APPENDIX 2: CURRICULUM VITAE

Alessandra (Alex) Pheiffer Environmental Assessment Practitioner



Qualifications

BSc	1998	Biological Sciences
BSc (Hons)	1999	Zoology
MSc	2004	Environmental Management

Professional affiliations and registrations

Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist (PrSciNat) in Environmental Science (Reg. No. 400183/05)

Registered with the Environmental Assessment Professionals of Namibia (EAPAN) as a Lead Practitioner (Membership No. 121)

Member of the International Association for Impact Assessments (IAIA), South African Affiliate

Summary of Key Areas of Expertise

Management and facilitation of permitting and licensing processes		
Management of stakeholder engagement processes		
Overall Project Management		
Due Diligence, Reviews		

Summary of Experience and Capability

Alex is a Director (since March 2013) and Operations Manager: Environmental Management, Planning and Approvals (EMPA) with SLR Africa and is responsible for co-ordinating SLR's environmental management team. Alex has 16 years' experience in the field of Environmental Management.

Alex has managed a wide range of permitting and licensing projects including environmental assessments, water use license applications and waste management license applications, mainly in the exploration, mining and industrial sectors. These included project management and co-ordination; specialist and engineering team management; co-ordination, facilitation and undertaking of stakeholder engagement processes including for contentious projects, and environmental assessment. She has experience in addressing both in-country legislation and Equator Principles and International Finance Corporation (IFC) requirements.

Alex has provided environmental specialist input on a number of pre-feasibility studies linked to the exploration/development/expansion of mining operations. She has also been involved in environmental due diligence processes and environmental reviews for financing institutions.

In her early career years, Alex held a position within Aloe Environmental as an Office and Project Assistant and within Anglo Platinum's Waterval Smelter as Assistant to the Chief

Environmental Officer. In 2002, she joined Metago Environmental Engineers (Pty) Ltd (Metago). Metago was acquired by SLR Consulting (UK) in March 2011.

Project Experience

Key aspects of Alex's project experience are summarised below.

Project	Date	Alex's Role
Chrome		
EMPs (including an EIA) for prospecting on the farms Beestekraal 290 JQ, Boschpoort 284JQ, Nooitgedacht 289JQ and Noointgedacht 287JQ near Rustenburg in the North West Province: Bakgatla Ba Kgafela Tribal Authority	2007	Project Manager
EMPs (including EIA) for two prospecting projects on the town and town lands of Rustenburg 272JQ in Rustenburg Magisterial District, North West Province: Xstrata South Africa (Pty) Ltd	2005	Project Manager
EIA/EMP for a chrome mine and concentrator in the Rustenburg / Boshoek region: SA Ferrochrome and Mining (Pty) Ltd	2003-2004	Project Assistant
Coal		
EIA/EMP for a greenfields coal mine in northern Kwa-Zulu Natal: Commissiekraal Coal (Pty) Ltd	Current	Project Manager
Copper		
EIA-EMP amendment for the Kinsenda operations in the DRC	2014	Project Reviewer
EIA for a greenfields copper oxide project (Omitiomire project) (Namibia): Craton Mining and Exploration (Pty) Ltd	2013	Project Reviewer
Ferrochrome		
EIA/EMP amendment for the exclusion of smelter activities at Bokfontein Chrome Mine: Hernic Ferrochrome	2013	Project Manager
EIA/EMP amendment for a concentrator and smelter complex at Bokfontein Chrome Mine: Hernic Ferrochrome	2012	Project Manager
EIA for Project Lion, a new smelter complex near Steelpoort: Xstrata South Africa (Pty) Ltd	2003-2004	Project Assistant
EIA/EMP for Transvaal Ferrochrome Project (a ferrochrome smelter complex in the Rustenburg/Brits region):	2002-2003	Project Assistant
EIA/EMP amendment for a pelletizing plant at Xstrata Wonderkop: Xstrata South Africa (Pty) Ltd	2002-2003	Project Manager
Gold		
EIA for a filtration plant at Navachab Gold Mine (Namibia): AngloGold Ashanti Namibia (Pty) Ltd	2012	Project Manager

Project	Date	Alex's Role	
Basic Assessment for Diesel storage facilities at its South Deep Mine Operations: God Fields (South Africa) (Pty) Ltd	2011	Project Reviewer	
Participation in an integrated environmental management review – technical workshop for new projects at Gold Fields: Gold Fields (South Africa) (Pty) Ltd	2009	Part of a peer review delegation for an ongoing EIA	
Consolidating South Deep Min's various EMPR documents into one document and in turn bringing the mine's EMPR in line with the requirements of the Mineral and Petroleum Resources Development Act and supporting regulations: Placer Dome Westonaria Joint Venture – South Deep Mine	2005-2007	Project Manager	
EIA and EMP amendment for a new tailings dam development: Placer Dome Westonaria Joint Venture – South Deep Mine	2005-2007	Project Manager	
Iron			
EIA/EMP for greenfield iron ore mine development near Lephalale (Ellisras) (Moonlight iron ore project) in the Limpopo Province: Turquoise Moon Trading (Pty) Ltd	2012	Project Manager	
Amendment to existing prospecting EMP to cater for changes in prospecting operations: Nelesco 684 (Pty) Ltd	2010	Project Manager and Reviewer	
Amendments to existing prospecting EMPs (Cascade 442IT and Delft 22HU) to cater for changes in prospecting operations: Mkhombi Mining (Pty) Ltd	2010	Project Manager and Reviewer	
Management of the consultation process for a prospecting EMP on the farms Sterkfontein 419IT and Wolvernkop 427IT, near Piet Retief in Mpumalanga Province: Mkhombi Mining (Pty) Ltd	2009	Project Manager and Reviewer	
EMP (including EIA) for prospecting on the farms Moabsvelden 248IR and Rietkuil 249IR, near Delmas in Mpumalanga Province: Spirapix Mining (Pty) Ltd	2009	Project Manager	
Manganese			
EMP performance assessment and financial provision reassessment for prospecting right: Ntsimbintle Mining (Pty) Ltd	2008	Project Reviewer	
Platinum			
Various EMP performance assessments and financial provision re-assessments for prospecting rights held by Impala in the North West, Mpumalanga and Limpopo Province: Impala Platinum Limited (Impala)	Ongoing	Project Manager and Reviewer	
Various EMP performance assessments and financial provision re-assessments for prospecting rights held by Afplats in the North West Province: Afplats (Pty) Ltd	Ongoing	Project Manager and Reviewer	
Various amendments to existing prospecting EMPs to cater for the changes in prospecting operations: Impala Platinum Limited (Impala)	Ongoing	Project Manager	
Various EMP performance assessments and financial provision re-assessments for prospecting rights held by	Ongoing	Project Manager and Reviewer	

Project	Date	Alex's Role
Inkosi and Imbasa in the North West Province		
EIA and EMP amendment including WML for changes to surface infrastructure and operations at Bakubung Platinum Mine, North West Province	2015 - 2016	Project Reviewer
EIA and EMP amendment for changes to surface infrastructure and operations at Tharisa Mine, North West Province	2012 - 2015	Project Reviewer
EMP Compliance Audit for Leeuwkop Mine	2014	Project Reviewer
EIA/EMP amendment for changes to surface infrastructure at Marula Platinum Mine: Marula Platinum (Pty) Ltd	2013	Project Manager and Reviewer
EIA/EMP for the extension of underground mining activities at Everest Platinum Mine (Fairway project): Aquarius Platinum (South Africa) (Pty) Ltd	2013	Project Reviewer
EIA/EMP for the extension of mining activities at Everest Platinum Mine (Hoogland project): Aquarius Platinum (South Africa) (Pty) Ltd	2013	Project Manager
Supply and co-ordination of interim on-site environmental manager to assist with general management of environmental aspects at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2011	Project Co-ordinator
Compilation of environmental documents (including a public consultation process) in support of a closure application for the Turffontein 263JQ and Kookfontein 265JQ prospecting right and Reinkoyalskraal 278JQ and Elandsheuwel prospecting right: Impala Platinum Limited (Impala	2010	Project Reviewer
2010 Annual Re-Assessments of Everest Platinum Mine's closure cost estimate: Aquarius Platinum (SA) (Pty) Ltd	2010	Project Reviewer & Auditing
EMP (including EIA) for prospecting on the farm Rooikraal 118JS in the Limpopo Province: Braggite Resource (Pty) Ltd	2010	Project Reviewer
2009 Annual Re-Assessments of Everest Platinum Mine's closure cost estimate: Aquarius Platinum (SA) (Pty) Ltd	2009	Project Manager
EIA/EMP amendment for the north and south boxcuts at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2009	Project Manager & closure
EIA/EMP amendment for the production expansion of Eland Platinum Mine: Xstrata South Africa (Pty) Ltd	2009	Project Reviewer
Assistance with the consultation with landowners to input into closure of a prospecting right: Impala Platinum Limited (Impala)	2008-2009	Project Manager
Compilation of environmental posters linked to the seismic EMP for the use in environmental awareness training: Impala Platinum Limited (Impala)	2008	Project Manager
EMP performance assessment of Marula Platinum Mine's EMP report: Marula Platinum (Pty) Ltd	2008	Project Manager & Reviewer
EIA/EMP for a new platinum mine and concentrator Plant (Mphahlele Project) in the Limpopo Province: Tameng Mining and Exploration (Pty) Ltd	2007-2008	Project Manager

Project	Date	Alex's Role
EIA/EMP amendment for additional infrastructure at Everest Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2006-2009	Project Manager
EIA/EMP for seismic survey activities near Impala's Rustenburg operations: Impala Platinum Limited (Impala)	2006-2008	Project Manager
EIA/EMP amendment for a new shaft and associated facilities and Marula Platinum Mine. This project also included the consolidation and updating of the mine's EMP to cater for the changes in mining legislation: Marula Platinum (Pty) Ltd	2006-2008	Project Manager
EMP (including an EIA) for prospecting on the farms Turffontein 263JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)	2005	Project Manager
EMP (including an EIA) for prospecting on the farm Reinkoyalskraal 278JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)	2005	Project Manager
EMP (including and EIA) for prospecting on the farms Klipgatkop 115JQ, near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)	2005	Project Manger
EMP (including and EIA) for prospecting on the farms, Doornspruit 84JQ and Roodekraalspruit 113JQ near Impala's Rustenburg Operations: Impala Platinum Limited (Impala)	2005	Project Manager
EIA/EMP for a mining right application (The Fingers Project) at Marikana Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2005	Project Manager
Assisted in the facilitation of the public involvement process for the Shaft 20 EMP amendment: Impala Platinum Limited (Impala)	2004	Project Assistant
EMP amendment for the Maandagshoek Winze Project (reestablishment of an underground shaft): Modikwa Platinum Mine	2003-2004	Project Manager
EIA/EMP amendment for the Opencast Mining Project at the Rustenburg operations: Impala Platinum Limited (Impala)	2002-2005	Project Manager
EMP amendment for The Hills Project (establishment of additional infrastructure for mining purposes): Modikwa Platinum Mine	2002-2003	Project Manager
EIA and EMP for a greenfields mine – Everest South Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2002-2003	Project Assistant
Drilling and bulk sampling EMPs for the Everest South Project: Aquarius Platinum (SA) (Pty) Ltd	2002	Platinum
Revised bulk sampling EMP for the Everest South Project: Aquarius Platinum (SA) (Pty) Ltd	2002	Project Assistant
EMP amendments for re-positioning of infrastructure for Marikana Platinum Mine: Aquarius Platinum (SA	2001	Project Manager
Residential		
Provision of environmental management support to Kumba Iron Ore for the relocation of Dingleton town	2016	Project Manager

Project	Date	Alex's Role
Basic Environmental process for the Pilanesburg Platinum Mine Housing Development, in the North West Province	2015	Project Reviewer
EIA for a village and cemetery for non-landowners to be relocated from the site of Marikana Platinum Mine: Aquarius Platinum (SA) (Pty) Ltd	2001-2002	Project Assistant
Silica		
EIA/EMP for mining right application at Rietvly Silica Mine: Xstrata South Africa (Pty) Ltd	2005-2006	Project Manager
Uranium		
ESIA for a greenfields Uranium and Coal Mine in Botswana (Letlhakane Project): A-Cap Resources Limited	Current	Project Manager
Alternative energy		
EIA/EMP amendment for the use of alternative fuels at its Lichtenburg Cement Plant: Lafarge Industries SA (Pty) Ltd	2012	Project Manager
EIA for cogeneration power plants at Xstrata's operations in the North West and Mpumalanga Provinces: Power Tech IST/ Xstrata South Africa (Pty) Ltd	2008 – on hold	Project Manager
Bioremediation		
EIA for a waste management license for the bioremediation operation at TransHex Baken Diamond mine in the Northern Cape	2013 - 2015	Project Manager
Other: Expert Consultant, due diligence, reviews, risk assessment		
Environmental input into various pre-feasibility studies linked to the exploration/development/expansion of mining operations.	Ongoing	Environmental specialist
Legal compliance review of Everest Platinum Mine (Mpumalanga) in support of re-commencing operations	2015	Environmental specialist
Update to Tharisa Mine's Competent Persons Report	2015	Environmental specialist
Alfred Knight Lab Due Diligence	2015	Project Manager
Due diligence on compliance, water, waste and air related aspects as part of an investment investigation at Silicon Technology (Pty) Ltd	2012 & 2013	Environmental specialist
A number of due diligences of gold exploration projects in Tanzania: New African Mining Fund	2013	Environmental specialist
Input to a legal environmental register for African Barrick Gold's operations in Tanzania	2012	Environmental specialist
Peer Review of baseline specialist studies for Gold Fields Damang Gold Mine	2012	Environmental specialist
Afplats Shaft Risk Assessment Update for Inkosi - Imbasa	2011	Environmental specialist

Project	Date	Alex's Role
Review of Barrick Tulawaka Tailings EIA	2011	Environmental specialist
Environmental input into the ESIA for the expansion of the Morupule Colliery in Botswana: Ecoserv Environmental Consultants	2010	Expert Consultant
Policy drafting		
Assistance with drafting a policy, guideline document and procedure for stakeholder participation during explorations operations for the Implats Group: Impala Platinum Limited (Impala)	2008	Project Manager
Water		
Assistance in compilation of water use license application (WULA) and integrated water and waste management plan (IWWMP) for a new platinum mine and concentrator plant (Mphahlele Project) in the Limpopo Province: Tameng Mining and Exploration (Pty) Ltd	2013	Project Manager
Co-ordination of integrated water and waste at Everest Platinum Mine: Aquarius Platinum (South Africa) (Pty) Ltd	2012	Project Reviewer
Water Supply Study for the Moonlight Iron Ore Project: Turquoise Moon Trading (Pty) Ltd	2011	Project Manager
ESIA for a greenfields wellfield development in Botswana (to supply the Letlhakane Project): A-Cap Resources Limited	2011	Project Manager
Re-registration of waste-related water uses at Everest Platinum Mine: Aquarius Platinum (South Africa) (Pty) Ltd	2010	Project Reviewer
Assistance with addressing water use license related issues: Marula Platinum (Pty) Ltd	2010	Project Reviewer
Water use license application (WULA) for the South Deep Doornpoort tailings dam	2010	Project Manager
Compilation of water use license application (WULA) and integrated water and waste management plan (IWWMP) for South Deep Mine:	2006	Project Manager
Basic assessment for a water supply project to the Pilanesberg Platinum Mine Operations: Pilanesberg Platinum Mines (Pty) Ltd	Cancelled	Project Reviewer

Publications

Onderstepoort Journal of Veterinary Science, 2005. "Aspects of the ecology of the Asian tapeworm *Bothriocephalus acheilognathi* Yamaguti, 1934 in yellow fish in the Vaal dam, South Africa"

Marline Medallie

Senior Environmental Scientist/ Project Manager



Qualifications

MSc	2006	Botany (Molecular Systematics)
BSc (Honours)	2004	Botany
BSc	2003	Natural Science (Botany & Zoology)

Key Areas of Expertise

Key areas of Marline's expertise are summarised below.

Management of major environmental impact assessments, environmental management programmes and water use licenses	Countrywide for minerals (coal, iron ore and diamond), infrastructure and electricity development	
Planning applications and other planning related matters	Countrywide for minerals, infrastructure and electricity development	
Planning and management of biodiversity offsets and conservation	Mpumalanga and the Northern Cape for mineral and infrastructure development	

Summary of Experience and Capability

Marline joined the environmental assessment team in July 2007. She has significant project experience in ecology and conservation from many areas of South Africa, as well as public participation, project management and environmental report writing. She has worked in Gauteng, Mpumalanga, Western Cape and the Northern Cape. Project experience constitutes coal mines (Mpumalanga), diamond mines (Western Cape & Lesotho) and an iron ore mine (Northern Cape).

She is currently involved in environmental project management and authoring basic assessment reports, environmental scoping reports, environmental impact assessment reports, management programmes and integrated water use license applications. Her strengths lie in her solid scientific and practical background, and her ability to adapt to and learn from various projects. Her interests include basic-, marine- and terrestrial ecology; conservation; management of the environment and environmental project management.

Recent Project Experience

Key aspects of Marline's recent project experience are summarised below.

Project	Date	Marline's Role
Taung Gold's Jeanette Project (Free State)	2014	Pre-Feasibility Report.
Kumba Iron Ore's Kathu Supplier Park, (Northern Cape)	2014 - current	Project management, application, EIA and WULA
Anglo American Thermal Coal's Alexander Concept, Witbank (Mpumalanga)	2013 - current	Project management, major planning and mining right application
Anglo American Inyosi Coal's Mobile Water Treatment Plant, Witbank (Mpumalanga)	2011 - current	Project management, major planning application and WML EIA
Anglo American Inyosi Coal's New Largo Colliery, Witbank (Mpumalanga)	2011 - current	Project management, major planning application, EIA, mining right, IWULA and IWWMP
Anglo American Inyosi Coal's Phola Kusile Overland Coal Conveyor, Witbank (Mpumalanga)	2011 - current	Project management, major planning application, EIA, WML and IWULA
Kumba Iron Ore's Dingleton Resettlement Project, Kathu (Northern Cape)	2009 - current	Project management, major planning application, Pre-Feasibility report, Feasibility report, Project Execution planning, amendment of environmental authorisation, WML EIA and EMP
Kumba Iron Ore's Protea Waste Dump Extension, Kathu (Northern Cape)	2008 - 2012	Project management and EMP amendment
Kumba Iron Ore's Sishen Expansion Project 2, Kathu (Northern Cape)	2009	Site selection study
Kumba Iron Ore's Sishen Western Expansion Project – Relocation of infrastructure, Kathu (Northern Cape)	2008 - current	Project management, major planning application, Feasibility report, EIA, BA's, WULA, WML, mining permit, environmental control officer and auditor
Letseng Diamonds' Lesotho Mine (Lesotho)	2008	Environmental action plan
Fish Eagle Eco-Estate, Vereeniging (Gauteng)	2007/9	Project management and response to the record of decision for the change of land use application
Kumba Iron Ore's Sishen Expansion Project 1B, Kathu (Northern Cape)	2008	Project coordinated the public participation process for the environmental authorisation application
Exxaro Coal's New Clydesdale Colliery, Ogies (Mpumalanga)	2008/9	Project coordinated the public participation process for the EIA and IWULA
Platreef Resources, Rustenburg (North-West)	2007	Environmental baseline climate report
De Beers Consolidated Mines' Langklip South Project (Western Cape)	2007	Project coordinated the public participation process for the mining right application
Exxaro Coal's Eerstelingsfontein Colliery, Belfast (Mpumalanga)	2007/8	Project coordinated, IWULA and IWWMP

Publications

Scientific Article in the Botanical Journal of the Linnean Society, *Gnidia* (Thymelaeaceae) is not monophyletic: taxonomic implications for Thymelaeoideae and a partial new generic taxonomy for *Gnidia*, 2009.

MSc Thesis, *Gnidia* L. (Thymelaeaceae) is not monophyletic: Taxonomic implications for *Gnidia* and its relatives in Thymelaeoideae, University of Johannesburg, 2007.