# Chiara D'Egidio Environmental Scientist



#### Qualifications

MSc	2012	Ecology, Environment & Conservation
BSc (Hons)	2009	Ecology, Environment & Conservation
BSc	2008	Zoology and Ecology, Environment & Conservation

### **Key Areas of Expertise**

Key areas of Chiara's expertise are summarised below.

Water use licencing	Countrywide for a wide variety of mines, quarries and plants
Environmental impact assessments	Countrywide for a wide variety of operations
Auditing	Countrywide for mining and quarrying operations
Public participation processes	Countrywide for a wide variety of projects

#### **Summary of Experience and Capability**

Chiara has been working in the Environmental Impact Assessment sector since 2012; Chiara is an Environmental Scientist with SLR and is involved with a wide variety of major projects throughout South Africa for major operators in the minerals and waste industry. Chiara has been involved in projects related to underground mining, power lines, water management, waste management, waste-to-energy, electricity co-generation, tailings facilities, coke production, ferrosilicon production and char production. Chiara has also been involved with Contamination Assessments, Water Use Licence (WUL) and Environmental Management Programme (EMP) audits and performance assessments.

Chiara has compiled proposals for a wide variety of projects and has assisted with the management and budgeting of projects.

Prior to joining Synergistics Environmental Services (now part of SLR) in 2012, Chiara obtained a Master's degree from the University of the Witwatersrand where she focused on the space use of four different species investigating how previous spatial restrictions affected subsequent space use in enlarged areas.

# **Recent Project Experience**

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

Project	Date	Chiara's Role
Evander Gold	2014	Environmental Application, Report Writing, Public Participation Processes,
Alexander Concept Project	2013 2014	Specialist Management, Project Management, Budgeting, Project Scheduling, Public Participation Processes
Kalkaar Solar Power Plant Project	2014	Environmental Baseline Report Writing
Char EA Amendment	2014	Project Management, Application Process, Report writing
Grootegeluk Superfines Disposal Facility	2014	Public Participation Processes
Market Coke Accommodation Camp	2013 2014	Public Participation Processes, Specialist Management
Langverwacht and Sunnyside	2014	EMP Performance Assessment Audit
Lafarge Quarry Performance Assessment	2014	EMP Performance Assessment Audit
Dingleton	2014	Protected tree applications
Relocation of a 275kV power line	2014	Water Use Licence, Technical Report
Dingleton Resettlement	2013	Water Use Licencing, IWWMP
Pilansberg Platinum Mine	2013	Water Use Licencing, IWWMP
Kolomela Consolidation	2013	Basic Assessments, Public Participation Processes
Southern Hubb Project	2013	Basic Assessment, Specialist management, Heritage Permit Applications
Total SA	2013	Contamination Assessments for Total South Africa
FerroAlloys Expansion Project	2013	Basic assessment, Public participation process (PPP), Assistance with project management, Budget control
Chloorkop Municipal Solid Waste to Energy Project	2012 2013	Assistance with PPP
Inyanda Mine GN704, EMP and WUL audit	2013	Proposal, Project planning and management, EMP audit, WUL audit
Market Coke and Co-generation Plant Project	2012 2013	WUL applications, IWWMP, AEL application, Assistance with EIA, Assistance with project management, Budget control, PPP
Char Manufacturing Plant Expansion Project	2012 2013	WUL application, IWWMP, AEL application, Assistance with EIA, WML, Assistance with project management, Budget control, PPP

Project	Date	Chiara's Role
Lafarge Quarries: Mpumalanga	2012 2013	Project planning and management, EMP audits
Chloorkop Waste Management Licence	2012	Waste Impact Report, PPP
Lafarge Quarries: Polokwane	2012	Assisted with site audit
Fairview Mine	2012	WUL technical report, Assisted with EIA
Mpophomeni Pipeline	2012	PPP, Assisted with basic assessment report
Boschmanskrans Extension Project	ct 2012	PPP

## **Publications**

2012 - D'Egidio, C. Space use following restricted space availability in two mammals and two arthropods. *To be published*.

# 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 Technical Discipline Manager: Environmental Impact Assessment (EIA) with SLR Africa and is responsible for co-ordinating SLR's environmental assessment team. Alex has over 11 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 coordination; 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 a number of 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.

## **Recent Project Experience**

Key aspects of Alex's recent 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 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
Basic Assessment for Diesel storage facilities at its South Deep Mine Operations: God Fields (South Africa) (Pty) Ltd	2011	Project Reviewer

Project	Date	Alex's Role
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
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
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: Mkhomb Mining (Pty) Ltd	2000	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

Project	Date	Alex's Role
Various EMP performance assessments and financial provision re-assessments for prospecting rights held by Inkosi and Imbasa in the North West Province	Ongoing	Project Manager and Reviewer
EIA/EMP amendments 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
Updated and consolidated EMP for Eland Platinum Mine	2012	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 (re-establishment 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

Project	Date	Alex's Role
Residential		
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
Other: Expert Consultant, due diligence, reviews		
Environmental input into various pre-feasibility studies linked to the exploration/development/expansion of mining operations.	Ongoing	Environmental specialist
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
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

Project	Date	Alex's Role
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	Current	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
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"

# Shelley Seton-Rogers

Environmental Scientist / Project Manager



#### Qualifications

BSc (Hons)	1999	Zoology
Postgraduate Diploma	2008	Environmental Studies

#### **Key Areas of Expertise**

Key areas of Shelley's expertise are summarised below.

Project Management	In South Africa and Namibia for mining, waste, infrastructure and industrial projects.		
Environmental Impact Assessments	In South Africa and Namibia for mining, waste, infrastructure and industrial projects.		
Environmental Management Programmes	In South Africa and Namibia for mining, waste, infrastructure and industrial projects.		
Public Participation	In South Africa and Namibia for mining, waste, infrastructure and industrial projects.		
Water Use Licensing	In South Africa for mining, waste, infrastructure and industrial projects.		
Waste Management Licensing	In South Africa for mining, waste, infrastructure and industrial projects.		
Atmospheric Emissions Licensing	In South Africa for mining, waste, infrastructure and industrial projects.		
Environmental Auditing and Performance Assessments	In South Africa for mining, infrastructure and industrial projects.		
Advisory Services	In South Africa for mining feasibility studies and projects.		
Competent Person Reports	In South Africa for mining companies listing on the Johannesburg Stock Exchange.		

#### **Summary of Experience and Capability**

Shelley is an Environmental Scientist and Project Manager with SLR in the EIA Section. Shelley has over 10 years' experience within the environmental consulting sector, both in a government position within the environmental regulation sector, and as an experienced consultant.

Shelley has managed a wide range of major Environmental Impact Assessment projects for mining, infrastructure, waste and industrial developments throughout South Africa and Namibia for many of the major companies within the minerals industry.

In addition to this she advises clients on a wide range of environmental issues and provides valuable input into project feasibility studies and Competent Person's Reports.

Prior to joining Synergistics Environmental Services in 2007, she held positions within Nemai Consulting, Rock Environmental Consulting and Cymbian Enviro-Social Consulting as an Environmental Scientist and Project Manager. She left Synergistics Environmental Services briefly in 2009 and 2010 to travel and work overseas. During this time, Shelley worked as an Environmental Consents Investigating Officer at Environment Canterbury in Christchurch, New Zealand.

Synergistics Environmental Services merged with SLR in 2013.

## **Recent Project Experience**

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

Project	Date	Shelley's Role
Construction of a New Conventional Slimes Facility for the Super Fines at Grootegeluk Coal Mine, Limpopo.	Current	Project manager and environmental scientist for EIA, EMP, Public Participation and Water Use Licence.
Construction Accommodation Facility for the Market Coke and Co-Generation Plant Project at Grootegeluk Coal Mine, Limpopo.	Current	Project manager and environmental scientist for Basic Assessment, EMP, Public Participation and Social Impact Assessment.
Integrated Water Use Licence Application at the Holfontein Hazardous Waste Disposal Site, Gauteng.	Current	Project manager and environmental scientist for Water Use Licence application.
Char, Coke and Co-generation Plants, for Exxaro Reductants, Limpopo.	2014	Project manager and environmental scientist for EIA, EMP, Public Participation, Atmospheric Emissions Licence, Waste Management Licence and Water Use Licence.
Chloorkop Municipal Solid Waste to Energy Project, Gauteng.	Current	Project manager and environmental scientist for EIA, EMP, Public Participation, Atmospheric Emissions Licence and Waste Management Licence.
Gravenhage Manganese Mining Project, for Aquila Resources, Northern Cape.	Current	Project manager and environmental scientist for Water Use Licence application.
Ferromanganese Plant Expansion for Exxaro FerroAlloys, Gauteng.	2014	Project manager and environmental scientist for Basic Assessment, EMP, Public Participation and Atmospheric Emissions Licence.
Omitiomire Copper Mine, for Craton Mining and Exploration, Namibia.	2014	Project manager and environmental scientist for EIA, EMP and Public Participation.
Exxaro Coal's Inyanda Mine, Mpumalanga.	2013	Project manager and auditor for Water Use Licence audit and EMP Performance Assessment.
Competent Person's Reports for Wescoal Mining's Pegasus and Elandspruit Mines, Mpumalanga.	2012	Report writer.
Lafarge Mining SA (Pty Ltd) six aggregate quarries in Mpumalanga, Limpopo and Free State.	2012	Project manager and auditor for EMP updates and EMP Performance Assessments.

Project	Date	Shelley's Role
Micro-encapsulation Plant at Holfontein Hazardous Waste Site, for EnviroServ Waste Management, Gauteng.	2011	Project manager and environmental scientist for Basic Assessment, EMP, Public Participation and Waste Management Licence.
Amberley Stormwater System Upgrade, Canterbury, New Zealand.	2010	Investigating officer, presented report on findings at public hearing.

#### **Publications**

Integrated Environmental Management Series 1 (IEMS) Sub Series No. IEMS 1.7, Monitoring and Auditing Protocol, for the Department of Water Affairs, September 2004.

BSc Hons (Zoology) Project, Nitrogen allocation to plant parts, with regard to life history strategies in South African forest trees. University of Natal, 1999.