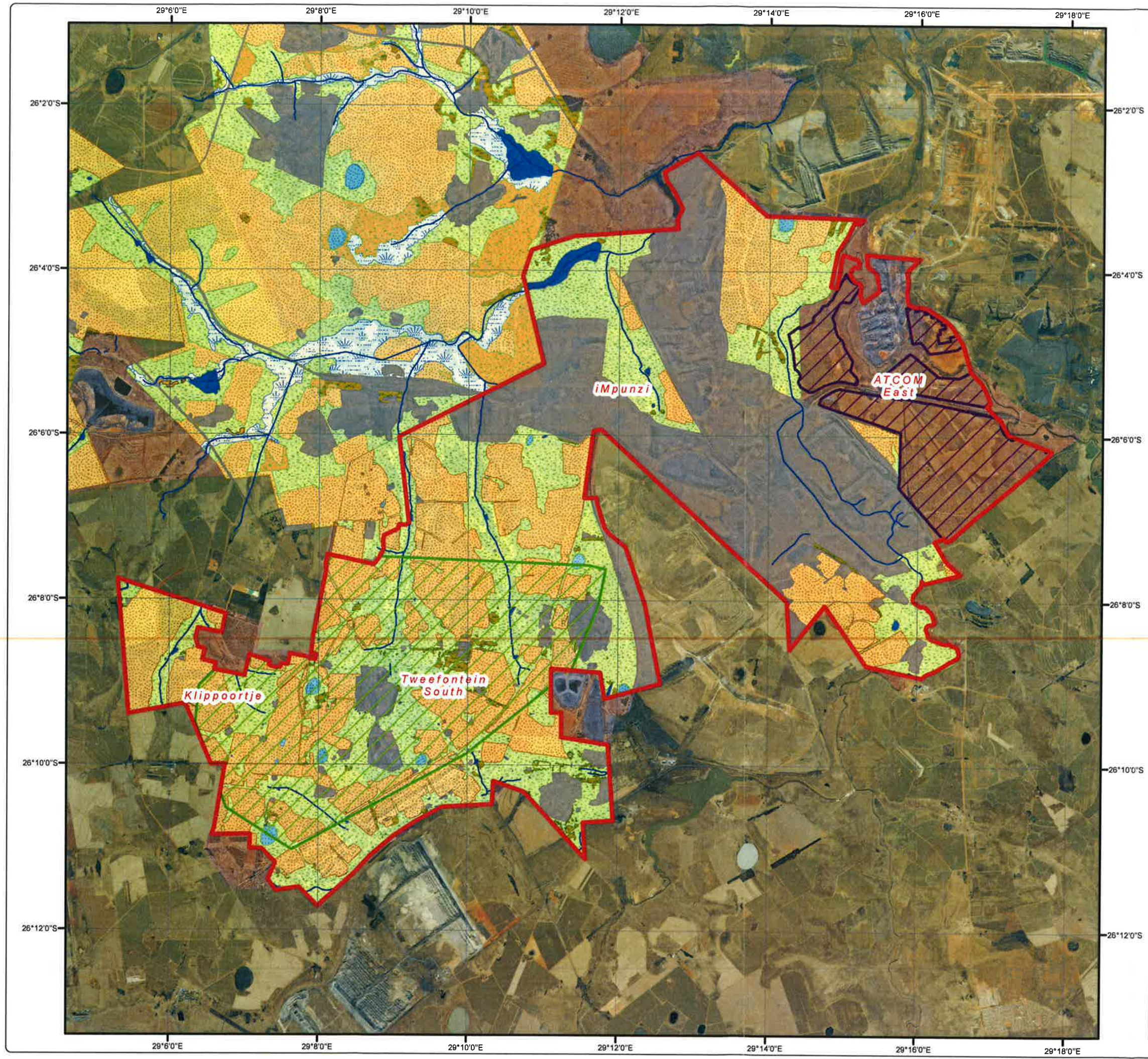
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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES
(Source: Xstrata BLMP 2010)

Date:



Projection: Transverse Mercator Ref #: scc.XST1364.201210.175
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Identified Alien Vegetation - Southstock

Legend

- Identified Alien Vegetation
- Mineral Rights Boundary
- SWC Project Area
- Arterial / National Route
- Main Road
- Minor Road
- Track
- + Railway Line
- Non-Perennial Stream
- Perennial Stream
- + Dam Wall
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

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Signature:

(Note: Alien Vegetation information only available for Southstock Complex)



Projection: Transverse Mercator Ref #: scc.XST1364.201211.060
 Datum: Cape Revision Number: 3
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock

Identified Terrestrial Invertebrates - Southstock

Legend

Identified Terrestrial Invertebrates

- Brachionopus sp.
- Dromica furcata
- Metisella meninx

▭ Mineral Rights Boundary

▨ SWC Project Area

— Arterial / National Route

— Main Road

— Minor Road

— Track

— Railway Line

— Non-Perennial Stream

— Perennial Stream

— Dam Wall

■ Dam

■ Non-Perennial Pan / Stream

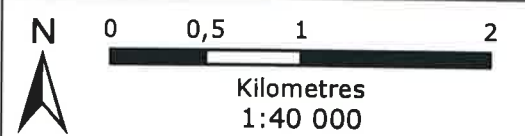
■ Perennial Pan

Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

(Note: Terrestrial Invertebrate information only available for Southstock Complex)



Projection: Transverse Mercator Ref #: scc.XST1364.201211.061
Datum: Cape Revision Number: 3
Central Meridian: 29°E Date: 16/06/2014





Xstrata Coal Consolidated EIA/EMP for Tavistock






Sensitive & Red Data Species

Legend

Sensitive Species

-  Giant Bull Frog
-  Southern Bald Ibis

Red Data Species

-  African Gladiolus/Natal Lily
-  Gladiolus spp.
-  Orange/Vaal River Lily
-  White Scilla
-  Wild snapdragon

 Mineral Rights Boundary

 Atcom East Project Area

 SWC Project Area

 Arterial / National Route

 Main Road

 Minor Road

 Track

 Railway Line

 Non-Perennial Stream


 Perennial Stream

 Dam Wall

 Dam / Lake

 Non-Perennial Pan./Stream

 Perennial Pan

 Regional Mpanzime Mpanzime


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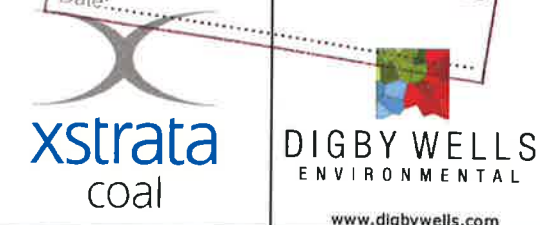
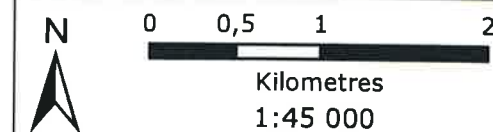
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Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Aquatics Points

Legend

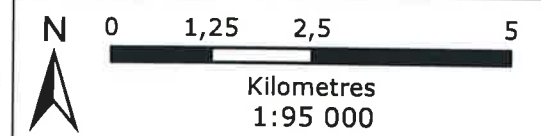
- Aquatics Points
- Atcom East Project Area
- SWC Project Area
- Mineral Rights Boundary
- Other Town
- Settlement
- Arterial / National Route
- Main Road
- Minor Road
- Track
- Railway Line
- Non-Perennial Stream
- Perennial Stream
- Dam Wall
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:
















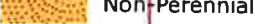



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 Datum: Cape Revision Number: 3
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Surface Water Features

Legend

-  Mineral Rights Boundary
-  Atcom East Project Area
-  SWC Project Area
-  Other Town
-  Settlement
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan
-  Quaternary Catchment Boundary

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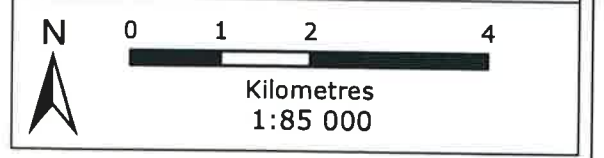
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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:



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 Datum: Cape Revision Number: 3
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Surface Water Monitoring Points

Legend

- Surface Water Monitoring Points
- Mineral Rights Boundary
- Atcom East Project Area
- SWC Project Area
- Other Town
- Settlement
- Arterial / National Route
- Main Road
- Minor Road
- Track
- Railway Line
- Non-Perennial Stream
- Perennial Stream
- Dam Wall
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

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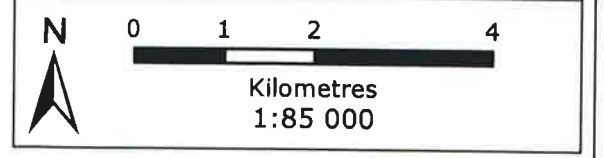
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Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

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Projection: Transverse Mercator Ref #: scc.XST1364.201210.161
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 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock Groundwater Monitoring Points

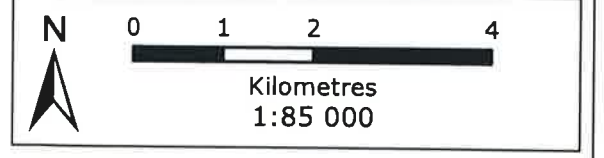
Legend

- Groundwater Monitoring Points
- Mineral Rights Boundary
- Atcom East Project Area
- SWC Project Area
- Other Town
- Settlement
- Arterial / National Route
- Main Road
- Minor Road
- Track
- Railway Line
- Non-Perennial Stream
- Perennial Stream
- Dam with Water
- Dam / Lake
- Non-Perennial Pan / Stream
- Perennial Pan

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 Signature:
 Regional Manager Mpumalanga
 DEPARTMENT OF MINERAL RESOURCES
 Date:





















Projection: Transverse Mercator Ref #: scc.XST1364.201210.162
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 16/06/2014



Xstrata Coal Consolidated EIA/EMP for Tavistock

Air Quality Monitoring Points

Legend

-  Air Quality Monitoring Points
-  Mineral Rights Boundary
-  Atcom East Project Area
-  SWC Project Area
-  Secondary Town
-  Other Town
-  Settlement
-  Arterial / National Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream
-  Perennial Pan

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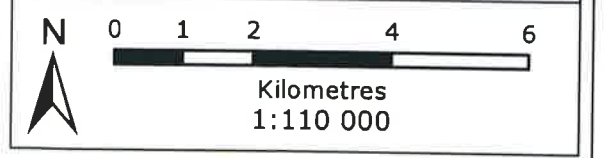
APPROVED

Regional Manager Mpumalanga
DEPARTMENT OF MINERAL RESOURCES

Date:



Projection: Transverse Mercator Ref #: scc.XST1364.201210.163
 Datum: Cape Revision Number: 2
 Central Meridian: 29°E Date: 16/06/2014



APPENDIX 4

Site plan

Appendix 5

APPENDIX 6
DEA Screening Tool Assessments

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number: MP30/5/1/2/3/2/1/ (375) EM

Project name: iMpunzi Complex IRP

Project title: Proposed iMpunzi Haul Road

Date screening report generated: 07/11/2019 13:17:39

Applicant: Glencore Operations South Africa (Pty) Ltd

Compiler: Golder Associates Africa (Pty) Ltd

Compiler signature:

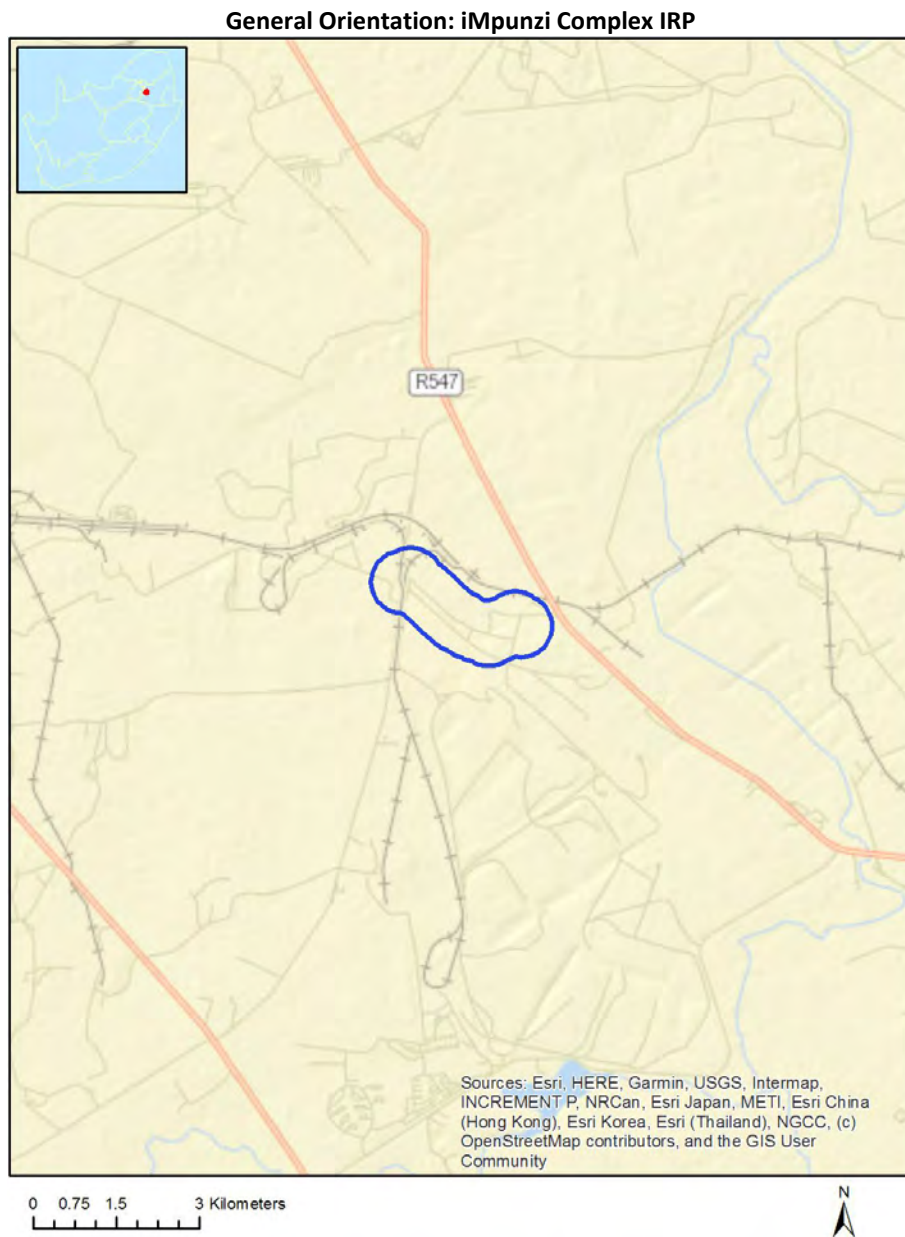

.....
 Mariette Weideman
Environmental Consultant
GOLDER

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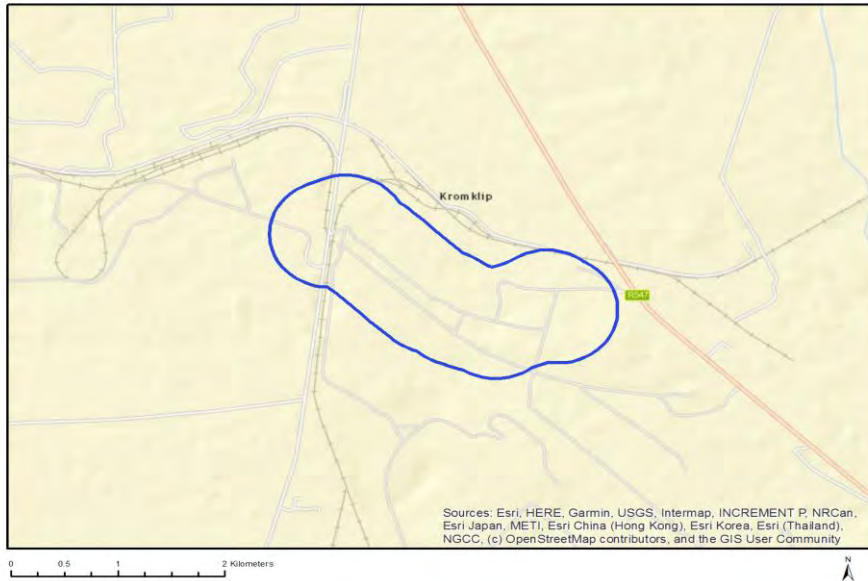
Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	5
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones.....	7
Proposed Development Area Environmental Sensitivity.....	7
Specialist assessments identified.....	8
Results of the environmental sensitivity of the proposed area	10
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MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	12
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY	13
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MAP OF RELATIVE DEFENCE THEME SENSITIVITY.....	15
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	16

Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	KLIPPLAAT	462	0	26°5'37.89S	29°11'51.06E	Farm
2	KROMFONTEIN	30	0	26°6'37.26S	29°14'21.01E	Farm
3	KLIPPLAAT	14	0	26°3'51.92S	29°12'5.58E	Farm
4	BLESBOKFONTEIN	31	0	26°6'47.58S	29°9'51.06E	Farm
5	HARTBEESTFONTEIN	39	0	26°7'49.29S	29°12'37.05E	Farm
6	KROMFONTEIN	30	36	26°6'0.73S	29°13'1.42E	Farm Portion
7	KROMFONTEIN	30	1	26°5'37.53S	29°12'58.35E	Farm Portion
8	KROMFONTEIN	30	19	26°6'5.85S	29°12'53.95E	Farm Portion
9	KROMFONTEIN	30	32	26°5'49.69S	29°12'20.75E	Farm Portion
10	KROMFONTEIN	30	5	26°6'35.49S	29°13'3.54E	Farm Portion
11	KLIPPLAAT	462	0	26°5'37.89S	29°11'51.06E	Farm Portion
12	HARTBEESTFONTEIN	39	0	26°6'49.79S	29°12'9.15E	Farm Portion
13	KROMFONTEIN	30	11	26°6'5.37S	29°12'26.18E	Farm Portion
14	KROMFONTEIN	30	37	26°5'54.81S	29°12'31.09E	Farm Portion
15	KLIPPLAAT	14	14	26°5'14.59S	29°11'29.21E	Farm Portion
16	BLESBOKFONTEIN	31	0	26°6'49.82S	29°9'49.65E	Farm Portion

Development footprint¹ vertices:

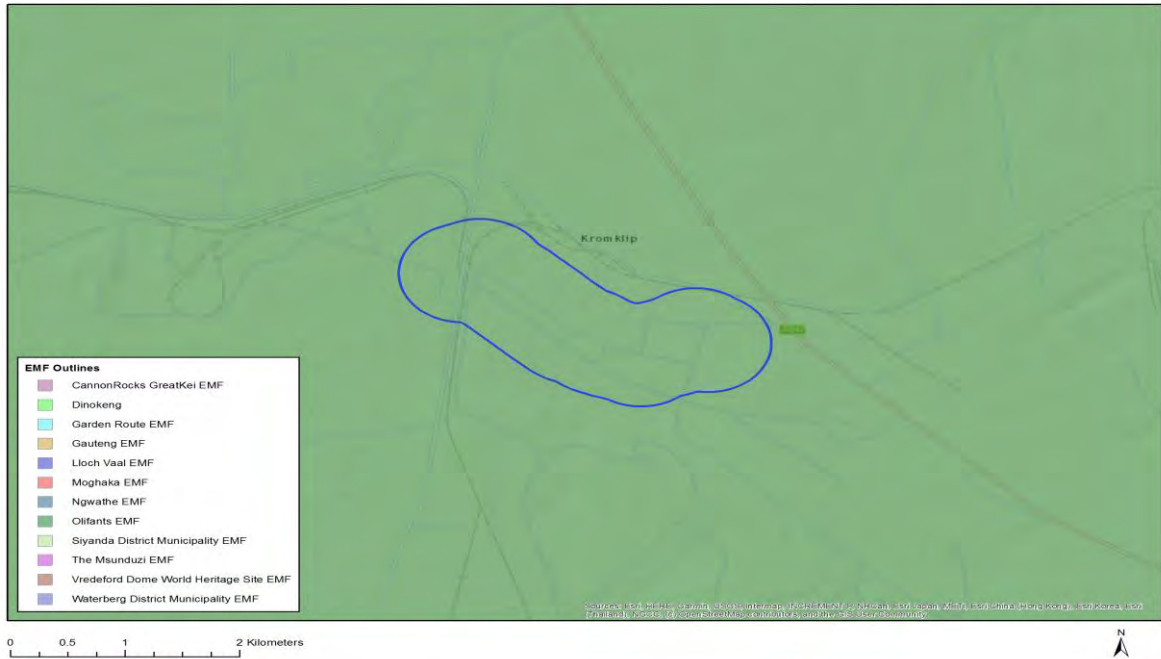
No development footprint(s) specified.

¹ "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/759	Solar PV	Approved	20.7

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_46, 67, 78, 80, 92, 103, 122, 129.pdf

Environmental screening results and assessment outcomes

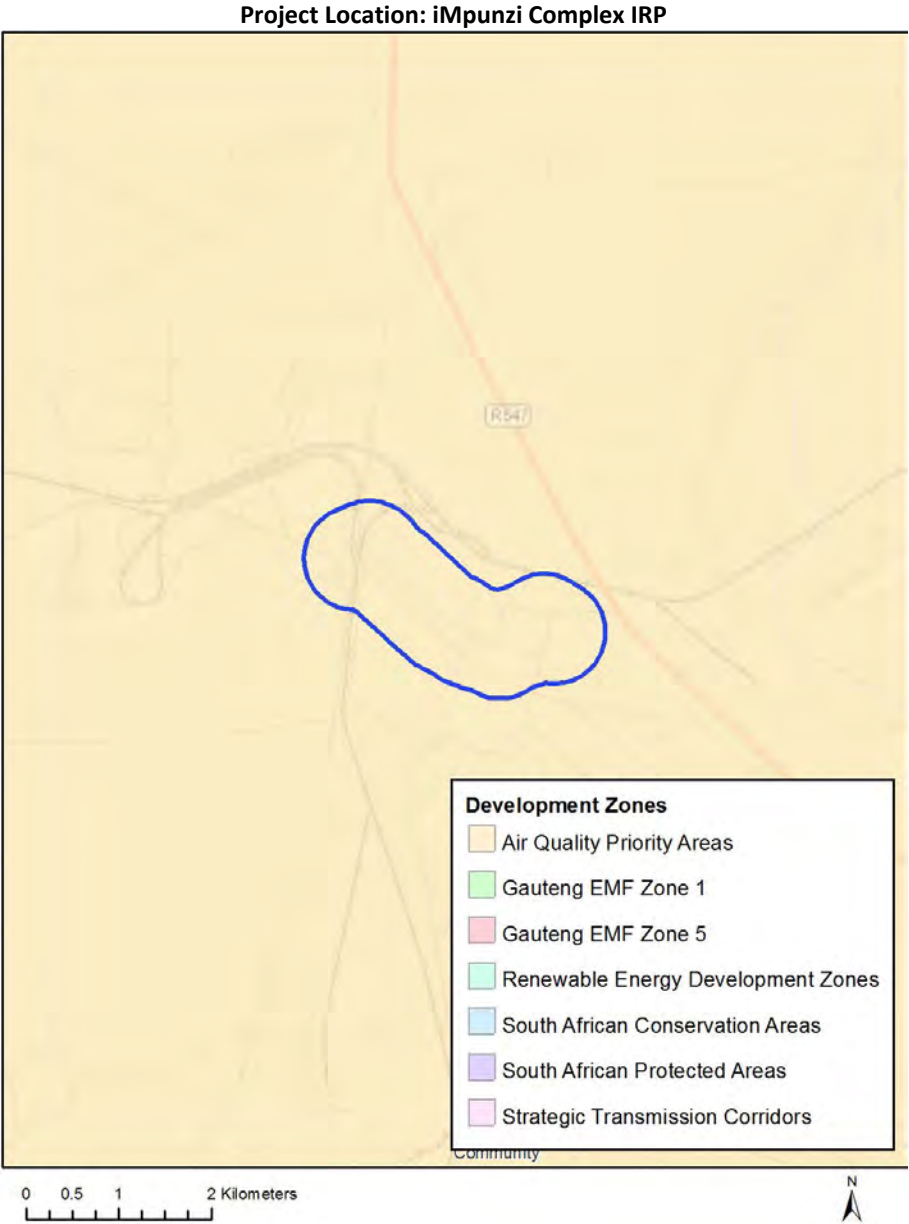
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: Mining|Mining Right|Mining - Mining Right.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Aquatic Biodiversity Theme				X

Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme		X		
Plant Species Theme			X	
Defence Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

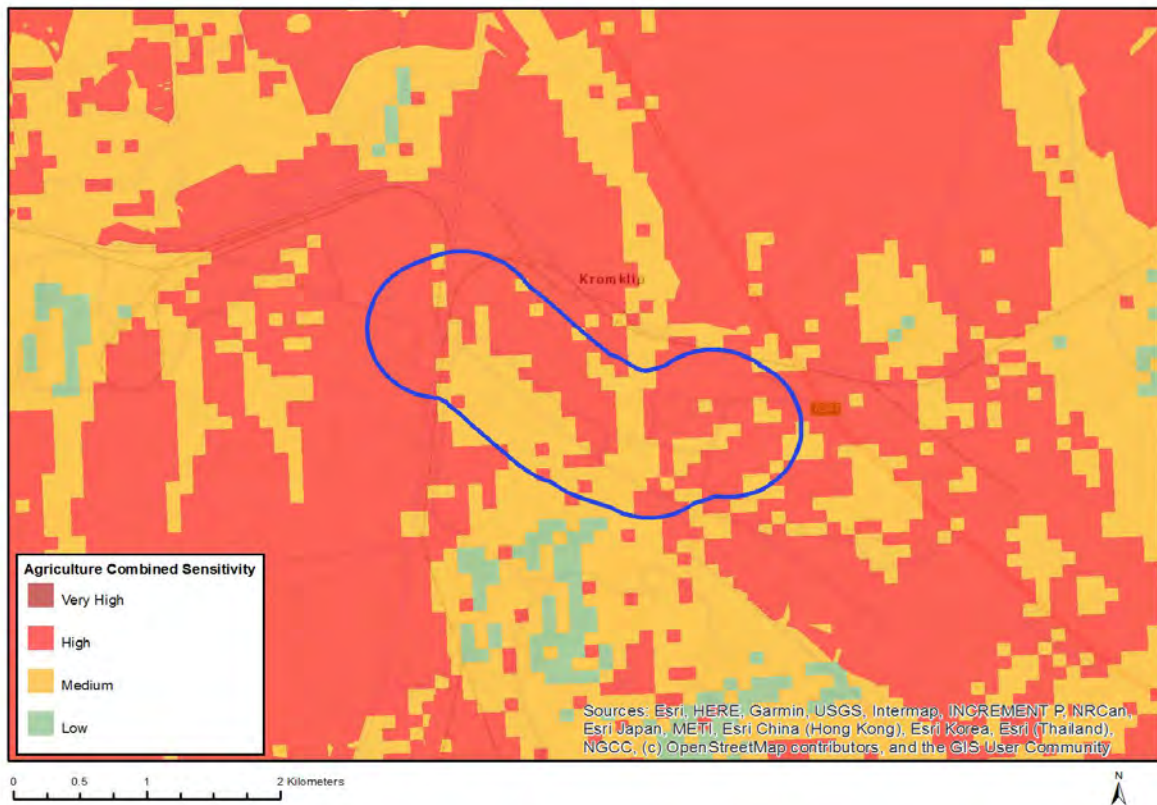
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf
7	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf

	ent	
8	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf
9	Radioactivity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
10	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
11	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
12	Climate Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
13	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
14	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
15	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
16	Seismicity Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
17	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
18	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

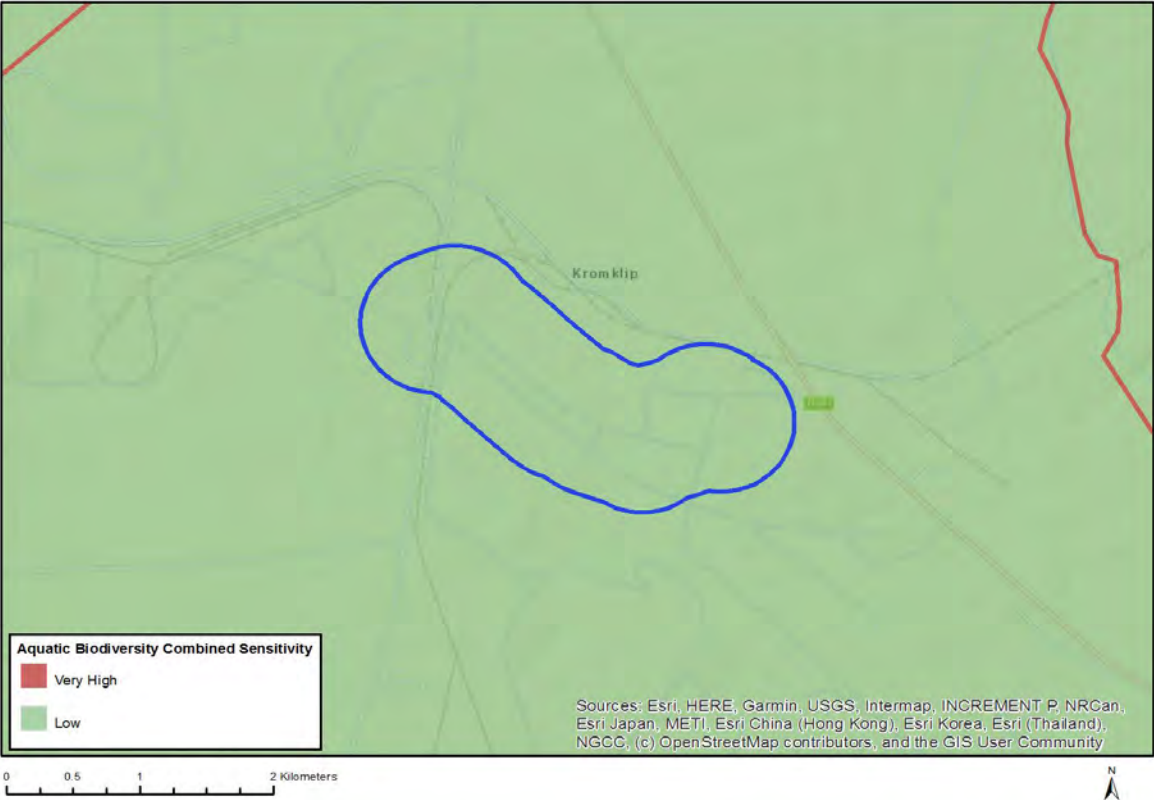


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
High	Old Fields;Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

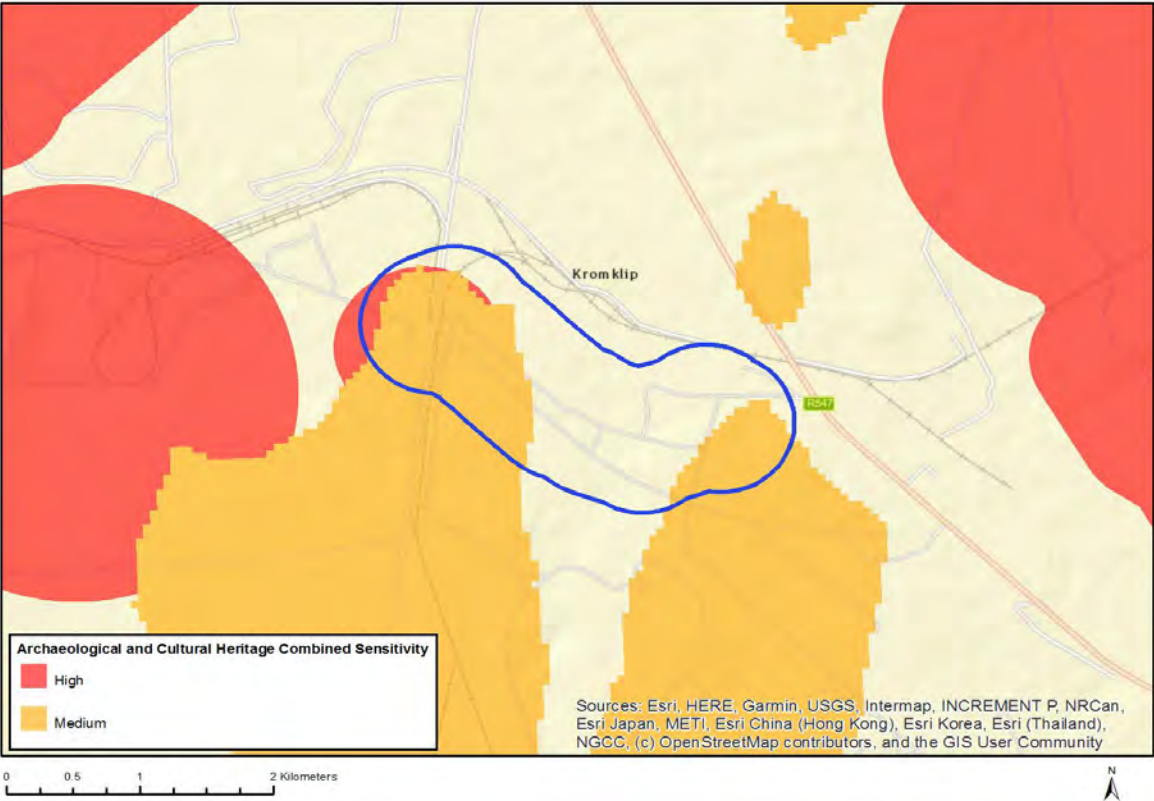


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity Areas

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

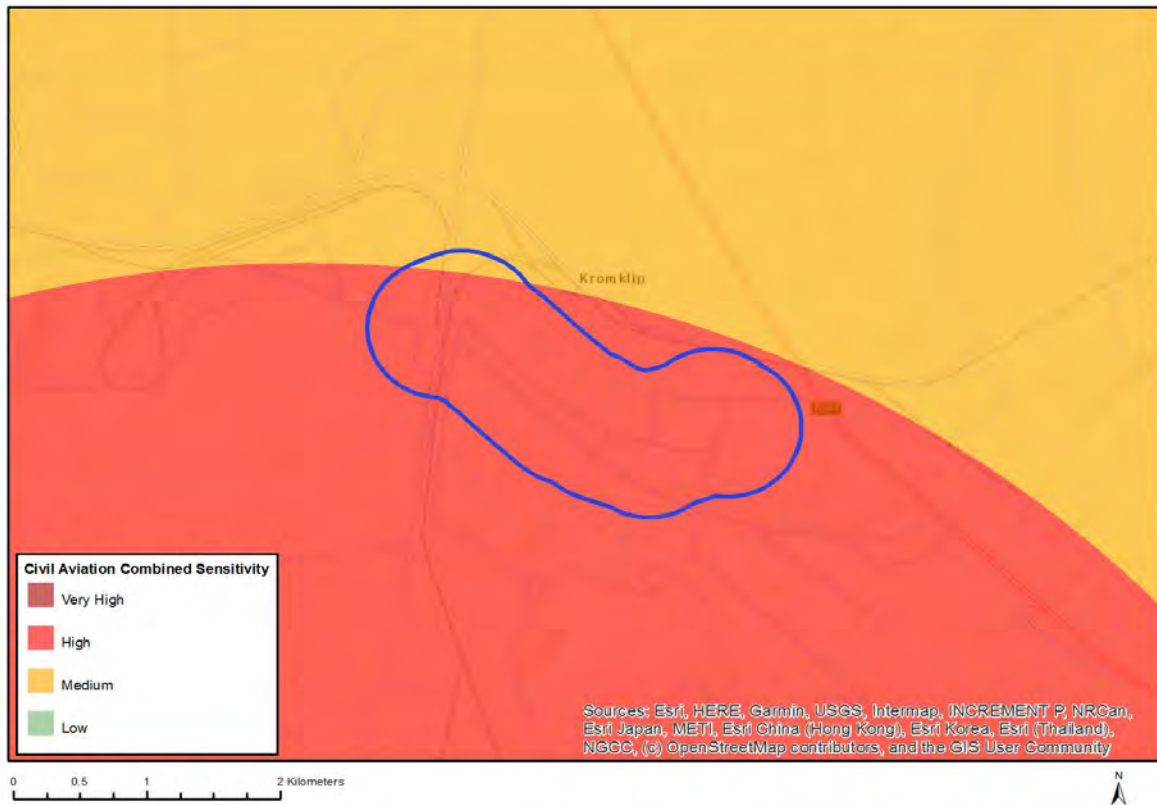


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within an important wetland
High	Within 500 m of an important wetland
Medium	Mountain or ridge

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

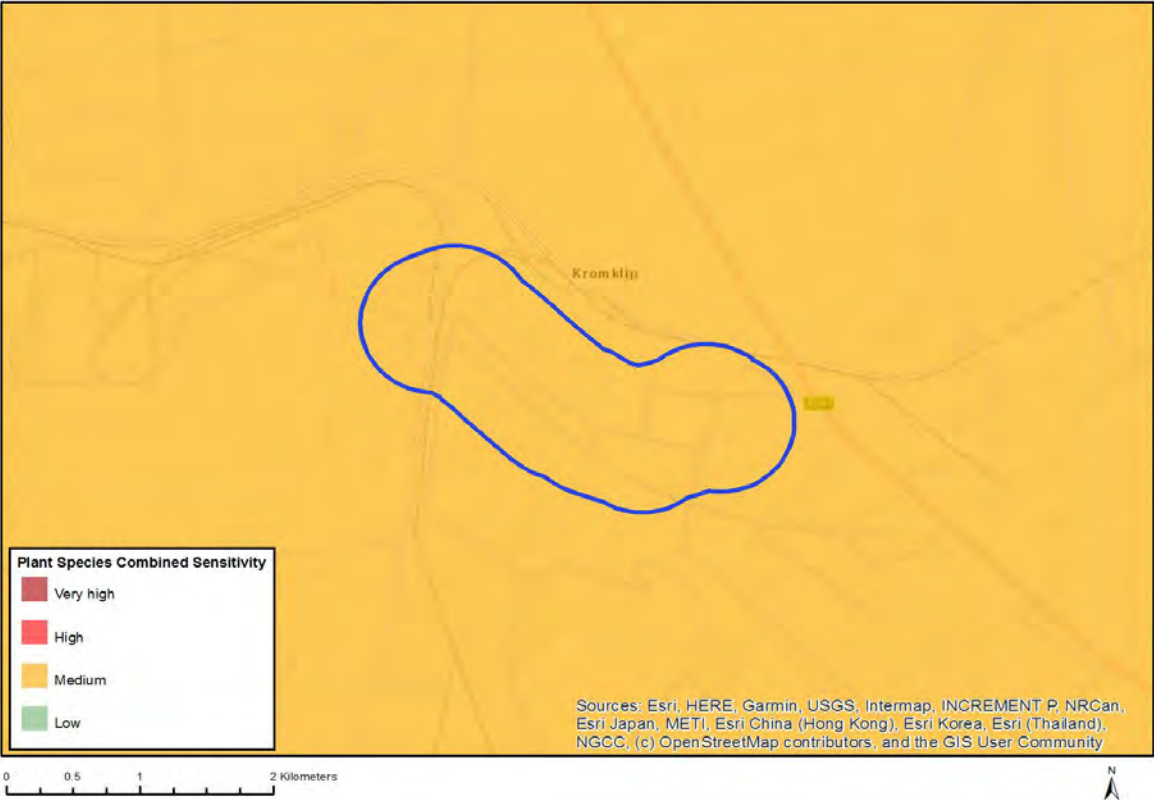


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

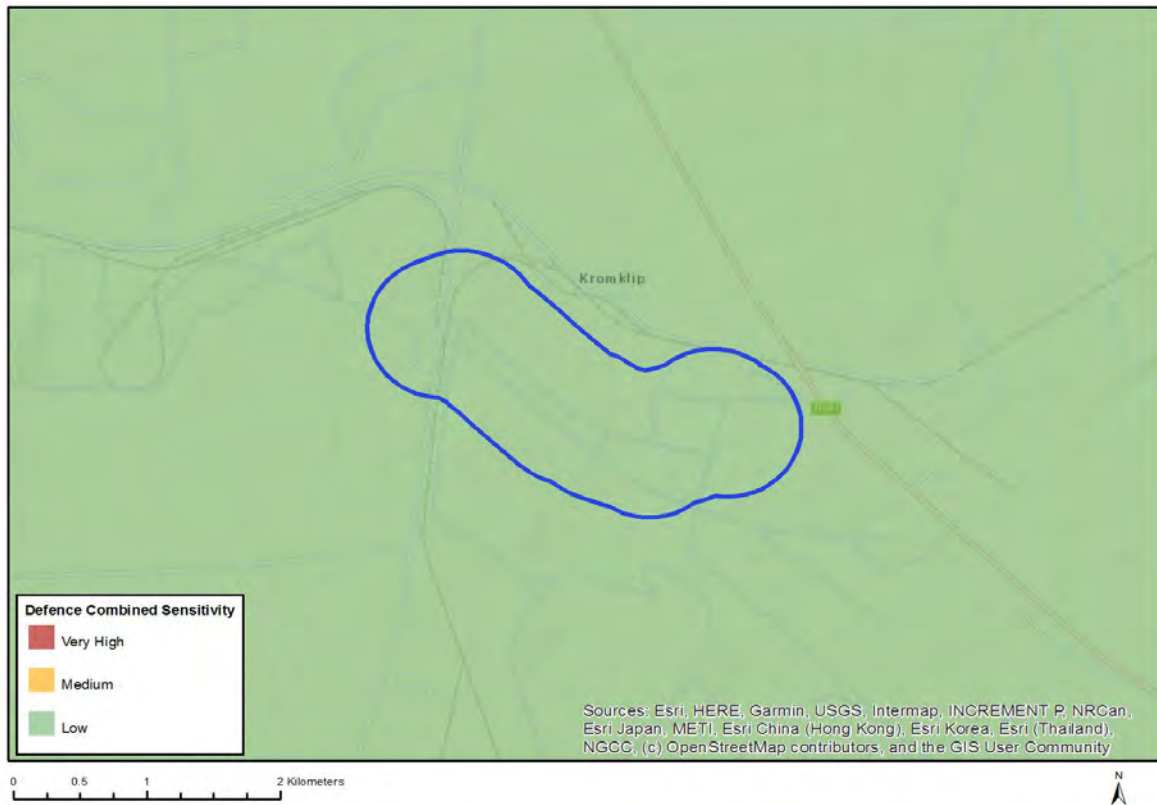


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Sensitive species 411
Medium	Sensitive species 455
Medium	Sensitive species 647
Medium	Pachycarpus suaveolens
Medium	Brachycorythis conica subsp. transvaalensis

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

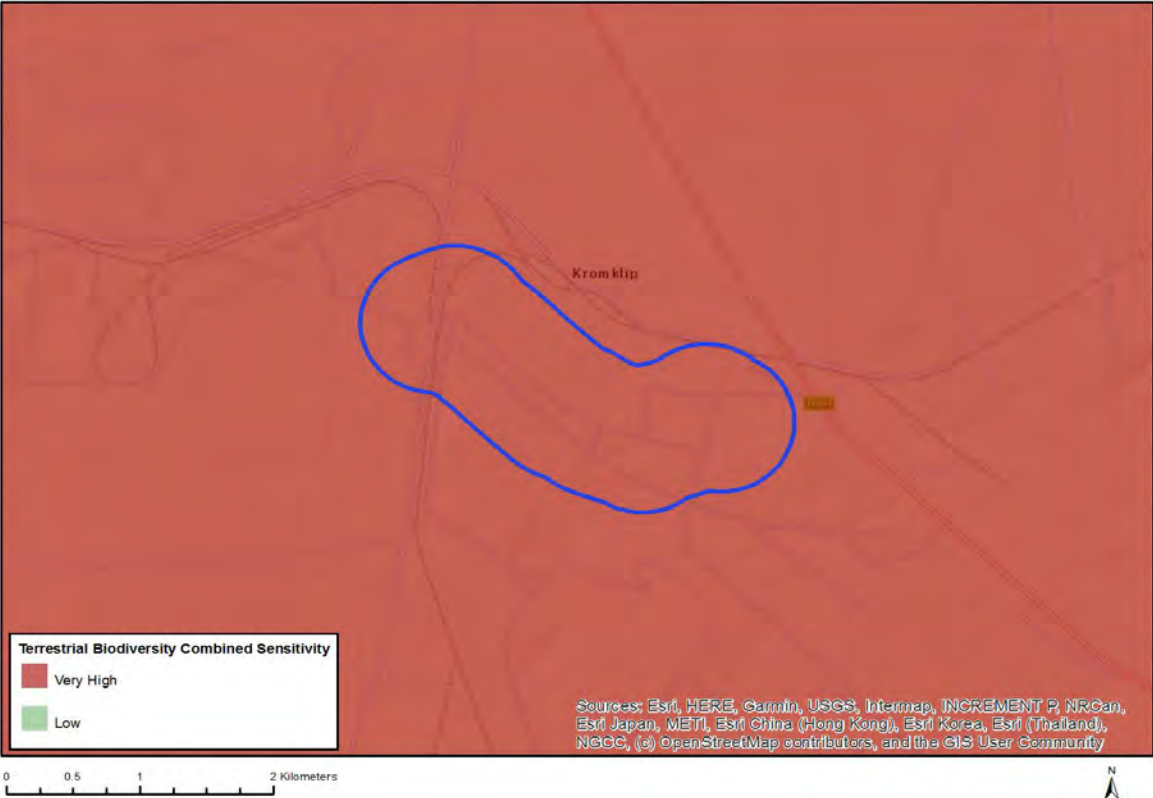


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Vulnerable ecosystem

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT
FOOTPRINT ENVIRONMENTAL SENSITIVITY**

EIA Reference number: MP30/5/1/2/3/2/1/ (375)EM

Project name: iMpunzi Complex IRP

Project title: Proposed iMpunzi South Pit Coarse Discard Facility

Date screening report generated: 23/10/2019 11:29:06

Applicant: Glencore Operations South Africa (Pty) Ltd

Compiler: Golder Associates Africa (Pty) Ltd

Compiler signature:

.....

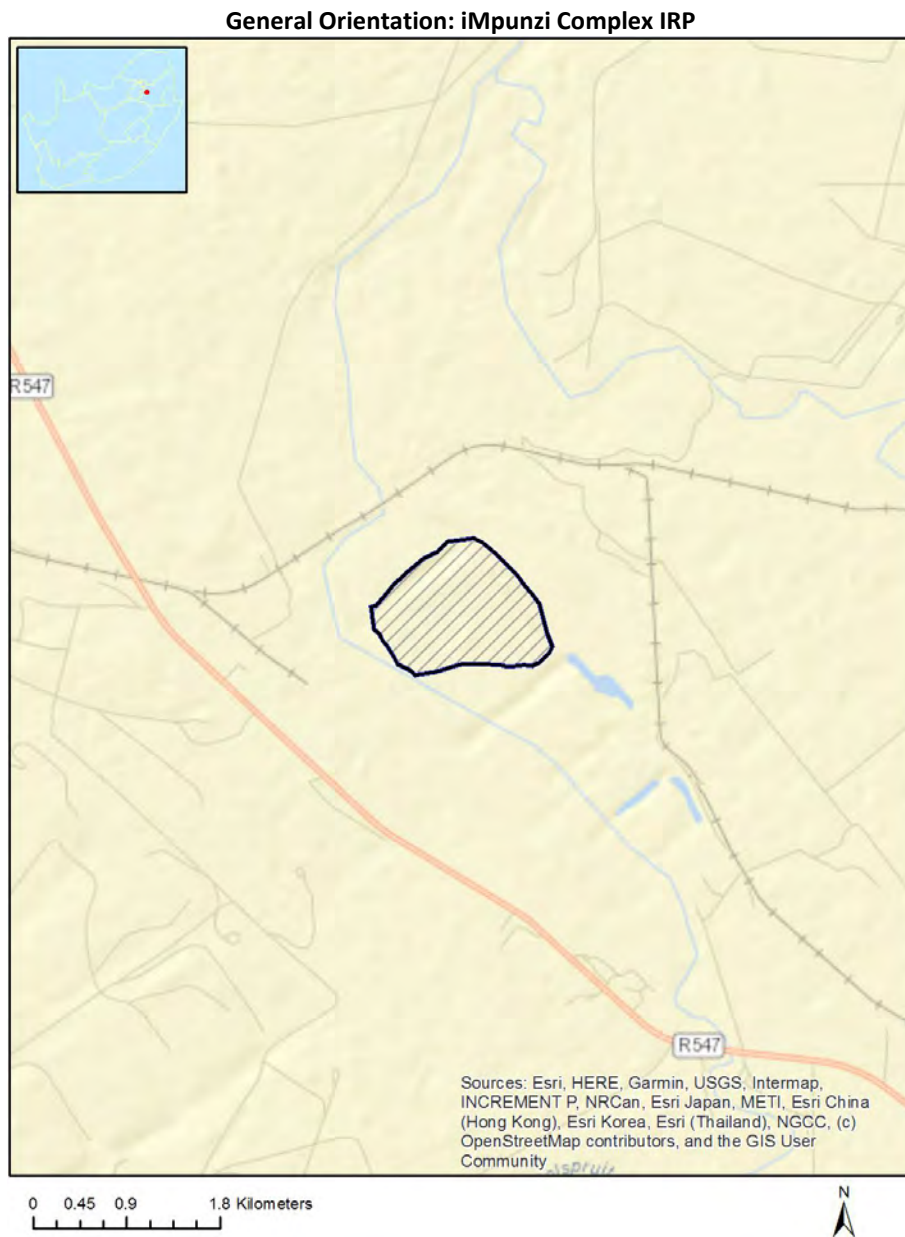
Mariette Weideman
Environmental Consultant
GOLDER

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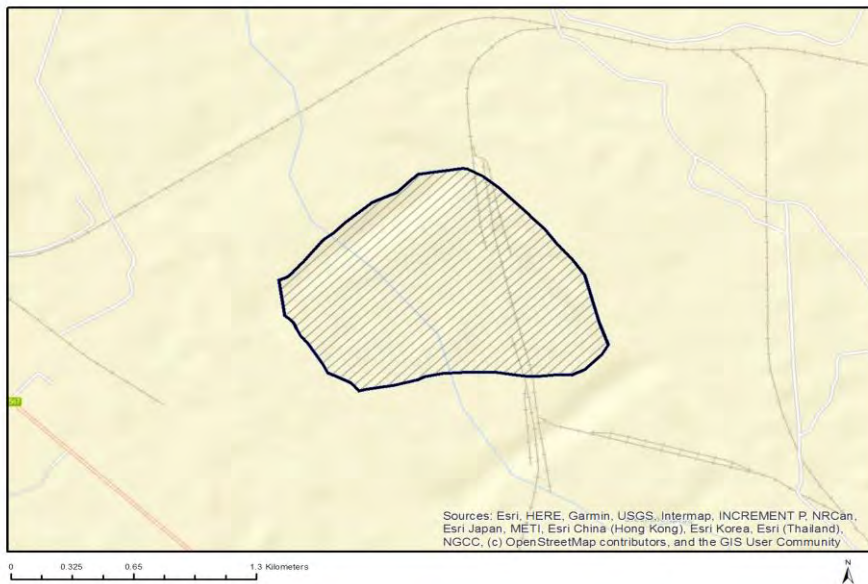
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MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	17

Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	KROMFONTEIN	30	0	26°6'37.26S	29°14'21.01E	Farm
2	KROMFONTEIN	30	23	26°6'8.35S	29°15'0.13E	Farm Portion
3	KROMFONTEIN	30	2	26°6'39.91S	29°15'32.26E	Farm Portion
4	KROMFONTEIN	30	12	26°6'26.84S	29°14'57.21E	Farm Portion
5	KROMFONTEIN	30	28	26°7'3.73S	29°14'26.16E	Farm Portion
6	KROMFONTEIN	30	3	26°5'52.46S	29°15'2.6E	Farm Portion
7	KROMFONTEIN	30	22	26°6'22.27S	29°15'10.64E	Farm Portion
8	KROMFONTEIN	30	14	26°6'26.03S	29°15'2.7E	Farm Portion
9	KROMFONTEIN	30	20	26°5'55.1S	29°14'55.65E	Farm Portion
10	KROMFONTEIN	30	2	26°6'22.81S	29°14'52.25E	Farm Portion
11	KROMFONTEIN	30	3	26°6'0.19S	29°14'19.15E	Farm Portion

Development footprint¹ vertices:

Footprint	Latitude	Longitude
1	26°6'16.03S	29°14'21.11E
1	26°6'9.92S	29°14'20.2E
1	26°6'9.33S	29°14'21.73E
1	26°6'6.52S	29°14'24.49E
1	26°6'2.9S	29°14'27.71E
1	26°6'1.59S	29°14'29.72E
1	26°5'59.73S	29°14'31.77E
1	26°5'56.4S	29°14'36.14E

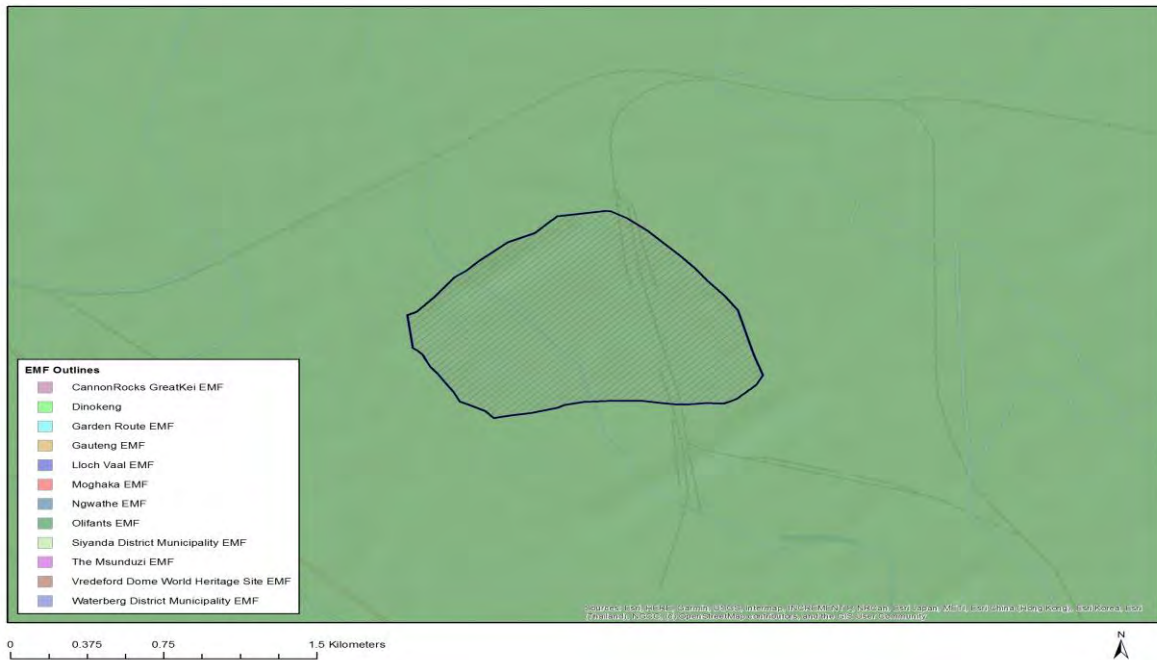
¹ “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

1	26°5'54.62S	29°14'40.5E
1	26°5'53.01S	29°14'42.28E
1	26°5'51.55S	29°14'44.03E
1	26°5'50.59S	29°14'51.49E
1	26°5'50.61S	29°14'51.94E
1	26°5'50.64S	29°14'52.49E
1	26°5'51.92S	29°14'55.06E
1	26°5'54.08S	29°14'58.1E
1	26°5'58.71S	29°15'3.22E
1	26°6'1.2S	29°15'5.82E
1	26°6'3.54S	29°15'7.77E
1	26°6'6.33S	29°15'10.49E
1	26°6'9.04S	29°15'12.59E
1	26°6'17.15S	29°15'15.1E
1	26°6'21.12S	29°15'16.59E
1	26°6'22.87S	29°15'15.47E
1	26°6'25.46S	29°15'12.47E
1	26°6'26.35S	29°15'10.38E
1	26°6'26.27S	29°15'8.63E
1	26°6'26.28S	29°15'7.25E
1	26°6'26.48S	29°15'5.16E
1	26°6'26.55S	29°15'3.12E
1	26°6'26.29S	29°15'0.81E
1	26°6'25.87S	29°14'57.61E
1	26°6'25.81S	29°14'53.1E
1	26°6'26.03S	29°14'48.22E
1	26°6'26.6S	29°14'45.22E
1	26°6'27.12S	29°14'44.02E
1	26°6'28.06S	29°14'39.88E
1	26°6'28.54S	29°14'36.83E
1	26°6'28.83S	29°14'35.07E
1	26°6'29.06S	29°14'33.91E
1	26°6'27.73S	29°14'32.55E
1	26°6'26.7S	29°14'30.28E
1	26°6'25.98S	29°14'28.59E
1	26°6'24.29S	29°14'27.6E
1	26°6'22.59S	29°14'26.34E
1	26°6'20.82S	29°14'25.06E
1	26°6'19.61S	29°14'23.89E
1	26°6'18.45S	29°14'23.25E
1	26°6'17.37S	29°14'22.69E
1	26°6'16.73S	29°14'22.08E
1	26°6'16.41S	29°14'21.64E
1	26°6'16.03S	29°14'21.11E

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/759	Solar PV	Approved	18.6

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_46,_67,_78,_80,_92,_103,_122,_129.pdf

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

Mining | Mining | Beneficiation | Hydrocarbon | Beneficiation - Hydrocarbon.

Relevant development incentives, restrictions, exclusions or prohibitions

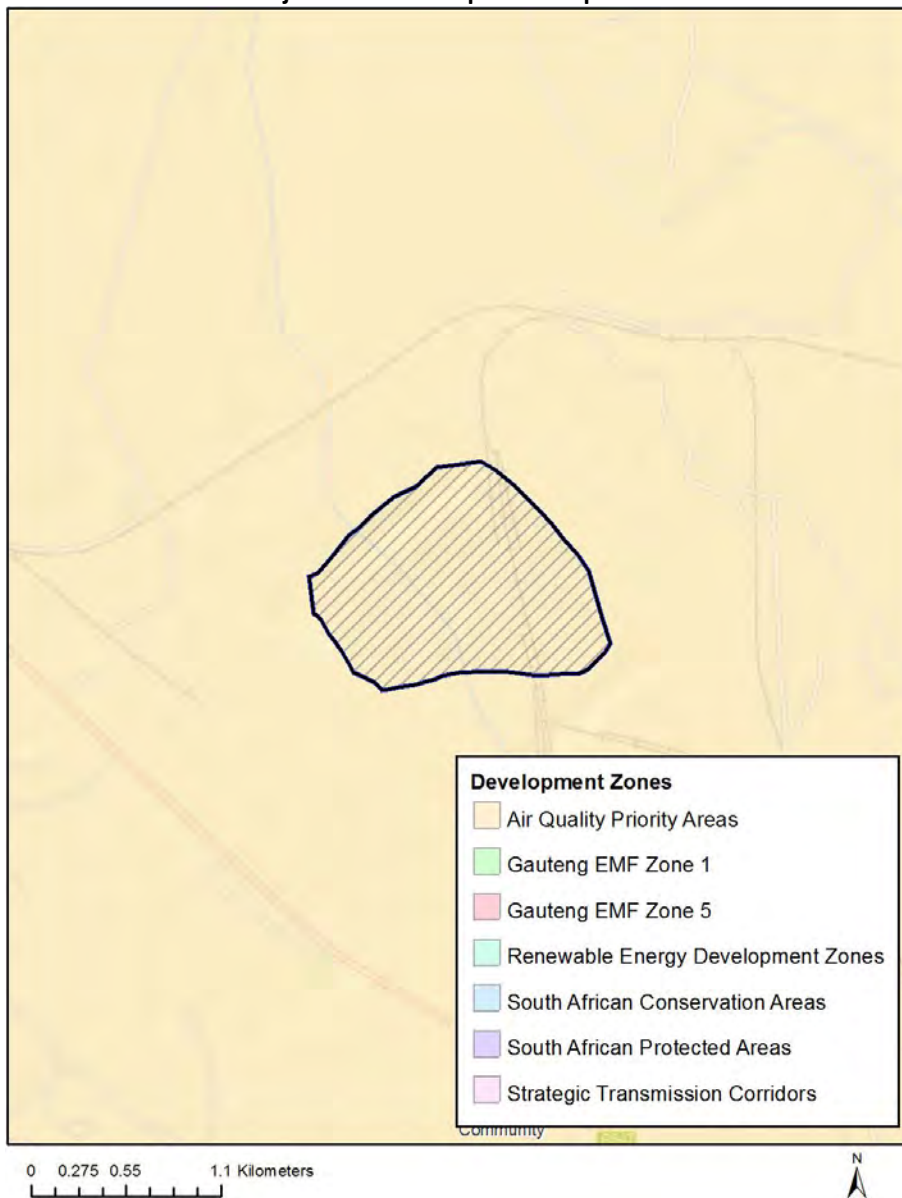
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this footprint are indicated below.

Incentive, restriction or prohibition	Implication

tion	
Strategic Transmission Corridor-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

Project Location: iMpunzi Complex IRP



Proposed Development Area Environmental Sensitivity

The following summary of the development footprint environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme			X	
Plant Species Theme			X	
Defence Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation.

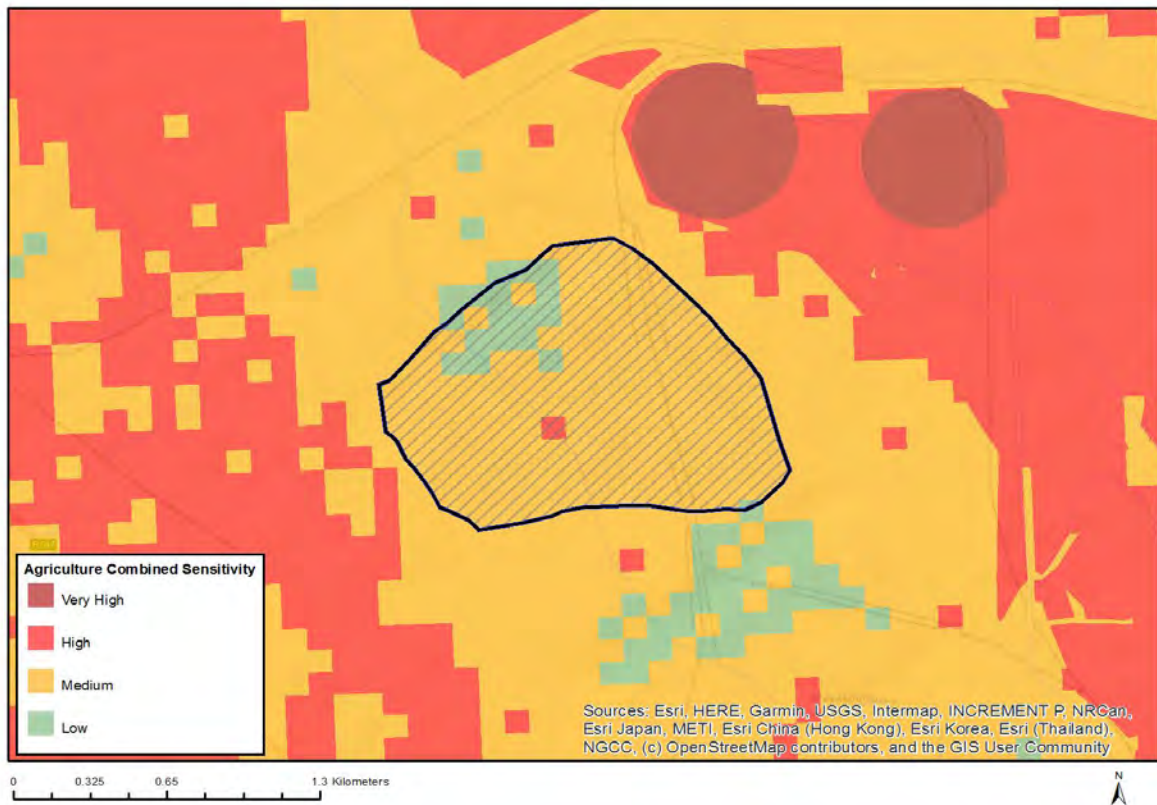
N	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiv	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf

	ersity Impact Assessment	
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf
6	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
7	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf
8	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
9	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
10	Climate Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
11	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
12	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
13	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
14	Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Assessment/General/Appendix6.pdf
15	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
16	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed footprint for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

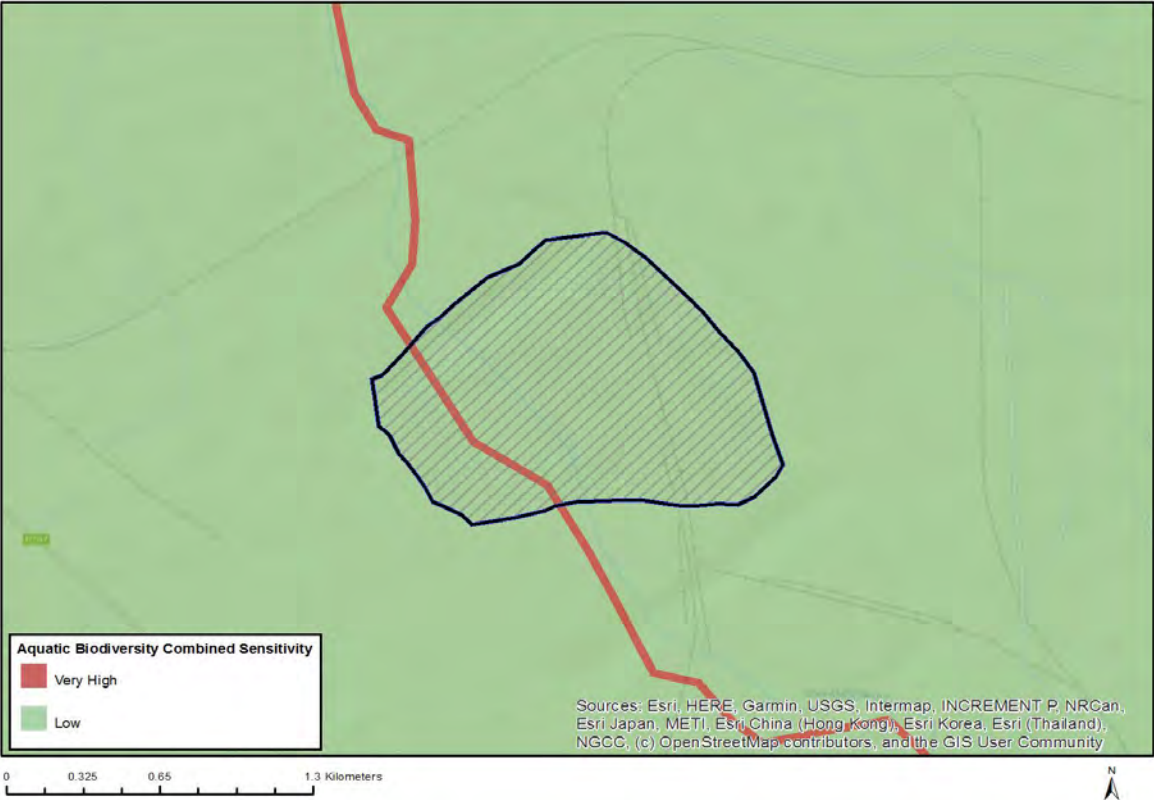


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

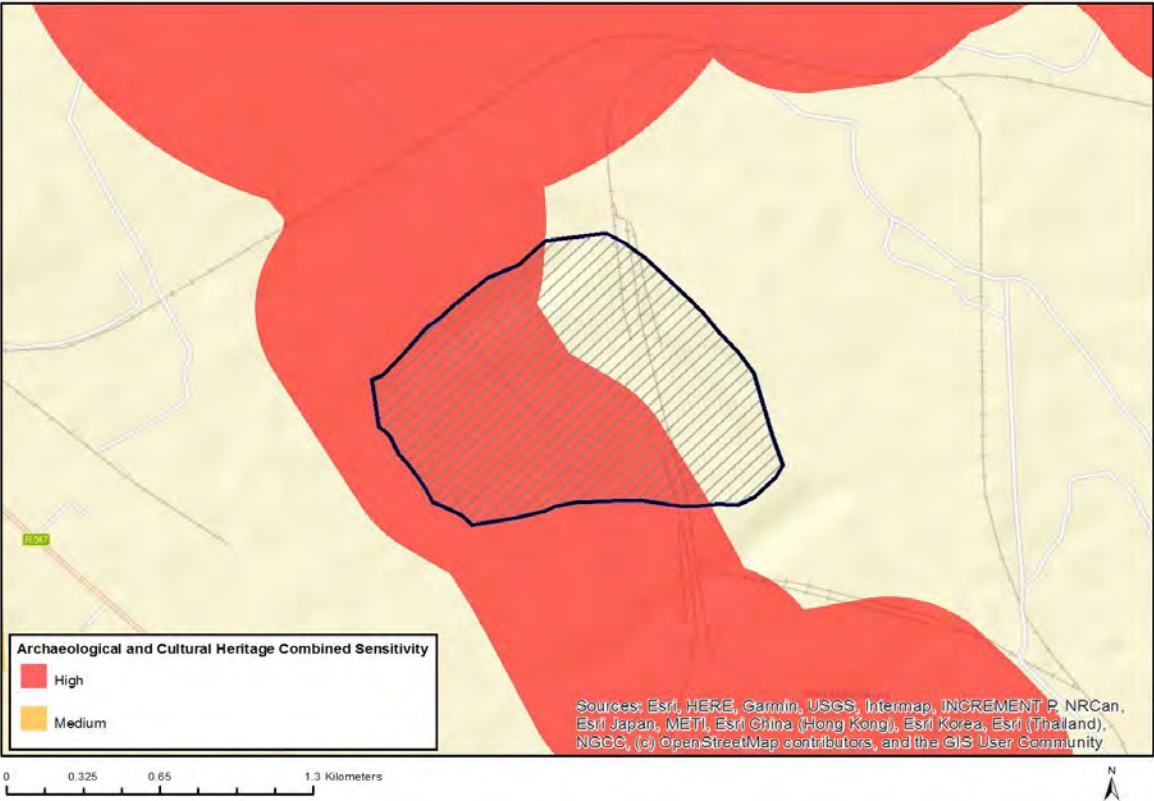


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity Areas
Very High	CBA,River,Steenkoolspruit

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

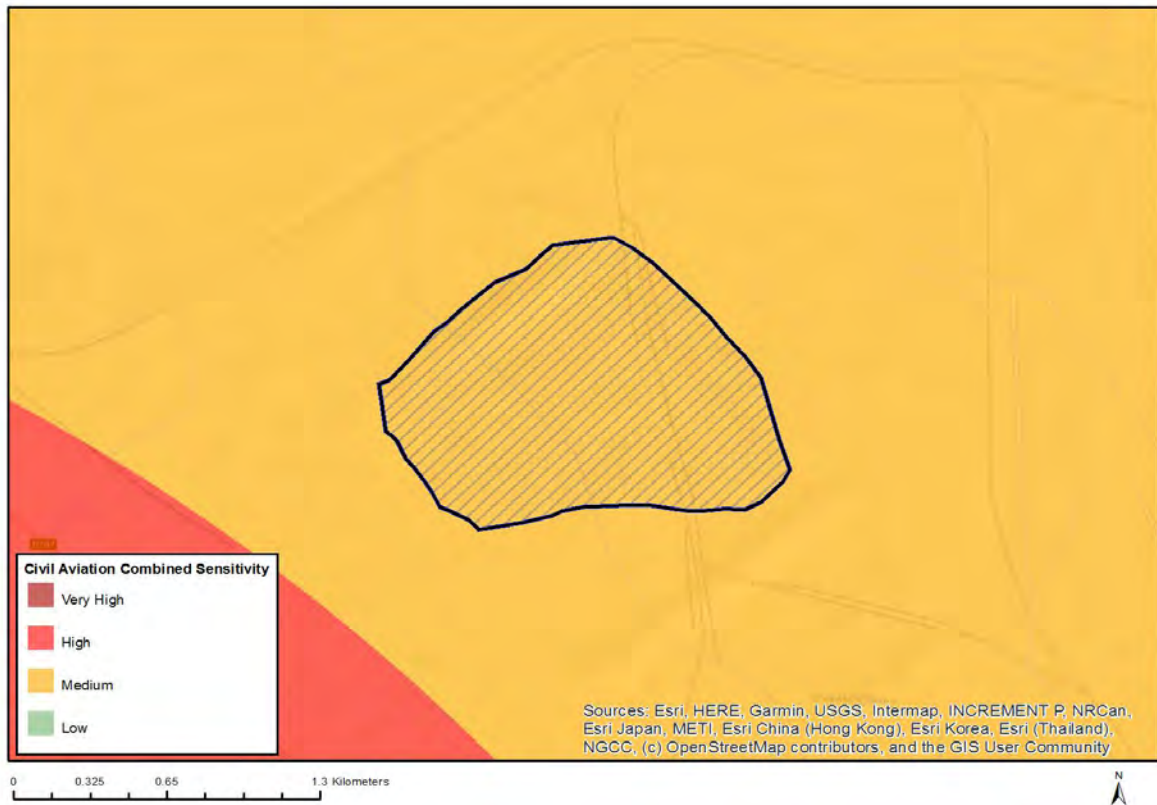


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 500 m of an important river

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

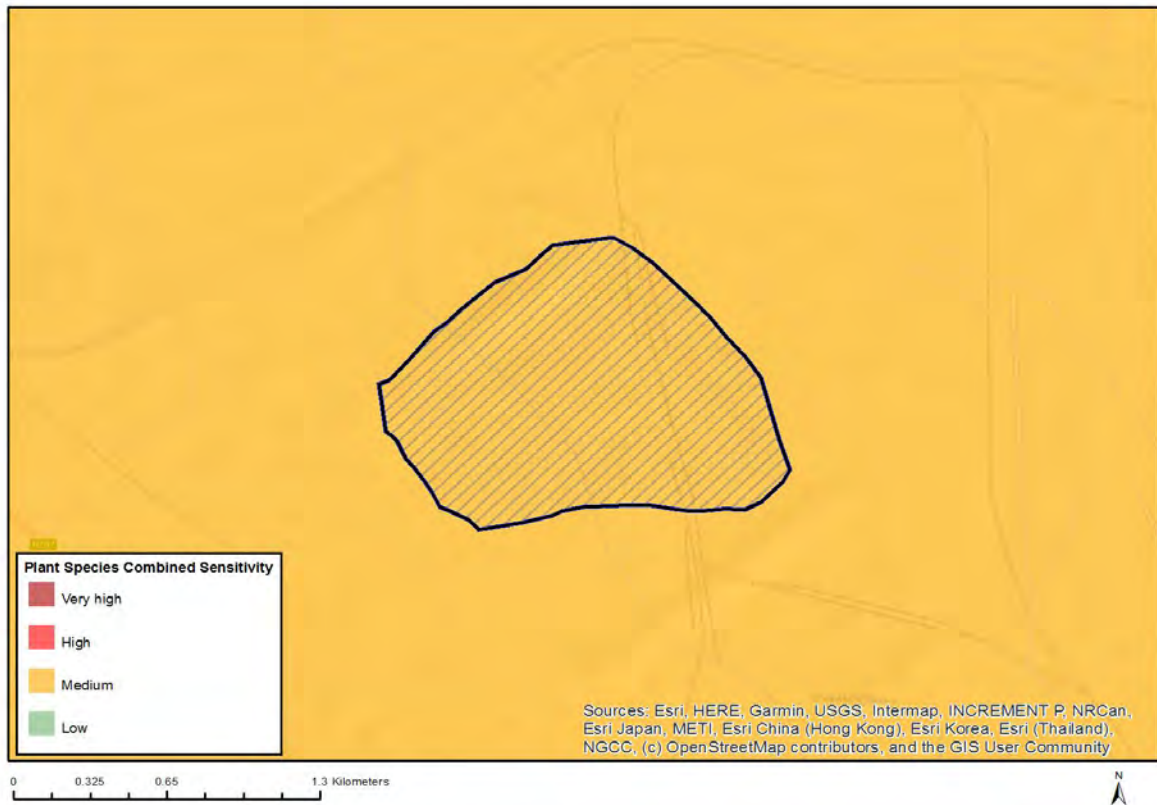


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Sensitive species 411
Medium	Sensitive species 455
Medium	Sensitive species 647
Medium	<i>Pachycarpus suaveolens</i>
Medium	<i>Brachycorythis conica</i> subsp. <i>transvaalensis</i>

MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Vulnerable ecosystem

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT
FOOTPRINT ENVIRONMENTAL SENSITIVITY**

EIA Reference number: MP30/5/1/2/3/2/1/ (375)EM

Project name: iMpunzi Complex IRP

Project title: Proposed iMpunzi Venture co-disposal facility

Date screening report generated: 23/10/2019 10:57:17

Applicant: Glencore Operations South Africa (Pty) Ltd

Compiler: Golder Associates Africa (Pty) Ltd

Compiler signature:

.....

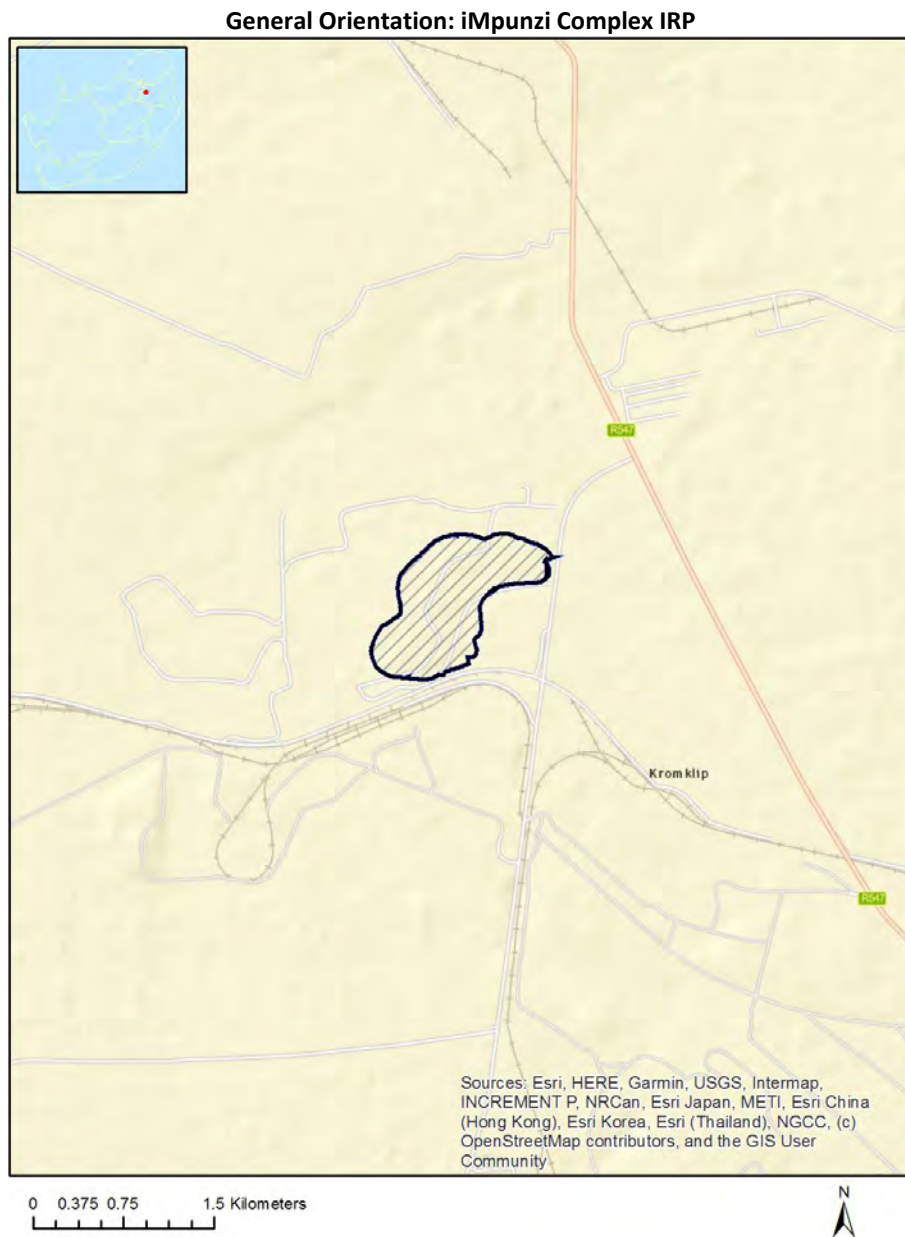
Mariette Weidenman
Environmental Consultant
GOLDER

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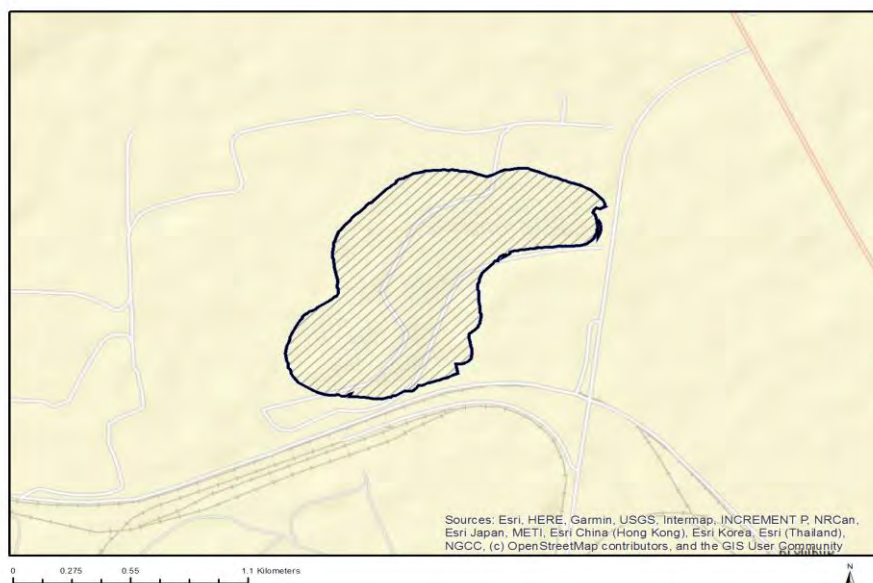
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Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	KLIPPLAAT	14	0	26°3'51.92S	29°12'5.58E	Farm
2	BLESBOKFONTEIN	31	0	26°6'47.58S	29°9'51.06E	Farm
3	BLESBOKFONTEIN	31	2	26°5'24.47S	29°10'43.17E	Farm Portion
4	KLIPPLAAT	14	14	26°5'14.59S	29°11'29.21E	Farm Portion
5	KLIPPLAAT	14	1	26°4'17.02S	29°11'17.32E	Farm Portion

Development footprint¹ vertices:

Footprint	Latitude	Longitude
1	26°4'43.42S	29°11'35.37E
1	26°4'43.44S	29°11'35.63E
1	26°4'43.53S	29°11'35.89E
1	26°4'43.61S	29°11'36.2E
1	26°4'43.78S	29°11'36.68E
1	26°4'43.88S	29°11'36.98E
1	26°4'43.97S	29°11'37.27E
1	26°4'44.13S	29°11'37.66E
1	26°4'44.31S	29°11'38.13E
1	26°4'44.55S	29°11'38.57E
1	26°4'44.57S	29°11'38.91E
1	26°4'44.64S	29°11'39.1E
1	26°4'44.71S	29°11'39.57E

¹ “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

1	26°4'44.81S	29°11'39.88E
1	26°4'44.99S	29°11'40.37E
1	26°4'45.18S	29°11'40.83E
1	26°4'45.31S	29°11'41.27E
1	26°4'45.42S	29°11'41.58E
1	26°4'45.6S	29°11'42.05E
1	26°4'45.68S	29°11'42.53E
1	26°4'45.88S	29°11'42.94E
1	26°4'45.94S	29°11'43.41E
1	26°4'46.14S	29°11'43.87E
1	26°4'46.4S	29°11'44.31E
1	26°4'46.55S	29°11'44.79E
1	26°4'46.72S	29°11'45.09E
1	26°4'46.98S	29°11'45.51E
1	26°4'47.15S	29°11'45.72E
1	26°4'47.4S	29°11'45.98E
1	26°4'47.75S	29°11'46.32E
1	26°4'48.03S	29°11'46.66E
1	26°4'48.37S	29°11'46.92E
1	26°4'48.64S	29°11'47.15E
1	26°4'49.11S	29°11'47.21E
1	26°4'49.19S	29°11'47.3E
1	26°4'49.57S	29°11'46.43E
1	26°4'49.45S	29°11'45.92E
1	26°4'49.74S	29°11'45.6E
1	26°4'50.16S	29°11'45.37E
1	26°4'50.38S	29°11'45.68E
1	26°4'50.82S	29°11'45.84E
1	26°4'51.28S	29°11'45.92E
1	26°4'51.76S	29°11'46.01E
1	26°4'51.41S	29°11'46.28E
1	26°4'51.78S	29°11'46.52E
1	26°4'52.09S	29°11'46.57E
1	26°4'52.39S	29°11'46.59E
1	26°4'52.7S	29°11'46.57E
1	26°4'53.01S	29°11'46.54E
1	26°4'53.3S	29°11'46.46E
1	26°4'53.6S	29°11'46.36E
1	26°4'53.88S	29°11'46.22E
1	26°4'53.42S	29°11'46.16E
1	26°4'53.12S	29°11'46.1E
1	26°4'52.65S	29°11'46.17E
1	26°4'52.33S	29°11'46.19E
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1	26°4'53.56S	29°11'45.73E
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1	26°4'55.29S	29°11'41.69E
1	26°4'55.26S	29°11'41.21E
1	26°4'55.31S	29°11'40.69E
1	26°4'55.25S	29°11'40.19E
1	26°4'55.35S	29°11'39.91E

1	26°4'55.42S	29°11'39.44E
1	26°4'55.47S	29°11'38.95E
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1	26°4'49.5S	29°11'10.67E
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1	26°4'47.27S	29°11'13.39E
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1	26°4'44.02S	29°11'19.06E
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1	26°4'43.58S	29°11'24.06E
1	26°4'43.71S	29°11'24.54E
1	26°4'43.75S	29°11'24.96E
1	26°4'43.85S	29°11'25.27E
1	26°4'43.89S	29°11'25.77E
1	26°4'43.9S	29°11'26.21E
1	26°4'43.96S	29°11'26.69E
1	26°4'44S	29°11'26.97E
1	26°4'44.12S	29°11'27.43E
1	26°4'44.24S	29°11'27.89E
1	26°4'44.32S	29°11'28.22E
1	26°4'44.5S	29°11'28.71E
1	26°4'44.67S	29°11'29.21E
1	26°4'44.58S	29°11'29.57E
1	26°4'44.42S	29°11'30.07E
1	26°4'44.37S	29°11'30.3E
1	26°4'44.13S	29°11'30.71E
1	26°4'44.1S	29°11'30.85E
1	26°4'43.91S	29°11'31.28E
1	26°4'43.84S	29°11'31.52E
1	26°4'43.65S	29°11'31.97E
1	26°4'43.61S	29°11'32.41E
1	26°4'43.53S	29°11'32.93E
1	26°4'43.51S	29°11'33.36E
1	26°4'43.45S	29°11'33.85E
1	26°4'43.43S	29°11'34.29E
1	26°4'43.4S	29°11'34.62E
1	26°4'43.39S	29°11'34.95E
1	26°4'43.42S	29°11'35.37E

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/759	Solar PV	Approved	20.2

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_46,_67,_78,_80,_92,_103,_122,_129.pdf

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

Mining|Beneficiation|Hydrocarbon|Beneficiation - Hydrocarbon.

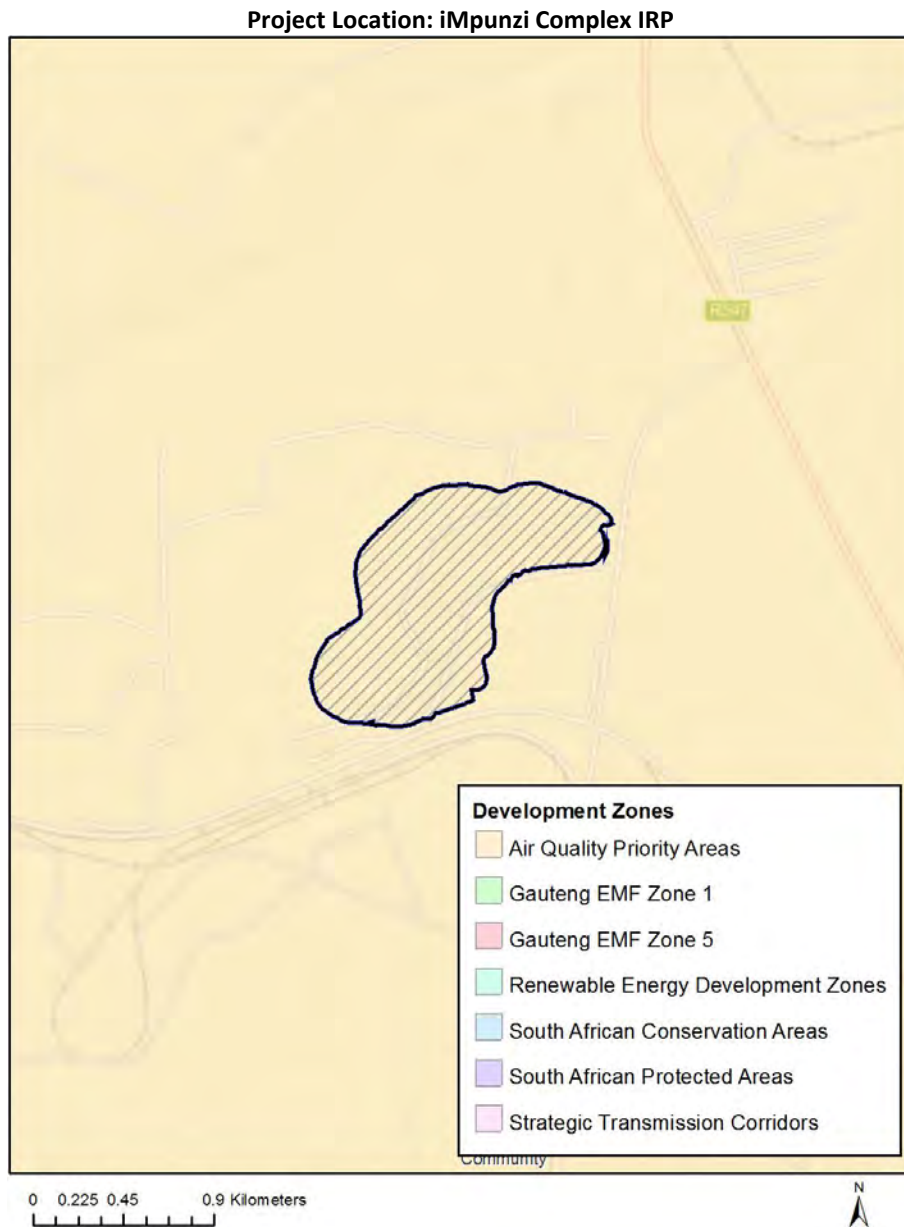
Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this footprint are indicated below.

Incentive, restriction or prohibition	Implication

tion	
Strategic Transmission Corridor-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development footprint environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Aquatic Biodiversity Theme				X
Civil Aviation Theme			X	
Plant Species Theme			X	
Defence Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation.

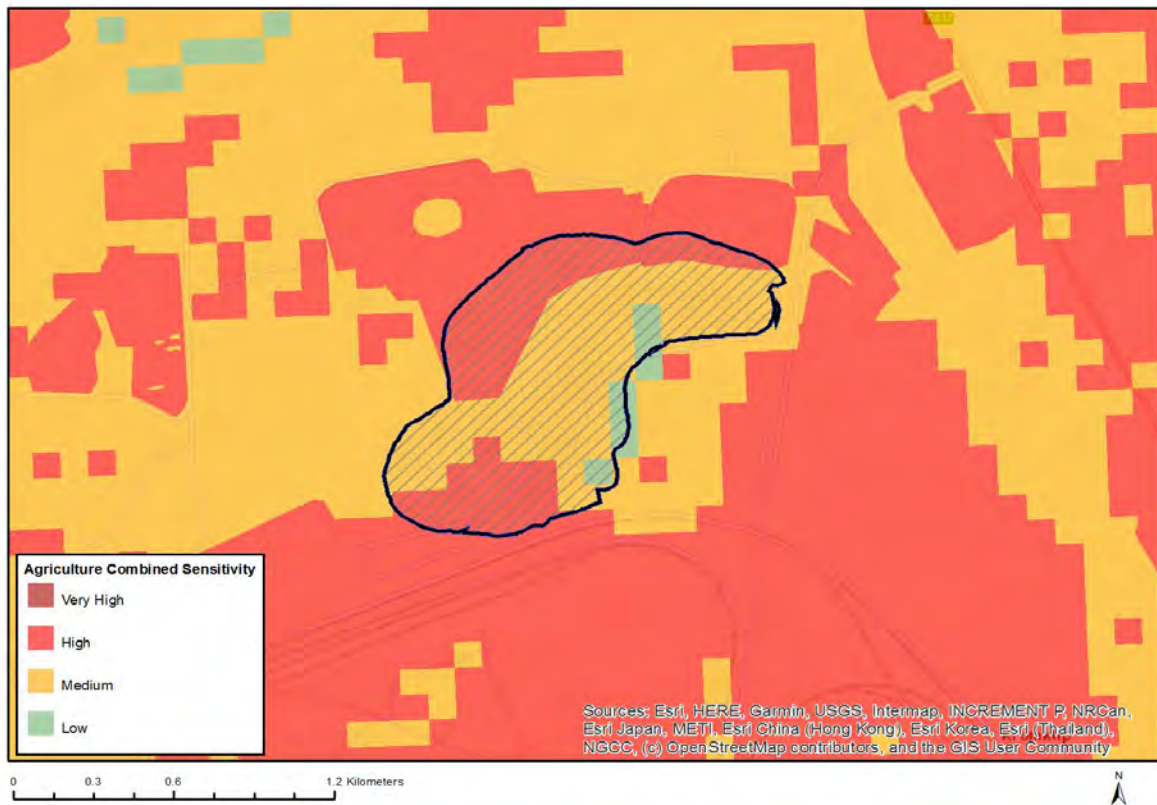
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiv	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf

	ersity Impact Assess ment	
5	Aquatic Biodiversity Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf
6	Hydrology Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
7	Noise Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf
8	Traffic Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
9	Geotechnical Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
10	Climate Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
11	Health Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
12	Socio-Economic Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
13	Ambient Air Quality Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
14	Air Quality Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/Assessment/General/Appendix6.pdf
15	Plant Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
16	Animal Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed footprint for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

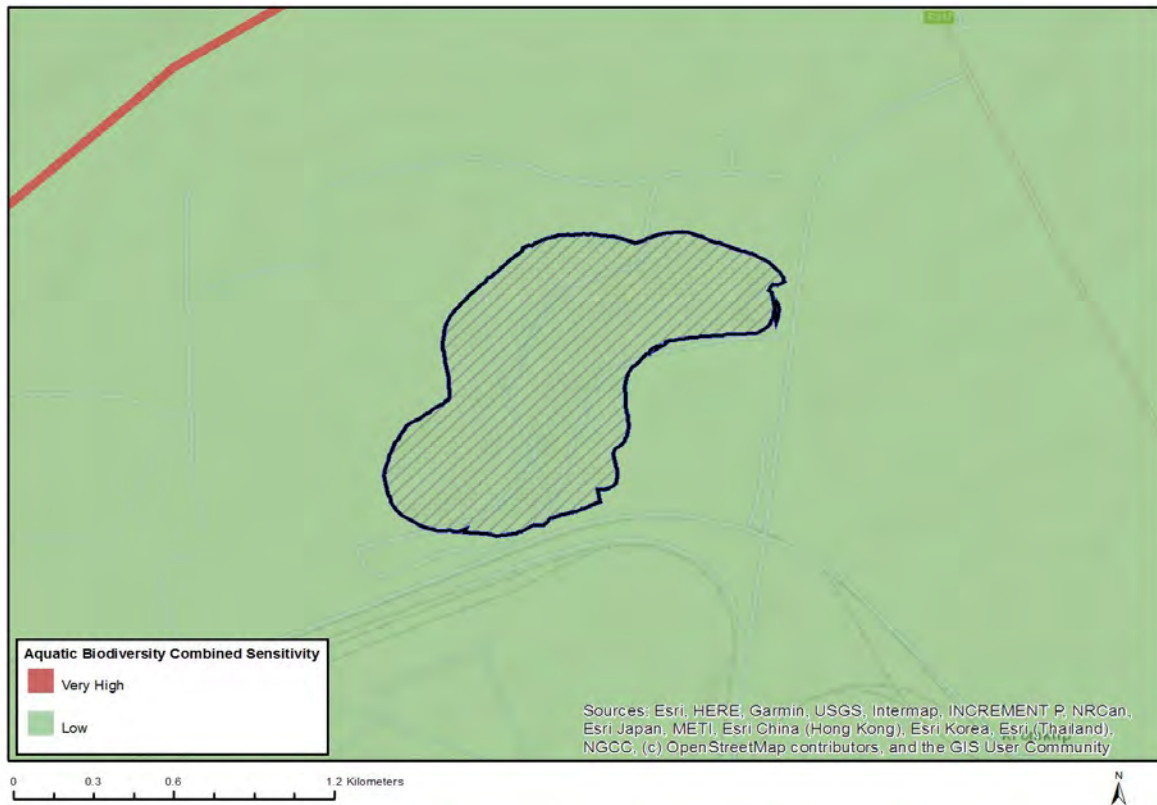


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
High	Old Fields;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity Areas

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Sensitive species 411
Medium	Sensitive species 455
Medium	Sensitive species 647
Medium	Pachycarpus suaveolens
Medium	Brachycorythis conica subsp. transvaalensis

MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Vulnerable ecosystem

APPENDIX 7
Landowner details

Title	Salutation	Surname	Stakeholder Category	Organisation	Postal Address 1	Postal Address 2	City	Postcode	Property 1	Property 2	Property 3	Property 4	Property 5	Property 6
Mr	Gideon Johannes	Dreyer	Directly Affected Landowner	Xstrata Char Group (Pty) Ltd	P O Box 2131	44 Nyirivier Avenue, Cashan	RUSTENBURG	0300	Kroomfontein 30 IS	Portion 1, 2, 3, 5, 12, 14, 20, 22, 23, 28	Klipplaat 14 IS	Portion 1 and 14	Blesbokfontein 31 IS	Portion 0 and 2
Mr	Willem Abram Nel	Potgieter	Directly Affected Landowner	Xstrata Char Group (Pty) Ltd	Suite 19, Private Bag X1	41 Islington Crescent, Midstream Estate Ext 2	MELROSE ARCH	2076	Kroomfontein 30 IS	Portion 1, 2, 3, 5, 12, 14, 20, 22, 23, 28	Klipplaat 14 IS	Portion 1 and 14	Blesbokfontein 31 IS	Portion 0 and 2
Mr	Armand	van Rensburg	Directly Affected Landowner	Xstrata Char Group (Pty) Ltd	P O Box 17070	118 Karin Street, Komos, Hartbeespoort	WITBANK	1035	Kroomfontein 30 IS	Portion 1, 2, 3, 5, 12, 14, 20, 22, 23, 28	Klipplaat 14 IS	Portion 1 and 14	Blesbokfontein 31 IS	Portion 0 and 2
Ms	Sufyaan	Sarang	Directly Affected Landowner	Ingwe Surface Holdings Holdings (Pty) Ltd	P O Box 61829		MARSHALLTOWN	2107	Klipplaat 462 IS	Portion 0				
Ms	Lerato	Legong	Directly Affected Landowner	Ingwe Surface Holdings Holdings (Pty) Ltd	P O Box 61829		MARSHALLTOWN	2107	Klipplaat 462 IS	Portion 0				



DATE 8 November 2019

PROJECT No. 1788674_DMR_Let_001

TO Department of Mineral Resources and Energy
Mine Environment Section
1st Floor
Saveway Centre
The Hub
Mandela Street
Witbank, eMalahleni
1035
(013) 653 0500 / 0526 / 0530

FROM Mariette Weideman
EMAIL mweideman@golder.co.za

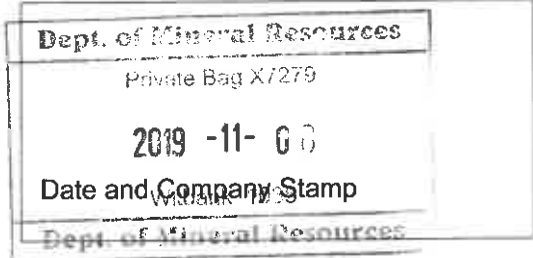
GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

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|---|--|
| <input type="checkbox"/> Mail / Express Post (select one) | <input type="checkbox"/> Enclosed |
| <input type="checkbox"/> Same Day Courier _____ | <input type="checkbox"/> Picked Up |
| <input type="checkbox"/> Air Freight _____ | <input checked="" type="checkbox"/> Hand Delivered |
| <input type="checkbox"/> Email _____ | <input type="checkbox"/> FTP Site _____ |

Quantity	Item	Description
2	Reports	Environmental Authorisation Application and Draft Scoping Report
2	Flash Drive	Environmental Authorisation Application and Draft Scoping Report

Notes

Audrey _____
 Print Name and Surname Signature



Please advise us if enclosures are not as described.

MW/mw/MW

ACKNOWLEDGEMENT REQUIRED:
 YES (please email/fax to Golder Associates) NO

c:\users\mminisile\desktop\1788674 - impunzi\final documents\issues slips\1788674_iss_dmr_dsr_08.11.2019.docx

DATE 08 November 2019

DOCUMENT No. 1788674_Let001

TO Ms Johanette Rozmiarek
 eMalahleni Public Library
 Cnr Hofmeyer and Elizabeth Avenue
 eMalahleni

FROM Mabel Qinisile
EMAIL mqinisile@golder.co.za

Tel:+27 13 690 6232

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

- Mail / Express Post** (select one)
- Same Day Courier** _____
- Air Freight** _____
- Email** _____

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- Picked Up**
- Hand Delivered**
- FTP Site** _____

Quantity	Item	Description
1x	Draft Scoping Report	Glencore Operations South Africa (Pty) Ltd (Gosa): Notification of Environmental Authorisation Application, Water Use Licence Application and Waste Management Licence Application for the Proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility Project on the farms Kromfontein 30 IS, and Klipplaat 14 IS, Mpumalanga Province
20x	Announcement Letter, Comment sheet and Locality Map A3 Poster	

Please acknowledge receipt of documentation

Nelly Mashiane
 Print name

Mashiane
 Signature

08/11/2019
 Date

EMALAHLENI MAIN LIBRARY
 PO BOX 3, EMALAHLENI, 1035
 c/o HOFMEYER & ELIZABETH STR. EMALAHLENI, 1034

08 NOV 2019

SIGNATURE: Mashiane

Please advise us if enclosures are not as described.

UP

ACKNOWLEDGEMENT REQUIRED:

- YES** (Please email / fax to Golder Associates) **NO**

DATE 08 November 2019

DOCUMENT No. 1788674_Let001

TO Sister Choko Motau

Ogies Clinic
1 Main Street
Admin Building Old Primary School
Ogies
2230

FROM Mabel Qinisile

EMAIL mqinisile@golder.co.za

Tel:+27 13 643 2037

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA PROVINCE

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Quantity	Item	Description
1x	Draft Scoping Report	Glencore Operations South Africa (Pty) Ltd (Gosa): Notification of Environmental Authorisation Application, Water Use Licence Application and Waste Management Licence Application for the Proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility Project on the farms Kromfontein 30 IS, and Klipplaat 14 IS, Mpumalanga Province
20x	Announcement Letter, Comment sheet and Locality Map A3 Poster	

Please acknowledge receipt of documentation

Ellen
Print name

[Signature]
Signature

08/11/2019
Date



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ACKNOWLEDGEMENT REQUIRED:

YES (Please email / fax to Golder Associates)

NO

DATE 08 November 2019

DOCUMENT No. 1788674_Let001

TO Librarian

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105 R55
Ogies
2230

FROM Mabel Qinisile

EMAIL mqinisile@golder.co.za

Tel:+27 13 643 1027

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Mail / Express Post (select one)

Same Day Courier

Air Freight

Email

Enclosed

Picked Up

Hand Delivered

FTP Site

Quantity	Item	Description
1x	Draft Scoping Report	Glencore Operations South Africa (Pty) Ltd (Gosa): Notification of Environmental Authorisation Application, Water Use Licence Application and Waste Management Licence Application for the Proposed Impunzi South Pit Coarse Discard and Venture Co-Disposal Facility Project on the farms Kromfontein 30 IS, and Klipplaat 14 IS, Mpumalanga Province
20x	Announcement Letter, Comment sheet and Locality Map A3 Poster	

Please acknowledge receipt of documentation

Dudu
Print name

[Signature]
Signature

08/11/2019
Date



Please advise us if enclosures are not as described.

ACKNOWLEDGEMENT REQUIRED:

YES (Please email / fax to Golder Associates)

NO



DATE 8 November 2019

PROJECT No. 1788674_DWS

TO Mr Isaac Tlagadi
22 Rooth Street
Bronkhorstspuit
1020

FROM Mariette Weideman

EMAIL mweideman@golder.co.za

Tel: 060 998 9196

GLENCORE OPERATIONS SOUTH AFRICA (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 14 IS, MPUMALANGA

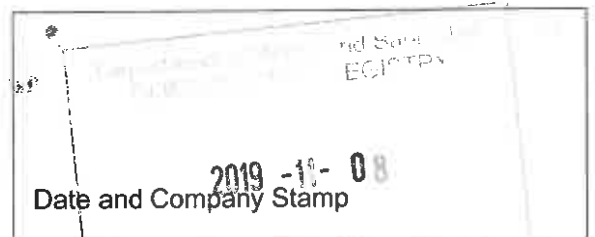
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|---|--|
| <input type="checkbox"/> Mail / Express Post (select one) | <input type="checkbox"/> Enclosed |
| <input type="checkbox"/> Same Day Courier _____ | <input type="checkbox"/> Picked Up |
| <input type="checkbox"/> Air Freight _____ | <input checked="" type="checkbox"/> Hand Delivered |
| <input type="checkbox"/> Email _____ | <input type="checkbox"/> FTP Site _____ |

Quantity	Item	Description
1	Report	Draft Scoping Report and the Notification Letter

Notes

Susan Hlatshwayo

Print Name and Surname Signature



Please advise us if enclosures are not as described.

MW/mw/MW

ACKNOWLEDGEMENT REQUIRED:

YES (please email/fax to Golder Associates) NO

\\joh1-s-fs1\gaadata\projects\1776031 - mafube env input 2017\7.0 public participation\road eia_emp process\eia\issue slips\1776031_iss_dws_deia_emp_05.07.2018.docx

APPENDIX G

**Comment and Response Report
(CRR)**



GOLDER

REPORT

**Glencore Operations South Africa (Pty) Ltd: iMpunzi
South Pit Coarse Discard Dump and Venture Co-
disposal Facility Project**

Comment and Response Report

Submitted to:

Glencore Operations south Africa (Pty) Ltd

Submitted by:

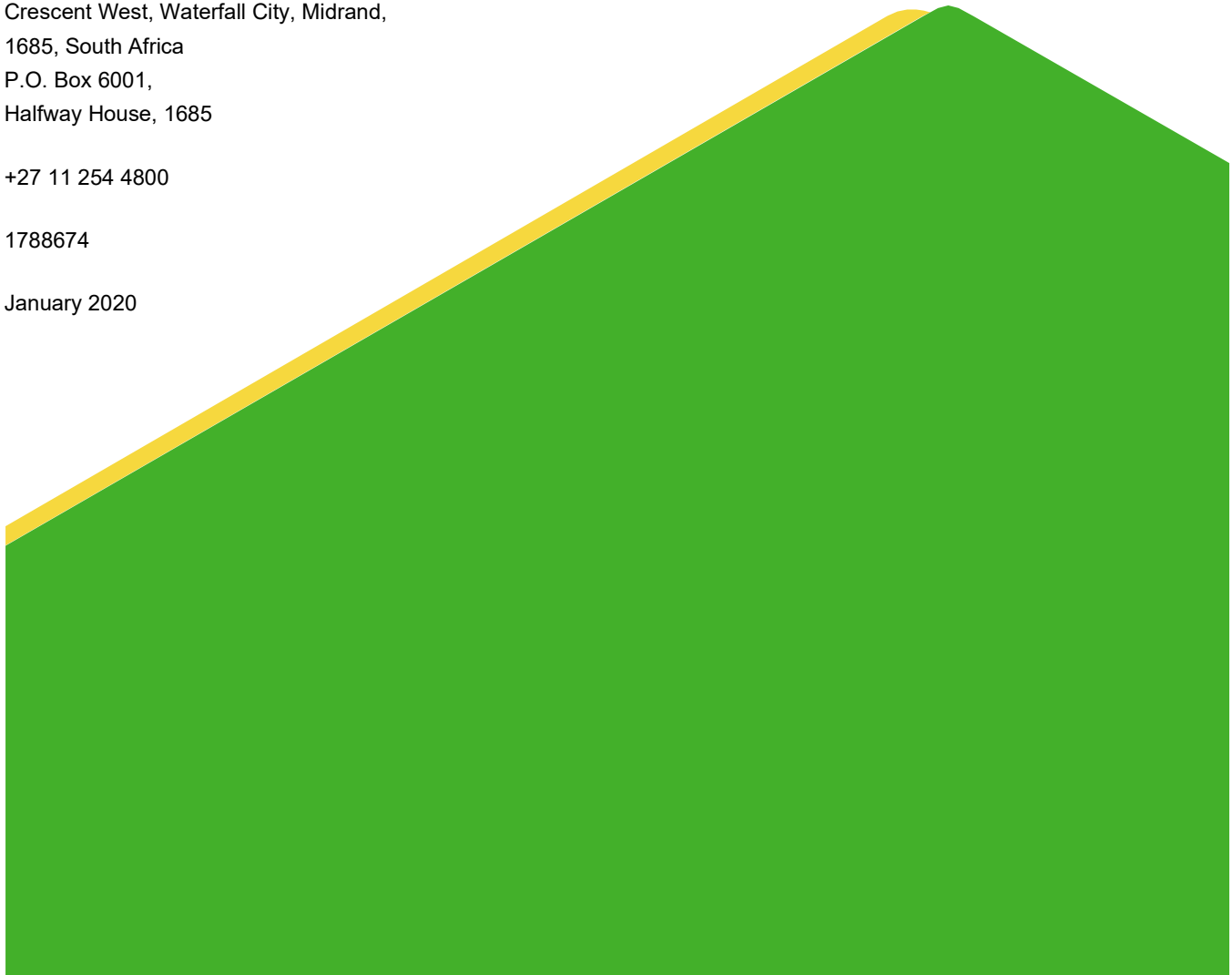
Golder Associates Africa (Pty) Ltd.

Building 1, Maxwell Office Park, Magwa
Crescent West, Waterfall City, Midrand,
1685, South Africa
P.O. Box 6001,
Halfway House, 1685

+27 11 254 4800

1788674

January 2020



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PURPOSE OF THIS DOCUMENT

The iMpunzi Complex comprises four collieries or sub-sections, namely: Arthur Taylor Colliery (ATC), Phoenix Colliery (decommissioned), Arthur Taylor Colliery Opencast Mine (ATCOM), and ATCOM East. Coal mining within the complex was initiated at the Phoenix Colliery in 1936. Operations at all four collieries historically have been underground, however all underground operations ceased in 2008 and all remaining operations are opencast.

All opencast mining is undertaken using the strip-mining method using draglines, and truck-and-shovel at the smaller open pits. All hard overburden (shale/sandstone) and coal are blasted using bulk explosives. The coal is taken by a truck fleet to the Crushing and Pillar Screening Plant (Golder, 2016b). The physical extent of the entire iMpunzi Complex for which there is a mining right extends over approximately 6 835 ha.

The existing Venture discard dump is expanding at a faster rate than initially anticipated and will need to accommodate additional volumes of discard. The existing Venture discard dump receives coal discard from the coal processing plant at ATC. The proposed venture co-disposal facility will consist of coarse discard from ATC plant as well as slurry, that is also generated at the ATC plant and currently disposed of into the underground workings at the ATC mine. The current Venture discard dump is authorised in terms of an approved EMPr (under the Mineral and Petroleum Resources Development Act).

As part of the design of the proposed co-disposal facility, a Return Water Dam (RWD) will need to be constructed to handle the expected flow rates as well as accept contaminated runoff from the facility. The new RWD is proposed to be located to the north west of the Venture co-disposal facility.

Glencore Operation South Africa have appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent Environmental Assessment Practitioner (EAP) to undertake the regulatory authorisation processes associated with the proposed Venture Co-Disposal facility, and coarse discard facility at the South Pit of the iMpunzi Complex.

The Draft scoping report was available for public review and comment for a period of 30 days, from **Friday, 8 November 2019 to Monday, 9 December 2019**. The report was also available on the following website: <https://www.golder.com/global-locations/africa/south-africa-public-documents/> and at the following public places:

Name of Public Place	Contact Person	Contact Number
Ogies Public Library	Librarian	013 643 1027
Emalahleni Public Library	Ms Maria Rozmiarek	013 690 6232
Ogies Clinic	Sister Choko Motau	013 643 2037
Golder Associates website	Mabel Qinisile/Ursula Papé	(011) 254 4800

This document records the issues and concerns, questions and suggestions for enhanced benefits raised by stakeholders during the announcement of the project.

The comments have been categorised as indicated in the Table of Contents and responded to by members of the EIA Team and the proponent.

Table of Contents

NO TABLE OF CONTENTS ENTRIES FOUND.

TABLES

Table 1: Comments and responses.....4

FIGURES

No table of figures entries found.

APPENDICES

APPENDIX A

Written submissions received

APPENDIX B

Document Limitations

Table 1: Comments and responses

ISSUE/COMMENT	COMMENTATOR	REFERENCE	RESPONSE
1. ROAD			
The mining area is a large and contribute significantly to the reducing of the service life of surface roads traversed by coal transporting vehicles between Ogies and Kriel in Mpumalanga.	Ms Ria Barkhuizen South African National road Agency	Email dated 03 December 2019	Noted
Heavy vehicles movements/volumes from Arthur Taylor/Phoenix Collieries using the N12 or N4 or parts therefore is not clear			N12 and N4 road will not be affected by the proposes road , the road that is going to be used by mining vehicle it is the exiting dead road that will be just expanded to cater from mining vehicles, not new road crossing planned
There should be a comprehensive traffic study done by a registered traffic engineer and forwarded to SANRAL and Mpumalanga Department of Roads and Transport for comment			The public will not be affected by the proposed road as indicted from the above
The traffic impact study must include all heavy vehicle traffic between Arthur Taylor/ Phoenix Collieries and E80's over surfaces roads traversed.			iMpunzi is planning to expand the existing discard dump facilities on an area where opencast mining and rehabilitation was previously done, the expansion is not going to disturb virgin ground. Existing infrastructure such as Coal Washing plant, conveyor belts to convey coarse discards will be utilised.

ISSUE/COMMENT	COMMENTATOR	REFERENCE	RESPONSE
			The proposed road is the expansions of the exiting dead road which is within the iMpunzi mining boundary. There is no public or national road that will be affected by either the expansion of the discards facilities or the expansion of the road.
Arthur Taylor/ Phoenix Collieries contribution to negate past and future road degradation and monetary contribution towards maintenance of provincial roads affected			The public will not be affected by the proposed road as indicted from the above
2. HERITAGE			
A heritage practitioner must be appointed to conduct the Heritage impact Assessment (HIA) which must be submitted to SAHRIS as part of the Environmental Authorisation. The HIA must comply with SAHRA 2007 minimum standards.	Ms Nokukhanya Khumalo South African Heritage Resource Agency (SAHRA)	Email dated 17 December 2019	Heritage Impact Studies was conducted for the overall iMpunzi mining area , the historical building and grave within the boundary of the mine are well documented and the plan is in place for that , this the project is about the expansion of the discard dumps on an area that is already being disturbed. IMpunzi is not opening a new mine
A based palaeontological study must be done and must comply with the SAHRA 2012 minimum standards			This the project is about the expansion of the discard dumps on an area that is already being disturbed. IMpunzi is not opening a new mine

ISSUE/COMMENT	COMMENTATOR	REFERENCE	RESPONSE
Any other heritage resources as defined in section 3 of the NHRA that may be impacted, such as maritime archaeology, built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewsapes must also be assessed.			This the project is about the expansion of the discard dumps on an area that is already being disturbed. IMpunzi is not opening a new mine
3. GENERAL			
An exemption letter for recommendation must be submitted if the specialist deems it appropriate.	Ms Nokukhanya Khumalo South African Heritage Resource Agency (SAHRA)	Email dated 17 December 2019	Noted
The Heritage Impact Assessment (HIA) to be submitted before any further comments can be issued.			This the project is about the expansion of the discard dumps on an area that is already being disturbed. IMpunzi is not opening a new mine
SANRAL has no objection to the issuing of the necessary WULA and EIA approval	Ms Ria Barkhuizen South African National road Agency	Email dated 03 December 2019	Noted

Signature Page

Golder Associates Africa (Pty) Ltd.



Mariette Weideman
Environmental Consultant

A handwritten signature in black ink that reads 'Antoinette Pietersen'.

Antoinette Pietersen
Stakeholder Engagement Lead

MW/AP

Reg. No. 2002/007104/07

Directors: RGM Heath, MQ Mokolubete, SC Naidoo, GYW Ngoma

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APPENDIX A

Written submissions received



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
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CaseID: 14566

Date: Tuesday December 17, 2019

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Interim Comment

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Glencore Operations South Africa (Pty) Ltd

GOSA has appointed Golder Associates Africa (Pty) Ltd (Golder) as an independent environmental assessment practitioner (EAP) to undertake the regulatory application process for the proposed the expansion of the South Pit and Venture Dump discard facilities at their iMpunzi Mining Complex. The proposed South Pit Discard Dump will receive coarse discard from the Phoenix Plant. The South Pit is a previously mined-out area and has been partially rehabilitated. The existing Venture Discard Dump footprint will be expanded and the facility will be modified into a co-disposal facility to accommodate both coarse and fine (slurry) discard. A new return water dam (RWD) will be constructed as part of the development of the Venture Co-disposal Facility. The co-disposal facility will receive coarse discard and slurry from the ATC Plant, which sources coal from opencast workings and from discard dump reprocessing. As part of the proposed discard expansion project, an existing haul road from the ATCOM Discard Dumps to the ATC Coal Processing Plant will be widened

Glencore Operations South Africa (Pty) Ltd appointed Golder Associates Africa (Pty) Ltd to undertake the Environmental Authorisation application for the proposed expansion of the South Pit and Venture Dump discard facilities at their iMpunzi Mining Complex in the Klipplaats 14 IS Portions 1 and 14, Kromfontein 30 IS Portions 2, 3, 12, 14, 20, 22, 23, and 28 and Blesbokfontein 31 IS Portion 2 in the Magisterial District of eMalahleni, Mpumalanga Province.

A draft Scoping Report is submitted for environmental authorizations in terms of the National Environmental Management Act, 1998 and the National Environmental Management Waste Act, 2008 in respect of listed activities that have been triggered by applications in terms of the Mineral And Petroleum Resources Development Act, 2002 (MPRDA) (as amended).

The physical extent of the entire iMpunzi Complex for which there is an existing mining right extends over approximately 6 835 ha. The development will extend over 267Ha of the mining right area. The Venture Discard Dump footprint will be expanded and the facility will be modified into a co-disposal facility to accommodate both coarse and slurry discard. The current pollution control dam (PCD) will be replaced with a larger water storage facility to the north west of the current Venture Discard Dump. The existing haul road will be widened and the proposed South Pit Discard Dump will be located on an area which was historically



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opencast mined (South Pit).

Interim Comment

The SAHRA Archaeology, Palaeontology and Meteorite (APM) unit notes in the draft Scoping Report that the proposed activities will take place on areas that were previously mined and rehabilitated. No cultural/heritage resources close enough to the proposed activities to be impacted were found, and the possibility of chance finds during construction and mining cannot be ruled out.

As per section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA) and section 24(4)d(iii) of the NEMA EIA Regulations, an assessment of heritage is required as part of a NEMA EA application. The assessment must comply with section 38(3) of the NHRA. A heritage practitioner must be appointed to conduct the Heritage Impact Assessment (HIA) which must be submitted to the case file on SAHRIS as part of the EA Application for the expansion the of the South Pit and Venture Dump discard facilities application.

The HIA must include a detailed Archaeological Impact assessment and it must comply with section 38(3) of the National Heritage Resources Act, Act 25 of 1999 (NHRA). The AIA must comply with the SAHRA 2007 Minimum Standards: Archaeological and Palaeontological Component of Impact Assessments. See www.asapa.org.za or www.aphp.org.za for a list of specialists that would be able to provide an AIA.

As the proposed development area was previously mined and rehabilitated, a Letter of Recommendations for Exemption may be submitted if the specialist deems it appropriate. The exemption letter should include a map of the development, photos and a track log.

Furthermore, the proposed prospecting location is in an area of very high palaeontological sensitivity as per the SAHRIS PalaeoSensitivity map, therefore, a field based palaeontological study must be done. The report must comply with the SAHRA 2012 Minimum Standards: Palaeontological Component of Heritage Impact Assessments (a list of qualified paleontologists is available. See www.palaeosa.org).

Any other heritage resources as defined in section 3 of the NHRA that may be impacted, such as maritime archaeology, built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewsapes must also be assessed.

The SAHRA APM unit awaits the HIA to be submitted before any further comments can be issued.

Our Ref: 14566



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CaseID: 14566

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Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Nokukhanya Khumalo
Heritage Officer
South African Heritage Resources Agency

Phillip Hine
Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/530984>
(DMR-MP, Ref: iMpunzi 375MR)

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.

Reference: N11/11/R
Date: 3 December 2019 Direct Line: +27 (0) 12 426-6242
Contact Person: J. Oliver Website: www.nra.co.za
Email: nrstat@nra.co.za

Golder Associates Africa (Pty) Ltd
P O Box 6001
HALFWAY HOUSE
1685

Dear Madam

GLENCORE OPERATIONS SOUTH AFRICAN (PTY) LTD (GOSA): NOTIFICATION OF ENVIRONMENTAL AUTHORISATION APPLICATION, WATER USE LICENCE APPLICATION AND WASTE MANAGEMENT LICENCE APPLICATION FOR THE PROPOSED IMPUNZI SOUTH PIT COARSE DISCARD AND VENTURE CO-DISPOSAL FACILITY PROJECT ON THE FARMS KROMFONTEIN 30 IS, AND KLIPPLAAT 4 IS, MMPUMLANGA PROVINCE, SOUTH AFRICA

SANRAL do not wish to be registered as a I & AP.

The mining area is large and contribute significantly to the reducing of the service life of surface roads traversed by coal transport vehicles between Ogies and Kriel in Mpumalanga.

The extent of heavy vehicle movements/volumes from Arthur Taylor / Phoenix Collieries using the N12 or N4 or parts therefore is not clear.

Although SANRAL has no objection to the issuing of the necessary WULA and EIA approval, the issuing thereof should be made subject to the preparation of a comprehensive traffic study by a registered traffic engineer and the forwarding thereof to SANRAL and the Mpumalanga Department of Roads and Transport for comments and approval.

This traffic impact study must include all heavy vehicle traffic between Taylor / Phoenix Collieries and E80's over surfaces roads traversed, Taylor / Phoenix Collieries contribution to negate past and future road degradation and monetary contribution towards maintenance of provincial roads affected.

Yours sincerely



STATUTORY CONTROL OFFICER: SANRAL NORTHERN REGION

APPENDIX B

Document Limitations

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