CURRICULUM VITAE



QUALIFICATIONS

B.Eng 1995 Masters 2004

EXPERTISE

- Environmental Management
- Environmental (and Social) Impact Assessments (EIA's)
- Environmental Feasibility Studies
- Stakeholder Management
- Environmental Management Systems (EMS)
- Environmental Auditing
- Environmental Training and capacity building
- Mine Closure

PROJECTS (Excerpt)

Shell Namibia Upstream BV – EIA for proposed offshore well drilling (2017 -2018)

Alten Renewable Energy Group – Environmental and Social Management Support (2018)

werner petrick

TECHNICAL DIRECTOR & ENVIRONMENTAL ASSESSMENT MANAGER

Environmental Management Planning & Approvals, Africa

Civil Engineering

Environmental Management

Werner has over 22 years of work experience. He started out as a Civil Engineer (first 3 years) but soon became involved with environmental related projects. The following 19 years (+) he has been working in the environmental field with experience in Environmental Impact Assessments (EIA's), general environmental management and implementation, Environmental Management Systems (EMS), waste management, environmental compliance, training, stakeholder engagement and capacity building, mine closure and rehabilitation, environmental auditing, reporting and monitoring as well as due diligence.

Werner's experience is based on work conducted as a consultant (current position) as well as working for industry (i.e. implementing environmental requirements, etc.)

Sectors of his experience include: exploration or production phases of large mining projects, power generation including renewable power initiatives and hybrid power plants, transmission lines, water supply & sanitation, petrochemical industry, linear infrastructure including roads and rail, port related projects, chemical handling and storage, large irrigation projects and other.

With SLR he is a Technical Director and is managing the Environmental Assessment Team associated with activities in Namibia.

Shell Namibia Upstream BV holds PEL 39, which is located adjacent to the southernmost Namibian offshore border with South Africa. Shell is proposing to drill one or possibly two exploration wells in the northern portion of the licence area.

Werner was the Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).

SLR is providing environmental and social (E&S) management support for Alten's Solar project in Mariental, Hardap Region of Namibia through a full time Environmental Manager on site for the entire construction period. Werner is managing the project, providing ongoing support to the on-site 'SLR Environmental Manager' and conducts site inspections and audits to measure compliance against the EMP.



Gecko Cobalt Mining -Environmental and Social Screening process (2018) Gecko Cobalt Mining (Pty) Ltd conducted reconnaissance drilling over a stretch of 24 km length over the cobalt and copper mineralisation in EPL 4346, located approximately 25 km northwest of Opuwo. Depending on the outcome of further exploration activities and the feasibility study, GCM and CR are proposing to apply for a ML to ultimately mine the ore and process it on site.

Gecko appointed SLR (Namibia) to conduct an Internal Environmental (and Social) Screening exercise.

Lead Environmental Assessment Practitioner managing an internal Environmental and Social Screening process.

Manila Investments – Kombat Copper Mine EIA (2017 - 2018) Manila Investments (Pty) Ltd holds Mining Licences 73B, 16, 9 (collectively the old Kombat Copper mine, which is currently under care and maintenance). The mine is a past-producing copper, lead and silver mine. Manila is considering implementing the following activities upon completion of the Environmental Impact Assessment process and acquiring the relevant permits and approvals for:

Open pit (surface) mining in ML 73B (also referred to as "Asis") and associated activities;

Processing of the ore at the existing process plant, currently being refurbished, and associated activities; and

Dewatering the "Asis Far West" (AFW) Shaft and conducting further underground exploration activities in ML 16.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).

Areva – Trekkopje mine and Desalination Plant – annual environmental audits SLR conducts annual environmental (EMP) audits for Areva's Trekkopje mine and Desalination Plant.

Werner managed the process, conducted the audits, complied / review the repots.

Swakop Uranium Waste Rock Dump Amendment and Incinerator - EIA amendment (2017 -2018) Swakop Uranium owns and operates the Husab Mine in the Erongo Region of Namibia; they propose amendment to their Waste Rock dump and also to implement a new on-site waste incinerator.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).

EIB and NamPower Encroacher Bush Biomass Power Project – EIA (2017 - 2018) European Investment Bank and NamPower: Environmental Impact Assessment (EIA) for the proposed Encroacher Bush Biomass Power Project in Namibia.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

Igneous Mining (Pty) Ltd – Application for Environmental Clearance (2016) Igneous Mining (PTY) LTD Environmental is seeking a Clearance Certificate (ECC) Renewal for small scale mining activities on ML 135 in Sarusus Area, Skeleton Coast Park. This included environmental audits and reporting.

Lead Environmental Assessment Practitioner managing the ECC Renewal Process.



City of Windhoek

Gammams Waste Water

Treatment Works Upgrade
EIA

(2017)

The Gammams Waste Water Treatment Plant (GWWTP) located in the Wanaheda suburb of Windhoek, is the City of Windhoek's (CoW) largest wastewater treatment plant. The CoW appointed SLR to develop an environmental Scoping Report (including Impact Assessment) for the planned GWWTP upgrade.

Lead Environmental Assessment Practitioner managing the completion of the EIA process, report compilation / review.

NAMPARKS Facility Amendments at Mudumu NP – EIA amendment (2016 – 2018) NAMPARKS Environmental Scoping Report for Infrastructure Development: Amendment for the proposed addition of an Entrance Gate, Tourist Reception and Staff Housing at Mudumu National Park.

Lead Environmental Assessment Practitioner for the EIA amendment process required for infrastructure development. Report review.

Gecko Salt (Pty) Ltd Cape Cross Salt Project – EIA (2016 – 2018) Gecko Salt (Pty) Ltd Environmental Impact Assessment for the proposed Cape Cross Salt Project.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and review reports.

Namibia Rare Earths – Proposed Lofdal Mine and linear infrastructure – EIA (2015 – 2016) NRE holds the EPL at Lofdal located west of Khorixas, exploring for rare earth. They wish to apply for a mining license in 2016, for which an EIA would is required.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

Rössing Uranium – Impacts of the TSF on biota and desert ecology – Management of study (2015 – 2016) Impacts of the TSF at Rössing Uranium and related dust dispersion on biota and desert ecology.

Managing the process and coordinating various specialists for input into the study (i.e. vegetation, air quality, biological soil crust, invertebrates and hyperspectral work). Compiling consolidated report summarising all the findings.

High Speed Railway Lines – Environmental Screening Process (2015 – 2016) Feasibility studies for a railway line between Windhoek and Katutura, as well as a study for a railway line between Windhoek and Okahandja.

Lead Environmental Assessment Practitioner managing the environmental Screening process (including limited stakeholder engagement, managing specialists, etc.) and compiling reports.

Swakop Uranium Reagents
– EIA for storage at the
Manica facilities
(2015)

Swakop Uranium is developing the Husab Mine in the Erongo Region of Namibia (70 km north-east of the Walvis Bay port). The reagents and chemicals that will be used in the processing plant will be imported through the port of Walvis Bay. It will be sourced in advance and stored in Manica warehouse facility (on a temporary basis – "phase 1 project") and container yard in the industrial area of Walvis Bay.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports

Swakop Uranium – Biannual Environmental Reports SLR assisted Swakop Uranium with the preparation of a number of their Bi-annual Environmental Reports to be submitted to MET.

Werner managed this process, oversees/review and assists with the report writing.



Sand Miners Association of Swakopmund – EIA for sandmining in the Swakop River (2015) The members of the Sand Miners Association have been mining sand from the Swakop River, within the Swakopmund Municipal boundaries, for many years. The sand they mine supplies Swakopmund, Long Beach and Walvis Bay with sand for construction purposes. The Sand Miners Association has had to look for an alternate source of sand for construction activities in their area and EIA had to be done.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

Swakop Uranium Reagents storage at a new facility in the Port of Walvis Bay – EIA (2015) Swakop Uranium is developing the Husab Mine in the Erongo Region of Namibia (70 km north-east of the Walvis Bay port). The reagents and chemicals that will be used in the processing plant will be imported through the port of Walvis Bay. It will be sourced in advance and stored in a warehouse facility within the boundaries of NamPort's harbour area (long term – "phase 2" project).

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

Namibia Rare Earths – Lofdal mine – Environmental baseline development (2015) NRE holds the EPL at Lofdal located west of Khorixas, exploring for rare earth. They wish to apply for a mining license in 2016, for which an EIA would be required. The baseline environment needs to be described in detail to feed into such an EIA process.

Compile the environmental baseline project plan. Manage specialists and develop Baseline data/report with input from various specialists.

Swakop Uranium – Husab Mine amendments - EIA (2015) Swakop Uranium is developing the Husab Mine in the Erongo Region of Namibia (70 km north-east of the Walvis Bay port). The EMP needs to be implemented during construction Swakop Uranium and their contractors. It further needs to be rolled out into a management system for operations.

Lead Environmental Assessment Practitioner managing the various EIA processes and compiling reports. Provide guidance and support to Environmental Control Officer(s), training to ECOs and contractors. Develop EMS procedures and other relevant documentation.

B2Gold – Otjikoto Gold Mine landfill site - EIA (2013 – 2014) B2Gold is developing the Otjikoto (gold mine) Project, located approximately 70 km north-east of Otjiwarongo in the Otjozondjupa Region of Namibia. B2 Gold proposed to develop a landfill site (waste disposal facility) on site to cater for non-hazardous waste. They also proposed to construct and operate an on-site (heavy fuel oil) Power Plant.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

B2Gold - Bi-annual Reports

SLR assisted B2Gold with the preparation of a number of their Bi-annual Environmental Reports to be submitted to MET.

Werner managed this process, conducted site visits and compiled the repots.



B2Gold – Otjikoto Gold
Mine development - EIA
(2012 - 2013)

B2Gold applied for Mining Licence (ML 169) to developed the Otjikoto (gold mine) Project, located approximately 70 km north-east of Otjiwarongo in the Otjozondjupa Region of Namibia. As part of the ML application process, a detail EIA process needs to be conducted.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports. The Scoping phase was already completed by another company. SLR (in corporation with the other company) completed the EIA process — i.e. assessment phase. Develop Mine Closure Framework.

Arandis Power Plant - EIA amendment (2014)

Arandis Power proposed to construct and operate a 'hybrid' thermal/PV plant with the maximum output capacity of 120 MW.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.

EPL's for exploration activities – various EIA's (2013 – 2015)

Various exploration companies planning to conduct exploration activities on the EPLs they hold. Prior the activities commencing, and EIA process needs to be conducted.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports. Also review of reports.

Commissiekraal Coal Mine – EIA Scoping Report (2015)

Development of the proposed Commissiekraal Coal Mine including services and associated infrastructure in South Africa.

Compiled EIA Scoping Report.

Various Mining and Exploration companies various services (2012 – 2015)

Various Mining and exploration companies across Namibia sought assistance.

Provided various services and support to various mining and exploration companies, including amongst others external audits, training, rehabilitation planning, compiling EMS procedures and other relevant documents, compile environmental performance reports, etc.

Various Mining, Exploration and Infrastructure Projects – various services (2012 – 2015)

Various Mining and exploration projects as well as infrastructure projects across Namibia sought assistance with EIAs, EMPs and review processes.

Review process and reports for various projects managed by other SLR environmental practitioners, including amongst others rail sidings; Nanomill which will produce 150,000 tons rebar's and billets per year from scrap steel; Okorusu Fluorspar Mine expansion; Offshore exploration drilling (Murphy); water and waste water treatment facilities EIA and EMPs; Dundee Precious Metal Tsumeb Hazardous Waste Site expansion; Walvis Bay Salt Holdings Expansion; and others.

Pietersite Mining License – EIA (2013)

Mining Pietersite (gemstone) on Mining License (ML) 57 in the Kunene Region, north-central Namibia.

Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.



EIA (2006 - 2007)

TransNamib – sulphuric acid transport – EIA (2014)	TransNamib plans to transport sulphuric acid by rail from Dundee Precious Metals (Tsumeb) to Rössing Uranium Mine and to Walvis Bay. Lead Environmental Assessment Practitioner managing the EIA processes and compiling reports.
Rössing Uranium Z20 deposit – EIA (2012 – 2014)	It is envisaged that the Z20 uranium deposit would be mined as a satellite open pit as it contains uranium bearing alaskite rocks, utilising conventional blast, load and haul methodology. An infrastructure corridor would need to be established to link the Z20 site to the existing Rössing Uranium Mine across the Khan River. Managing the EIA processes and compiling reports in a 'joint venture' with Aurecon.
Desalination Plant – Managing SEIA processes (2014)	A new Desalination Plant (located approximately 6 km north of Swakopmund, at the premises of the existing Swakopmund Salt Works.) to supply water to the for Rössing Uranium Mine. The plant will have a design capacity of 8,800 m³/day. Managing the SEIA processes and compiling reports in a 'joint venture' with Aurecon.
Coal Storage at Walvis Bay Harbour – EIA (2012)	Environmental Screening/ fatal flaw analysis for the proposed expansion of coal storage at the Walvis Bay Harbour. Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.
Arandis Power HFO and recycled oil power plant - EIA (2012)	Arandis Power proposes to develop an independent power generation plant east of the town of Arandis, located in the Erongo Region, Namibia. Arandis Power is proposing a power station with a nominal output capacity of approximately 120MW which utilises reciprocating engines. Arandis Power will utilise a residual fuel known as heavy fuel oil (HFO) and recycled oil from a waste oil recycling plant. Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.
Langer Heinrich Uranium Mine – expansion projects – Specialist environmental support (2009 – 2012)	Langer Heinrich is an operational Uranium Mine in Namibia Naukluft National Park. Specialist environmental support to ensure EIAs for expansion projects are correctly managed and implemented. Also to provide support, guidance and management in terms of environmental management implementation at the mine i.e. EMS development and implementation; mine closure and restoration strategy; environmental training; etc.). Site inspections and internal environmental audits.
Port Expansion Projects in SA – Project environmental management (2008 - 2009)	Port expansions and development (Port Elizabeth, Coega and Richards Bay). Project Environmental Manager - managing the EIA process (including stakeholder engagement, managing specialists, etc.) and compiling reports.
Gautrain Rapid Rail Link -	Development of the Gautrain Rapid Rail Link. Appointed (on contract basis) to provide specialist input into the very challenging EIA processes, and EMP development for the project. Also appointed as the



contractor, for the Gautrain Rapid Rail Link Project.

processes and EMP development for the project. Also appointed as the

Environmental Manager for the Bombela Turnkey Contractor, the managing

memberships	
EAPAN	Certified as a Lead Environmental Practitioner and a Reviewer under the Environmental Professionals of Namibia (Membership No. 114)
PUBlications	
	Paper on the integration of the EIA process with the project execution model through the University of Pretoria.

EMPLOYMENT RECORD

Date		Firm (Division)
From	Until	
1/1/1996	31/12/1998	Africon Engineering International (PTY) LTD (Geotechnical and Environmental Division)
1/1/1999	30/1/2004	Sasol Technology (Environmental and Risk Engineering Division)
1/2/2004	1/10/2005	Independent Environmental consultant (Natura Environmental Partitionner CC) and Sub-contracted by Golder Associates
1/10/2005	February 2009	Independent environnemental consultant (Natura Environmental Practitioners CC) and • Sub-contracted by Bombela (Preferred bidder to the Gautrain Rapid Rail Link project) – Environmental Manager for Bombela Turnkey Contractor. • Sub-contracted by Hatch Africa
March 2009	April 2012	Langer Heinrich Uranium Mine (Environnemental Department)
April 2012	Present	SLR

