

# CURRICULUM VITAE



## NATASHA SMYTH

### ENVIRONMENTAL ASSESSMENT PRACTITIONER

EMPA, South Africa

### QUALIFICATIONS

BSc Hons 2008

BSc 2007

Environmental Sciences and Development

Environmental and Biological Sciences

### EXPERTISE

- Environmental Impact Assessments
- Environmental Compliance and Monitoring
- Environmental Due Diligence
- Management and facilitation of permitting and licensing processes
- Management and facilitation of stakeholder engagement processes
- Financial Provision, Closure and Rehabilitation Planning

Natasha is an environmental practitioner with SLR's South Africa office and is responsible for various environmental assessment projects. Natasha has ten years of experience within the Minerals sector, both as a project manager and assistant to various projects in South Africa and Africa.

Natasha has managed and assisted in a wide range of Environmental Impact Assessment projects for major and small-scale minerals developments throughout South Africa as well as in Namibia for many of the major operators within the minerals industry.

Since 2009 Natasha has been involved in over 50 projects of which she has project managed 36 projects varying in complexity with primary focus within the mining industry.

### PROJECTS

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

**Environmental Assessment process for the expansion of a substation for Northam Platinum Limited (Limpopo Province), 2020 -2021**

Project Director. Compilation of an amended EIA and EMPr for the expansion of a substation at the Smelter Complex at the Zondereinde Mine. The management of the stakeholder engagement process and a full set of specialists.

**Environmental Assessment process for an additional flash dryer for Impala Platinum Limited (North West Province), 2020 -2021**

Project Director. Compilation of a Basic Assessment report and an amendment of an Atmospheric Emissions Licence for the addition of an additional flash dryer at the Impala Rustenburg operation. The management of the stakeholder engagement process and a full set of specialists.

**Environmental Assessment process for infrastructure changes at Lehating Mine and the consolidation of the Khwara and Lehating Mining Right areas (Northern Cape), 2020 - 2021**

Project Manager. Compilation of a Basic Assessment report and an application for a Water Use Licence. The management of the stakeholder engagement process and a full set of specialists.

<b>Environmental Assessment process for infrastructure changes for Maurla Platinum Mine (Limpopo Province) (Pty) Ltd, 2020 - 2021</b>	Project Director. Compilation of Basic Assessment Report and the management of the stakeholder engagement process and specialists in support of changes to Shaft infrastructure at the Marula Mine.
<b>Integrated Environmental Assessment Process for the Mamatwan Mine (Northern Cape Province) 2019 to 2021 - Manganese</b>	Project Manager. Compilation of a Section 24G report, compilation of a scoping and environmental management programme reports, and an amendment of a Water Use Licence. The management of the stakeholder engagement process and a full set of specialists.
<b>Environmental compliance audit for Mn48 (Pty) Ltd (Northern Cape), 2020</b>	Project Manager. Environmental compliance audit against conditions of the approved EMPr and environmental authorisation for the Lehating Mine.
<b>Environmental compliance audit for Khwara Manganese (Pty) Ltd (Northern Cape), 2020</b>	Project Manager. Environmental compliance audit against conditions of the approved EMPr and environmental authorisation for the Khwara Mine.
<b>Environmental Compliance Assessment of the Lily and Barbrook Gold Mines (Limpopo Province), 2020</b>	Project Manager. Legal environmental compliance assessment for the Lily and Barbrook Gold Mines and development of an Environmental and Social Action Plan.
<b>Environmental Assessment process for prospecting rights for Khwara Manganese (Pty) Ltd (Northern Cape Province) 2019 to 2020 - Manganese</b>	Project Manager. Compilation of Basic Assessment Report and the management of the stakeholder engagement process and specialists in support two separate prospecting right applications.
<b>Environmental Assessment Process for the proposed alternative closure and rehabilitation strategy for the Tshipi Borwa Mine (Northern Cape Province) 2018 to 2019 - Manganese</b>	Project Manager. Compilation of Basic Assessment Report and environmental management programme reports. The management of the stakeholder engagement process, multi-disciplinary specialist team both within South Africa and the UK. Assistant with the compilation of the Financial Provision Specialist Report.
<b>Environmental Assessment Process for the merging of the Mamatwan Mine Sinterfontein Waste Rock dump and the Tshipi Eastern Waste Rock dump for the South32 Mamatwan mine (Northern Cape Province) 2019 - Manganese</b>	Project Manager. Compilation of Basic Assessment Report and environmental management programme reports and the Water Use Licence Application. The management of the stakeholder engagement process specialist team including the compilation of the Financial Provision Specialist Report.
<b>Minimum Air Quality Emissions Standard Postponement Application for Anglo American Platinum's Polokwane (Limpopo Province), Waterval (North West Province) and Mortimer Smelter (Limpopo Province) operations (2018 to 2019) - Platinum</b>	Project Manager. Management of Stakeholder Engagement Process as part of an Air Quality Minimum Emissions Standards Postponement Application Process for the Waterval, Polokwane and Mortimer Smelter Complexes.

<b>Minimum Air Quality Emissions Standard Postponement Application for the Zondereinde Northam Platinum Mine in the Limpopo Province in the Limpopo Province (2018 to 2019) - Platinum</b>	Project Manager. Management of Stakeholder Engagement Process as part of an Air Quality Minimum Emissions Standards Postponement Application Process for the Zondereinde Smelter Complex.
<b>Integrated Water Use Licence Application for the Lehating mine in the Northern Cape Province (2018 - 2019) - Manganese</b>	Project Manager. Compilation of the Integrated Water and Waste Management Plan, Water Use Licence Application forms and the management of specialists in support of the Lehating Integrated Water Use Licence Application.
<b>Integrated Water Use Licence Application for the new Khwara manganese mine in the Northern Cape Province (2018 - 2019) - Manganese</b>	Project Manager. Compilation of the Integrated Water and Waste Management Plan, Water Use Licence Application forms, the management of specialists and authority liaison in support of the Khwara Integrated Water Use Licence Application.
<b>Monthly environmental support for the Tshipi Borwa Mine (2018 – 2019) - Manganese</b>	Project Manager. Off-site environmental support work.
<b>Financial Provision for Infrastructure Changes at the Zondereinde Northam Platinum Mine in the Limpopo Province (2018) - Platinum</b>	Project Manager. Compilation of the financial provision report for infrastructure changes at the Zondereinde Smelter Complex as part of a basic assessment process for changes to infrastructure at the smelter.
<b>EMP commitments consolidation of the Tshipi and Mamatwan Mine for the mining of the barrier pillar in the Northern Cape Province (2018) - Manganese</b>	Project Manager. Compilation of a barrier pillar mining commitments report to outline the collective environmental management programme, integrated water use licence and environmental authorisation commitments for both Tshipi and South32 specifically for the mining of the barrier pillar.
<b>ESIA for the retreatment of copper tailings dams in the town of Kitwe in Zambia (2017 - 2018) - Copper</b>	Project Manager. Compilation of scoping report and terms of reference. Compilation of the environmental and social impact assessment report to meet IFC requirements. Management of multi-disciplinary specialist studies. Co-ordination of specialist teams within Zambia and South Africa. Management of stakeholder engagement process.
<b>Environmental compliance audit for the Sishen Dingelton resettlement site in the Northern Cape Province (2017)</b>	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
<b>Environmental compliance audit for the Sishen Dingelton decommissioning site in the Northern Cape Province (2017)</b>	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
<b>Atmospheric Emissions Compliance Audit for the Zondereinde Northam Platinum Mine in the Limpopo Province (2017) - Platinum</b>	Project Manager. Assess compliance with the conditions of the atmospheric emissions licence for the Zondereinde Mine and report compilation.

<b>Environmental compliance audit for the Northam Platinum Mine in the Limpopo Province (2017) - Platinum</b>	Project Manager. Undertake an environmental compliance audit of the Zondereinde Mine in terms of applicable legislation and report compilation.
<b>Independent Peer Review of the Vaal Gamagara Water Supply Scheme in the Northern Cape Province (2017)</b>	Project co-ordinate. Management of specialists and review of environmental permitting aspects and assistance with report compilation.
<b>Due diligence for a smelter complex and associated mine located in the North West Province (2016- 2017) - Ferrochrome</b>	Project Manager. Team co-ordination and compilation of due diligence report
<b>EIA and EMP for the development of the new Khwara underground mine in the Northern Cape Province (2016-2017) - Manganese</b>	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Management of specialists and stakeholder engagement process and compilation of the financial provision report.
<b>Environmental assessment process to cater for changes to the approved infrastructure layout at the Tshipi Borwa Mine in the Northern Cape Province (2012-2017) - Manganese</b>	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. The management of the stakeholder engagement process and specialists.
<b>Preliminary close out audit for the Sishen Mine Dingleton Resettlement site near Kathu in the Northern Cape Province (2016)</b>	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
<b>Update of the basic assessment report for the establishment of a diesel generator as part of dewatering infrastructure at the Evander No. 6 Shaft complex in the Mpumalanga Province (2016)</b>	Project Manager. Update the basic assessment report to comply with the DMR report template
<b>Environmental assessment process and air emissions license process for the establishment of the new Jeanette Mine in the Free State Province (2015-2016) - Gold</b>	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a waste management license application and an air emissions license application. The management of the stakeholder engagement process and specialists.
<b>Water Use License Compliance Audit for the UMK Mine in the Northern Cape Province (2015 - 2016) - Manganese</b>	Project Manager. Assess compliance with the commitments included in the water use licenses issued and make recommendations for rectifying non-compliances and partial compliances identified during the audit.

Basic Assessment for undertaking prospecting related activities for Impala Platinum Mine in the North West Province (2015 -2016) - Platinum	Project Manager. Compilation of basic assessment report, management of specialists, management of stakeholder engagement process.
Environmental compliance audit for the UMK Mine in the Northern Cape Province (2015 -2016) - Manganese	Project Manager. Assess compliance with the conditions outlined in the environmental authorisation and the approved environmental management programme.
Environmental assessment process, waste management license process and water use license process for the establishment of a new Mokala Manganese Mine in the Northern Cape Province (2014-2016) - Manganese	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a water use license application process and submission of the waste management license application. The management of the stakeholder engagement process and specialists.
Environmental assessment process for the proposed construction of dewatering infrastructure and the development of a decant water pipeline in support of the proposed Evander Shaft 6 in the Mpumalanga Province (2014) - Gold	Project Manager. Compilation of a basic assessment report, the management of the stakeholder engagement process and the management of specialists.
Environmental legal gap analysis for Rappa Resources in the Gauteng Province (2014) - Gold	Project Manager. Compilation of an environmental legal gap analysis report to identify any inadequacies in existing approvals and to identify outstanding approvals in terms of the National Environmental Management Act 107 of 1998, the National Environmental Management: Waste Act 59 of 2008, the National Environmental Management: Air Quality Act 39 of 2004, and the National Water Act 36 of 1998 (NWA).
Environmental support work to meet the requirements of the approved environmental management programme and updating the water use license application for the UMK Mine in the Northern Cape Province (2009-2014) - Manganese	Project Manager. Environmental support with regards to assistance to the UMK Mine in implementing its environmental management programme commitments. This also includes quarterly stakeholder engagement processes, EMP performance assessments and quarterly audits. Updating the water use license and supporting documentation including a new integrated water and waste management plan and specialist management
Environmental Management Programme amendment for the Nooitgedacht Sand Quarry Mine in the Gauteng Province (2013) - Sand	Project Manager. Compilation environmental impact assessment and environmental management programme amendment report.
Proposed Kinsenda project amendment: underground mine and surface infrastructure for Meterox, Kinsenda Copper mine in the DRC (2013) - Copper	Project assistant. Assistance with the compilation of the environmental impact assessment and environmental management programme report.

<b>The environmental assessment process to amend the existing environmental impact assessment report and environmental management programme report to cater for infrastructure changes as the Leeuwkop Platinum Mine in the North West Province (2012-2013) - Platinum</b>	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme amendment reports. Submission of the waste management license application. The management of the stakeholder engagement process and specialists.
<b>Environmental and social impact overview of the proposed development of a new training centre at the Impala Platinum Rustenburg Operation in the North West Province (2013) - Platinum</b>	Project Manager. Compilation of a report to provide an overview of the potential environment and social impacts associated with the development of the proposed training centre.
<b>Environmental Management Programme performance assessment of the Impala Rustenburg Operation in the North West Province (2012) - Platinum</b>	Project assistant. Assistance with the on-site auditing and report writing required for the environmental management programme performance assessment
<b>Prospecting environmental management plan renewal and amendment Afplats in the North West Province (2012) - Platinum</b>	Project Manager. Compilation of the reports required for the renewal of a prospecting right, the amendment of an approved prospecting environmental management plan including the update of the financial provision and the management of the stakeholder engagement process.
<b>Prospecting environmental management plan renewal and amendment (Impala Platinum Limited on behalf of Inkosi Platinum in the North West Province (2012) - Platinum</b>	Project Manager. Compilation of the reports required for the renewal of a prospecting right, the amendment of an approved prospecting environmental management plan including the update of the financial provision and the management of the stakeholder engagement process.
<b>Prospecting environmental management plan amendment Ntsimbintle Mining (Pty) Ltd in the Northern Cape Province (2012) - Manganese</b>	Project Manager. Compilation of the prospecting environmental management plan amendment report and specialist management.
<b>The consolidation of Impala's fourteen existing approved environmental management programme reports into one consolidated report in the North West Province (2012) - Platinum</b>	Project Manager. Compilation of a consolidated environmental impact assessment and environmental management programme report include the management of the stakeholder engagement process



Environmental evaluation of Pit8C at Impala Platinum in the North West Province (2012) - Platinum	Project Manager. Compilation of a report to evaluate if the approved EIA and EMP amendment report adequately caters for the proposed Pit8C conventional opencast mining area, in terms of the baseline environment, the impact assessment and the mitigation/management measures.
Environmental assessment process for the environmental impact assessment and environmental management programme amendment for a proposed new tailings dam, re-processing of an old tailings dam, rehabilitation of the old tailings and waste disposal site, and open pit expansion for Impala Platinum Limited (Rustenburg Operation) in the North West Province (2011-2012) - Platinum	Project Manager. Compilation of scoping and environmental impact assessment and environmental management programme reports. Compilation of the technical supporting information required for a water use license application process. The management of the stakeholder engagement process and specialists
EIA and EMP for the establishment of the Swakop Uranium Mine in Namibia (2011)	Project assistant. Project assistant with stakeholder engagement and managing specialists.
EIA and EMP for the establishment of the new Husab Uranium Mine in Namibia ( 2011) - Uranium	Project assistant. Project assistant with stakeholder engagement and managing specialists.
EIA and EMP for the linear infrastructure associated with the Swakop Uranium Mine in Namibia (2010-2011) - Uranium	Project assistant. Project assistant with stakeholder engagement and managing specialists.
Environmental assessment process for the establishment of the new Turquoise iron ore mine in the Limpopo Province (2010-2011) – Iron Ore	Project assistant. Assistance with the stakeholder engagement process.
Environmental assessment process (2010)	Project assistant. Assistance with the compilation of the environmental impact assessment and environmental management programme report.
Environmental assessment process for the establishment of the new Kalkfontein Platinum Mine in the Limpopo Province (2010)	Project assistant. Assistance with the stakeholder engagement process.
Prospecting EMP for platinum group metals for Braggite Resources in the Mpumalanga Province (2010)	Project manager. Compilation of a prospecting EMP and stakeholder management process.

<b>Compilation of the EIA and EMP reports for the Lonshi Copper Mine located in the DRC (2009-02010)</b>	Project Assistant. Assistance with the compilation of the EIA and EMP reports for the Lonshi Copper Mine
<b>Licensing of various water uses at the South Deep Mine in the North West Province (2009)</b>	Project assistant. Assistant with water use licensing application.
<b>Stakeholder engagement process for the Everest Platinum Mine as part of an EMP amendment to the extension of mining activities and changes to surface infrastructure in the Mpumalanga Province (2009)</b>	Project assistant. Assistance with the stakeholder engagement process.
<b>Stakeholder engagement process for the EIA and EMP amendment process for the new Northern Cape Manganese Company Mine (2009)</b>	Project assistant. Assistance with the stakeholder engagement process.



## EAPASA

Unit 19 Oxford Office Park  
3 Bauhinia Street  
Highveld Techno Park  
Centurion  
0157  
Tel. (+27) 12 880 2154

## Environmental Assessment Practitioners Association of South Africa

*Advancing environmental assessment practice in South Africa*



Email: [registrar@eapasa.org](mailto:registrar@eapasa.org) / Website: [www.eapasa.org](http://www.eapasa.org)

Mrs Natasha Smyth  
11B, Henry Road, Rivonia  
Standalone house  
Johannesburg  
2129

Sent by email to: [nsmyth@slrconsulting.com](mailto:nsmyth@slrconsulting.com)

Dear Mrs Smyth

**Registered Environmental Assessment Practitioner: Number 2020/3035**  
**Natasha Holly Smyth : South African ID 8610080193087**

The Environmental Assessment Practitioners Association of South Africa (EAPASA) herewith certifies that Natasha Holly Smyth is a Registered Environmental Assessment Practitioner (EAP) in accordance with the prescribed criteria of Regulation 15.(1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Your registration is duly authorised by EAPASA as the single Registration Authority for EAPs in South Africa (appointed as per Regulation No. 104, Gazette No. 41434 of 8 February 2018, in terms of section 24H(3)(a) of the NEMA). Your status as a Registered EAP is displayed in the 'EAP Register' - please find your name and contact email address at

<https://registration.eapasa.org/registered-practitioners>

Your registration is effective for a period of five years from 19 February 2021, and expires on 19 February 2026. The renewal of your registration in 2026 will be contingent on you having met the requirements of EAPASA's Continuing Professional Development (CPD) policy during each year of registration.

As a Registered EAP you are required to uphold the EAPASA Code of Ethical Conduct and Practice in your professional endeavours, towards the goal of quality assurance in environmental assessment practice.

Please accept my congratulations on your registration.

Best regards

Dr Richard Hill  
Registrar

Date: 19 February 2021

Board Members: Ms Snowy Makhudu (Chairperson), Mr Khangwelo Desmond Musetsho (Vice-Chairperson),  
Mr Ntsako Baloyi, Mr Zama Dlamini, Mr Siyabonga Gqalangile, Ms Jacqui Hex, Mr Phumudzo Nethwadzi, Mr Danie Neumann.  
Registrar: Dr Richard Hill  
NPO Reg. No. 122-986

# CURRICULUM VITAE



## MAVISHA NARIANSAMY

### SENIOR ENVIRONMENTAL CONSULTANT

EMPA, South Africa

## QUALIFICATIONS

GDE	2015	Graduate Diploma in Engineering – Environmental Engineering
BSc Hons	2011	Bachelor of Science (Hons) - Environmental Monitoring and Modelling
BSc	2009	Bachelor of Science- Biological Science

## EXPERTISE

- Environmental and Social Impact Assessment
- Strategic Environmental Assessments
- Stakeholder Engagement
- Water quality
- Screening Studies
- Integrated Waste and Water Management Plan
- Compliance Auditing

Mavisha Nariansamy is a Senior Environmental Consultant with the EMPA division at SLR. Mavisha began her environmental career working at the Department of Environmental Affairs in Chief Directorate: Protected Areas Systems Management. There she gained experience drafting National Norms and Standard's for mining in protected areas, reviewing EIAs for proposed listed activities in protected areas and updating the NPAES database. She has more than 6 years of experience in the civil engineering and environmental consulting field gaining experience in the mining, power, linear infrastructure, and water sectors. The current role focuses on servicing clients in the mining sector undertaking the management and execution of Environmental authorisations (EIA and scoping, EMPr Amendments, Basic Assessment), compilation of management plans, risk assessments, compliance auditing, monitoring and permitting. In addition to being well versed with the South African legislative processes, she is also experienced in working on international ESIAs involving alignment with the Equator Principles and IFC Performance Standards. She has worked on projects at varying capacities in Swaziland, Democratic Republic of Congo, Guinea, Namibia and South Africa.

## PROJECTS

<b>Marula Platinum – Scoping and EIA and IWULA for a 10 MW Solar PV Plant</b> (Present)	Project manager. Compilation of reports, co-ordination of Integrated Water Use License Process and Scoping and EIA Process.
<b>Marula Platinum – Basic Assessment and EMPr Amendment for the Ventilation Shaft Project</b> (2020 – present)	Project manager. Compilation of BAR and EMPr document. Management of authorisation process, specialist investigations and authorisation process.
<b>NAMPARKS (Namibia) Scoping and EIA</b> (2020)	Project assistance. Compilation of Scoping and EIA report for NAMPARKS V infrastructure upgrade.

<b>South Africa Mainstream Renewable Power Developments – Screening Report</b> (2020)	Assistance project manager. Compilation of screening report for off-shore wind farms.
<b>West Wits IWWMP</b> (2020)	Project assistance. Compilation of the IWWMP for the West Wits mining operation in Johannesburg.
<b>Norplats Plant Substation Expansion</b> (Present)	Project Manager. Amendment of Environmental Management Programme for the Upgrade of the Plant Substation - Zondereinde Mine. Co-ordination of specialists, public participation, and management of the authorisation process. Compilation of Amended EMPr documents.
<b>Tshipi Borwa Mine: Compilation of RSIP</b> (2020)	Project Manager. Compilation of the Rehabilitation Strategy and Implementation Plan for the Tshipi Borwa Mine.
<b>Projects undertaken during the employ of Knight Piesold South Africa</b>	
<b>EMPr Update for Bakubung Platinum Mine</b> (2016 – 2019)	Project Manager. The project was concerned with the amendment process for Bakubung Platinum Mine for the establishment of a new Tailings Storage Facility. The process included specialist studies as well as Integrated Water Use License amendments.
<b>Water Quality Monitoring: Transnet Freight Rail (TFR)</b> (2018 – 2019)	Project Manager. Logistical co-ordination and management for water quality monitoring for TFR across South Africa for an 18-month period. Analysis of chemical results and compilation of monthly monitoring reports.
<b>External EIA Audits: Middelburg Ferrochrome</b> (2019)	Project Manager and auditor. Conducted an external audit in terms of Regulation 34 of the EIA Regulations. Assessed compliance and reporting of audit findings to relevant authority.
<b>Legal compliance audits for Middelburg Ferrochrome</b> (2018)	Project Manager. Auditing of compliance to GN 704 regulations and ECA Section 20, stipulations of site Water Use License (WUL) and compliance to Kloof Dump closure Permit. Reporting of audit conditions.
<b>Management Plans for Redstone Water Use Licence – Solar Reserve LLC</b> (2018)	Project Assistance. Compilation of a rehabilitation plan for watercourses around project area.
<b>EMPr Update: Wessel Hotazel Manganese Mines</b> (2016 - 2018)	Project Manager. Update of the existing EMPr for the Wessels Mine, where activities included liaison with client and government officials, co-ordination of specialist studies, assessment of impact; public participation process and compilation of Environmental Impact Assessment Report.
<b>Water Use License – Middelburg Ferrochrome</b> (2017)	External Auditor. Auditing of compliance to GN 704 regulations and stipulations of site Water Use License (WUL) and compilation of audit reports.

<b>ECO monitoring for Ezulwini Water Supply Project - Swaziland Water Services Corporation (Swaziland)</b> (2018)	Project Manager and External ECO Auditor. Conducted monthly ECO monitoring and ensuring compliance to construction CMP. Compilation of monthly ECO reports.
<b>Kinsevere Primary Copper ESIA – MMG Kinsevere Copper Mine (DRC)</b> (2017)	Project Assistance. Co-ordination of specialist studies, compilation of impact assessment for ESIA report and review of specialist studies.
<b>Water Use License (WUL) audits - Samancor Chrome Ferrometals</b> (2016 – 2018)	External Auditor. Auditing of compliance to stipulations of Water Use License (WUL) and compilation of audit report.
<b>Aquatic Biomonitoring at all Wastewater Treatment Works – Johannesburg Water</b> (2014 – 2018)	Project Assistance. Undertook quarterly water quality monitoring including administrative, logistical duties and compilation of reports
<b>Water Quality Site Support – MMG Kinsevere Copper Mine (DRC)</b> (2014 – 2018)	Project Manager. Compilation of the mine's water quality reports based on interpretation of laboratory results, providing water quality recommendations for the mine based on findings and trends, logistical support and procedures for water monitoring and sampling events.
<b>Biodiversity Site Support – MMG Kinsevere Copper Mine (DRC)</b> (2014 – 2018)	Project Manager. Project management and support for specialist studies undertaken at Kinsevere Copper Mine, to determine rehabilitation success of plant translocation programme
<b>EIA for Oxidation Ponds - Ohangwena Regional Council (Namibia)</b> (2016)	Project Assistance. Compilation of scoping report and impact assessment and preparation of BID documents and public participation material.
<b>Initial Environmental Evaluation: Ezulwini Water Supply – Swaziland Water Services Corporation (Swaziland)</b> (2016)	Project Assistance. Compilation of baseline and project description, stakeholder consultation and review of draft IEE report.
<b>The City Deep Kazerne freight hub roads upgrade programme: ECO audit – SANRAL</b> (2016)	ECO Auditor. Conduct monthly ECO monitoring and ensuring compliance to construction CMP and compilation of monthly ECO reports.

<b>Ethemba Environmental Impact Assessment - Ministry of Natural Resources and Energy (Swaziland)</b> (2015 – 2016)	Project Assistance. Assistance with compilation some chapters for the ESIA Report.
<b>Air Quality Site Support – MMG Kinsevere Copper Mine (DRC)</b> (2014 – 2016)	Project Manager. Compilation of monthly feedback air quality reports, interpretation of laboratory data and management recommendations, logistical and administrative duties and management of sub consultants.
<b>Environmental Impact Notice for plant modification and pit expansion for Siguiri Gold Mine – AngloGold Ashanti (Guinea)</b> (2015)	Project Assistance. Updating EIN for Siguiri Gold Mine by compiling and reporting of baseline water quality data and other environmental baseline components for EIN update for the Combination Plant Project.
<b>State of the Rivers – City of Johannesburg</b> (2015)	Project Assistance. Conducted vegetation assessment (VEGRAI), including identification of riverine vegetation.
<b>Lethabo Power Station: Waste Classification and Lining Type Assessment – ESKOM</b> (2015)	Project Manager. Waste classification of ash and sewage sludge. Project management role and co-ordination/ liaison with specialists.
<b>Update of Environmental Impact Study – MMG Kinsevere Copper Mine (DRC)</b> (2014)	Project Assistance. Assisted with writing the baseline chapter for the update of the Environmental Impact Study and stakeholder material such as BID documents and information brochures.
<b>Water Pollution Monitoring for Van Eck Power Station, Ruacana Power Station and Brakwater Depot – NamPower</b> (2014 – 2015)	Project Assistance. Data analysis and report compilation, data capture, trend analysis and provide water quality recommendations.
<b>MEMBERSHIPS</b>	
<b>Pr. Sci. Nat. SACNASP (Membership Number 115550)</b>	Professional Natural Scientist (Environmental Science) of the South African Council for Natural Scientific Professions (SACNASP).

IAIAsa

(Membership Number  
6474)

Full member of the International Association of Impact Assessment (South Africa)



**herewith certifies that**  
**Mavisha Nariansamy**  
Registration Number: 115550  
**is a registered scientist**

in terms of section 20(3) of the Natural Scientific Professions Act, 2003  
(Act 27 of 2003)  
in the following field(s) of practice (Schedule 1 of the Act)  
Environmental Science (Professional Natural Scientist)

Effective    20 July 2016

Expires       31 March 2021



A handwritten signature in black ink, appearing to read 'Botha', is positioned above a horizontal line.

Chairperson

A handwritten signature in black ink, appearing to read 'M. Prinsloo', is positioned above a horizontal line.

Chief Executive Officer





# CURRICULUM VITAE



## ED PERRY

### OPERATIONS MANAGER

Environmental Management Planning & Approvals,  
South Africa

## QUALIFICATIONS

Postgrad Cert.	2016	Postgraduate Certificate in Occupational Health and Safety, University of Cape Town
Postgrad Cert.	2012	Postgraduate Certificate in Environmental Law, Centre for Environmental Management, Potchefstroom
Postgrad Cert.	2008	Postgraduate Certificate in Environmental Assessment, Oxford Brookes University
MSc	1994	MSc Applied Hydrobiology, Cardiff University
BSc (Hons)	1990	BSc (Hons) Environmental Science, Plymouth University

## EXPERTISE

- Environmental and Social Impact Assessments
- EHSS Auditing
- Environmental Compliance
- Management Systems
- Due Diligence

Ed Perry joined SLR as the Operations Manager for the Environmental Management Planning and Approvals (EMPA) team in Africa in August 2019. He has worked in environmental consultancy for over twenty years for a wide range of public and private sector clients.

Ed is a registered Environmental Auditor with the Institute for Environmental Management and Assessment and a Lead Auditor with the International Cyanide Management Institute. Prior to moving to South Africa in 2011 Ed worked in the UK on a wide range of projects including EIAs and Integrated Pollution and Prevention Permits. This included permitting the first hazardous waste landfill in the UK under the new integrated permitting mechanism and undertaking a study for the European Commission on the implementation of the Landfill Directive in 15 European countries.

Since moving to South Africa, Ed has been involved with ESIA's and environmental authorisations throughout Africa. Ed has been Project Director / Partner in Charge of EIAs for a wide range of facilities including: Renewable Energy Facilities; Metal Extractive Industries; Large Water Storage Schemes; and New Mine and Extensions to Mines.

Ed has also undertaken a wide range of environmental audits including; due diligence audits, EMPR audits, and over 20 international cyanide code audits of mines throughout Africa.

## PROJECTS

A sample of Ed's project experience, summarised by sector, is provided below.

### Mining

#### Anglo-American – Polokwane Smelter, Polokwane

Ed was the Project Manager responsible for undertaking an external compliance audit for the Anglo-American Polokwane Smelter as stipulated in the slag stockpile permit for the Polokwane Metallurgical Complex. This included a review of the permit for the temporary stockpile of ash as part of the expansion of the Complex.

<b>Eurasian Natural Resources Corporation – Kakanda Mine, DRC</b>	Ed was the Project Manager for the review of a Safety, Health, Environment and Community Management System for Kakanda Mine in the DRC.
<b>Continental Coal Limited – Penumbra, South Africa</b>	Ed was the Lead Auditor undertaking review of EIA, EMP and site procedures against the requirements of the IFC Procedures.
<b>Ruighoek Mine, South Africa</b>	Ed was the Project Manager for an ESIA associated with the expansion of this chromium mine in South Africa.
<b>AngloGold Ashanti – Yatela, Sadiola, Siguri Gold Mines, Mali and Guinea</b>	Ed was the Lead Auditor and Project Manager undertaking a re-certification audit against the requirements of the International Cyanide Code for three gold mines.
<b>Freda Rebecca Gold Mine - Zimbabwe</b>	Ed was the Lead Auditor and Project Manager for a gap audit to ascertain the status of the gold mine with regards to its ability to comply with the International Cyanide Code
<b>Gold Fields Ghana – Tarkwa and Damang Gold Mines</b>	Ed was the Lead Auditor and Project Manager undertaking a re-certification audit against the requirements of the International Cyanide Code for the two gold mines.
<b>Goldfields, Harmony, AngloGold Ashanti – South Africa</b>	Ed was the Lead Auditor and Project Manager undertaking a re-certification audit against the requirements of the International Cyanide Code for 5 gold mines for AngloGold Ashanti, 4 gold mines for Harmony, and a gold mine for Gold Fields.
<b>Maamba Collieries Limited – Maamba Coal Mine, Zambia</b>	Ed was the lead auditor leading the creation and implementation of an integrated management system in accordance with the requirements of the IFC performance standards, ISO 14001, ISO 9001, and OHSAS 18001.
<b>Eramet - Senegal</b>	Lead Auditor for a due diligence audit of a mineral sands mining operation. The operation was the subject of a possible joint venture. The environmental audit, which included 3 days on site, was to establish if what environmental risks were involved with the project, which was just about to enter the construction phase.
<b>Nyoto Minerals – Tula Kapi Mine, Ethiopia</b>	Ed was the technical reviewer for the ESIA undertaken on behalf of Nyoto Minerals for the Tula Kapi Gold Mine in Ethiopia.
<b>Riversdale Capital – Zambeze Coal Mine, Zambia</b>	Ed was the Technical Reviewer for an ESHIA for the development of the Zambeze Coal Mine on behalf of Riversdale Capital.
<b>Confidential – proposed mine, South Africa</b>	Ed was the Project Manager for an ESIA for a new proposed iron ore mine in South Africa. This application was withdrawn following baseline studies by specialist showing the existence of fatal flaws with regards to water use and location of the TSF.
	<b>Industry</b>
<b>Distell – South Africa</b>	Ed was Project Manager for a number of projects for Distell in order to obtain various environmental authorisations for their brewing facilities including the one for the siting of a new waste water treatment works.

<b>SPAR – South Africa</b>	Ed was Project Manager for a number of energy projects undertaken for SPAR in South Africa including looking at Science Based Targets, Internal Carbon Pricing, and an ISO 50001 Energy Management System.
<b>SCAW – South Africa.</b>	Ed was the Project Manager for a range of Environmental Authorisations, including ESIA's, Air Emissions Licences, Water Use Licences and contaminated land assessments. These studies were undertaken for SCAW at a number of their smelter sites in Gauteng over a 5 year period.
<b>Confidential – South Africa</b>	Ed lead an EHS audit of a cable tie manufacturer using plastic extrusion as part of a due diligence project.
<b>Pfizer – South Africa</b>	Ed was the Project Manager and Lead Auditor for an EHS audit of the head offices of Pfizer in South Africa.
<b>Sasol - Sasolburg</b>	Ed was the Project Manager and Lead Auditor for International Cyanide Code recertification audit for the Sasol cyanide production facility at Sasolburg.
<b>Sohar Aluminium - Oman</b>	Ed was the Lead Auditor of Sohar Aluminium's environmental management system auditing the system against the requirements of ISO 14001 and benchmarking this facility against international requirements.
<b>Confidential – KZN, South Africa</b>	Lead Auditor for a due diligence audit of a white goods manufacturing company in Kwa-Zulu Natal.
<b>Sasol – Secunda</b>	Ed was the Lead Auditor for a third party audit of waste contractors operating on behalf of Sasol. The audit investigated compliance with South African environmental legislation and environmental best practice.
<b>Confidential – South Africa, Kenya, UAE</b>	Ed was the project manager for a due diligence audit of a packaging company's facilities in South Africa, Kenya and UAE.
	<b>Infrastructure</b>
<b>Lesotho Highlands Development Agency - Lesotho</b>	Ed took over as Project Manager undertaking an ESIA for the Polihali Reservoir and Western Access Road in Lesotho on behalf of the Lesotho Highlands Development Agency.
<b>Freight Forwarders Group – Kenya and Tanzania</b>	Ed was the Lead Auditor undertaking a re-certification audit against the requirements of the International Cyanide Code for the Freight Forwarders transportation group of companies.
<b>Transnet Pipelines – South Africa</b>	Ed was the Project Manager responsible for the creation and implementation of an Energy Management System for all of the pumps stations, workshops and offices for Transnet Pipelines, who pump crude oil and petroleum products from Durban to Johannesburg.
<b>Vehrad Transportation - Ghana</b>	Ed was the Project Manager and Lead Auditor undertaking a re-certification audit of Vehrad Transportation against the requirements of the International Cyanide Code.

	<b>Oil and Gas</b>
<b>Shell – South Africa</b>	Ed was the Project Manager for various environmental authorisations in South Africa associated with the Shell GUESS program. This program related to the closure and clean up of Shell service stations.
<b>Vopak – Richards Bay, South Africa</b>	Ed was the Project Manager for an ESIA for a new terminal operated by Vopak at Richards Bay for the handling and storage of Liquid Petroleum Gas and Clean Petroleum Products.
<b>Vopak – Durban, South Africa</b>	Ed was the Project Manager for an ESIA for the expansion of the Vopak terminal at Durban Docks for the handling and storage of Liquid Petroleum Gas and Clean Petroleum Products.
<b>Bidvest – Durban South Africa</b>	Ed was the Project Manager for an ESIA for the expansion of the Bidvest terminal at Durban Docks for the handling and storage of Liquid Petroleum Gas and Clean Petroleum Products.
	<b>Power</b>
<b>Department for International Development – UK Government</b>	The UK Department for International Development is providing support to medium sized renewable energy facilities ( mainly hydroelectric power plants) in Uganda through the Global Energy Transfer Feed in Tariff programme (GET FiT). The project was to assess how local communities in the vicinity of these facilities could obtain power and how environmental and social safeguards for these types of facilities could be improved in the future. Ed was the lead environmental and social advisor undertaking a review of the environmental and social safeguards.
<b>Confidential - Angola</b>	Ed was Project Manager for a project undertaking a Strategic Environmental Assessment of locations for renewable energy facilities in Angola.
<b>Confidential - Mozambique</b>	Ed was the Project Manager for an ESIA to be submitted to the Mozambican authorities for the development of a unique renewable energy pilot facility.
<b>MEMBERSHIPS</b>	
<b>IEMA</b>	Practitioner for the Institute of Environmental Management and Assessment
<b>IEMA</b>	Registered Environmental Auditor
<b>PUBLICATIONS</b>	
	<ul style="list-style-type: none"> <li>• The Role of Socio-Economic Factors, Seasonality and Geographic Differences on Household Waste Generation and Composition in the City of Tshwane. 2016 (Wastcon).</li> </ul>
	<ul style="list-style-type: none"> <li>• EMS as a Tool for Integrated Business Risk Management. 2005 (various journals).</li> </ul>
	<ul style="list-style-type: none"> <li>• Golder Associates EMS Roadmap. 2004 (CD ROM).</li> </ul>

	<ul style="list-style-type: none"><li>• Incentives to Encourage Recycling. 2002. Materials Recycling Week</li></ul>
	<ul style="list-style-type: none"><li>• Recycle of Life. 2002. Government Business</li></ul>
	<ul style="list-style-type: none"><li>• New Approaches to Management of Waste. 2002 (various journals)</li></ul>
	<ul style="list-style-type: none"><li>• Minimise the Waste – Maximise the Message. 2001</li></ul>
	<ul style="list-style-type: none"><li>• Guide to Waste Reduction on Construction Sites. 1999. Construction Confederation</li></ul>

## EAPASA

Unit 19 Oxford Office Park  
3 Bauhinia Street  
Highveld Techno Park  
Centurion  
0157  
Tel. (+27) 12 880 2154

## Environmental Assessment Practitioners Association of South Africa

*Advancing environmental assessment practice in South Africa*



Email: [registrar@eapasa.org](mailto:registrar@eapasa.org) / Website: [www.eapasa.org](http://www.eapasa.org)

Mr Edward Perry  
2 Nonoti Gardens  
15 Nonoti Avenue, Berea  
Durban  
4001

Sent by email to: [eperry@slrconsulting.com](mailto:eperry@slrconsulting.com)

Dear Mr Perry

**Registered Environmental Assessment Practitioner: Number 2019/1210**  
**Edward James Perry : South African ID 6606136020185**

The Environmental Assessment Practitioners Association of South Africa (EAPASA) herewith certifies that Edward James Perry is a Registered Environmental Assessment Practitioner (EAP) in accordance with the prescribed criteria of Regulation 15.(1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Your registration is duly authorised by EAPASA as the single Registration Authority for EAPs in South Africa (appointed as per Regulation No. 104, Gazette No. 41434 of 8 February 2018, in terms of section 24H(3)(a) of the NEMA). Your status as a Registered EAP is displayed in the 'EAP Register' - please find your name and contact email address at

<https://registration.eapasa.org/registered-practitioners>

Your registration is effective for a period of five years from 23 April 2020, and expires on 23 April 2025. The renewal of your registration in 2025 will be contingent on you having met the requirements of EAPASA's Continuing Professional Development (CPD) policy during each year of registration.

As a Registered EAP you are required to uphold the EAPASA Code of Ethical Conduct and Practice in your professional endeavours, towards the goal of quality assurance in environmental assessment practice.

Please accept my congratulations on your registration.

Best regards

Dr Richard Hill  
Registrar  
Date: 23 April 2020

Board Members: Ms Snowy Makhudu (Chairperson), Mr Khangwelo Desmond Musetsho (Vice-Chairperson),  
Mr Ntsako Baloyi, Mr Zama Dlamini, Mr Siyabonga Gqalangile, Ms Jacqui Hex, Mr Phumudzo Nethwadzi, Mr Danie Neumann.  
Registrar: Dr Richard Hill  
NPO Reg. No. 122-986