

PRINCIPAL ENVIRONMENTAL CONSULTANT (ENVIRONMENTAL SERVICES), ENVIRONMENT & ENERGY



YEARS WITH THE FIRM

4

YEARS TOTAL

9

AREAS OF PRACTICE

Stakeholder Engagement

Water Use License Applications

Environmental
Authorisation Processes

Environmental Management Plans

Waste Management

Legal Compliance

Environmental Management Systems

Environmental Due Diligence and Liability Assessments

LANGUAGES

English

Afrikaans

CAREER SUMMARY

Anri graduated from the University of Johannesburg with a BA honours in Geography in 2007, and has nine years work experience. Anri is a principal environmental consultant.

She has been involved in numerous mining and industrial projects in South Africa. The projects include ESIA's, EMPr Environmental Performance Assessments and EMPr consolidation and alignment processes associated.

Anri's roles and responsibilities include the management of Basic Assessment Processes, Scoping and Environmental Impact Assessment Reporting Processes, Water Use Licence Application Processes and Waste Licencing Processes and the implementation of ISO 14000 and 9000 systems

EDUCATION

Bachelor of Arts (Honours), Geography, University of Johannesburg, Gauteng, South Africa	2007
Bachelor of Arts, Geography, University of Johannesburg, Gauteng, South Africa	2006
ADDITIONAL TRAINING	
Snake Awareness, Scorpion Awareness and First Aid for	2016

Snake Awareness, Scorpion Awareness and First Aid for Snakebite and Scorpion Sting, African Snakebite Institute Environmental Management Systems ISO 14001 Audit: Lead Auditor, Centre for Environmental Management, South Africa

IWRM, Water Use Authorisations, and Water Use Licence
Applications – Procedures, Guidelines, IWWMPs and Pitfalls,
Carin Bosman Sustainable Solutions, South Africa

ISO 14001 Environmental Management Systems (EMS), Implementation and Auditing, Centre for Environmental Management, South Africa

IEMA Approved Foundation Course in Environmental Auditing, 2009 Aspects International, South Africa

2011

PROFESSIONAL EXPERIENCE

Stakeholder Engagement

- Re-establishment of a Monitoring Committee for Metalloys, Meyerton, gautneg, South Africa (2015 – 2016): Project Manager. The re-establishment of a Monitoring Committee for four of the Waste Management Facilities at Samancor Manganese, Metalloys. Client: BHP Billiton Metalloys (Pty) Ltd
- Stakeholder Engagement for Mooi-Mgeni Transfer Scheme Phase 2, Rosetta Village, Kwazulu- Natal, South Africa (2009): Assistant. This project involved undertaking the public participation process for the Mooi-Mgeni Transfer Scheme Phase 2, which will primarily encompass the construction of the proposed Spring Grove Dam and an associated transfer pipeline from the proposed dam to the Mpofana River. Client: Department of Water Affairs and Forestry (DWAF).

Water Use Licence Applications

 Metalloys Water Use Licence Application, Meyerton, Gauteng, South Africa (2009): Assistant. This project involved compiling and submitting water use



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licence applications for all water use licence activities being undertaken at Metalloys. Subsequently a water use licence amendment process was also undertaken. Client: Samancor Manganese (Pty) Ltd.

Environmental Authorisation Processes

- Environmental Authorisation Process for Existing Borrow Pits at the Vaal River
 Operations (2016-2017): Project Manager. The Vaal River (including Mine
 Waste Solutions) Operations are located at the boundary between the North
 West and the Free State Provinces. Borrow pits needs to be established to mine
 soil and gravel, and will be used during the construction of pollution control
 berms, for the rehabilitation activities and where required landfilling
 requirements at AGA. Client: AngloGold Ashanti Limited
- Environmental Authorisation Process for the SO₂ Abatement Plant at Mortimer Smelter, Swartklip, North West, South Africa (2016-2017): project Manager.
 Undertaking a Scoping and Environmental Impact Reporting Process to ensure compliance with the National Environmental Management Air Quality Act (No. 39 of 2004). Client: Anglo American Platinum Limited
- Environmental Authorisation Process for the SO₂ Abatement Plant at Polokwane Smelter, Polokwane, Limpopo, South Africa (2016-2017): Project Manager. Undertaking a Scoping and Environmental Impact Reporting Process to ensure compliance with the National Environmental Management Air Quality Act (No. 39 of 2004). Client: Anglo American Platinum Limited
- Sasol Energy Technology Blending Facility Upgrade Project, Sasolburg, Free State, South Africa (2017): Principal Consultant. Basic Assessment Process for the installation of dangerous goods tanks at the Sasol One Site. Client: Sasol Energy Technology, a Division of Sasol Oil (Pty) Ltd.
- Environmental Authorisation for a Private Vehicle Proving Ground
 Development, Northern Cape, South Africa (2016): Project Manager. A Scoping
 and Environmental Impact Reporting Process for a private vehicle proving
 ground. Client: Ingen | Aix GmbH.
- Establishment of the Proposed Rietvlei Opencast Coal Mine, Mpumalanga, South Africa (2016): Project Manager. This project involved repeating the environmental authorisation process with the DMR as the competent authority, for the establishment of an opencast coal mine north of Middelburg. Client: Rietvlei Mining Company.
- Environmental Authorisation for Blue Sphere, Nigel, Gauteng, South Africa (2014): Consultant. This project includes an environmental impact assessment, environmental management programme report, water use license application, waste management license application and an atmospheric emissions licence application as well as the public participation process for the existing and proposed processes for Blue Sphere in Nigel. Client: Blue Sphere Investments and Trading 103 (Pty) Ltd.
- Environmental Authorisation for the Proposed Construction and Operation of Two Furnaces and Associated Infrastructure at Transalloys, eMalahleni, Mpumalanga, South Africa (2014): Consultant. The project entailed undertaking an environmental authorisation (by way of a scoping and environmental impact reporting process), including an atmospheric emissions licence application and waste management licence application process for the construction of two new 75MVA submerged arc furnaces that will primarily produce silicomanganese. Client: Transalloys (Pty) Ltd.
- Section 24G Rectification Process for the Storage of Dangerous Goods for Much Asphalt, Gauteng, South Africa (2014): Project Manager. Much Asphalt was required to undertake a Section 24G Rectification Process for the unlawful storage of dangerous goods on a number of their sites. Zaffar was involved in



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the compilation of the Section 24G application forms. Client: Much Asphalt (Ptv Ltd.

- M14 Furnace Environmental Authorisation, Meyerton, Gauteng, South Africa (2012): Consultant. The project entailed undertaking an environmental authorisation, including an atmospheric emissions licence application process, in terms of the National Environmental Management Act (No. 107 of 1998) for the construction of an 81MVA furnace that will produce Ferromanganese and Silicomanganese. Client: Samancor Manganese (Pty) Ltd.
- Basic Assessment Process for the Proposed Expansion and Upgrading of the Raw Materials Stockyard at Metalloys, Meyerton, Gauteng, South Africa (2011): Consultant. The project included the undertaking of an environmental authorisation process, by way of a basic assessment process, and the amendment application of an atmospheric emissions licence. The project involved the expansion and The project entailed undertaking an environmental authorisation, including an atmospheric emissions licence application process, in terms of the National Environmental Management Act (No. 107 of 1998) for the construction of an 81MVA furnace that will produce Ferromanganese and Silicomanganeseupgrading of the existing Raw Materials Stockyard at the Samancor Meyerton Works (Metalloys site). Client: Samancor Manganese (Pty) Ltd.
- Proposed new Sinter Plant: Mamatwan Mine, Hotazel, Northern Cape, South Africa (2010): Consultant. This project included an environmental impact assessment, environmental management programme report addendum and water use license application as well as the public participation process for a proposed sinter plant at the Mamatwan Mine in the Northern Cape. Client: Hotazel Manganese.

Environmental Management Plans

- Environmental Programme for the Proposed Knightsbridge Development,
 Bryanston, Gauteng, South Africa (2015): Project Manager. Compilation of a
 Green Star Rating Environmental Programme for the Proposed Knightsbridge
 Development. Client: Emira Property Fund
- J.P Morgan Chase & Company, 1 Fricker Road EMP ECO, Illovo, Gauteng, South Africa (2017): Project Manager. An EMP was compiled for the proposed refurbishment of the office building to attain a Green Star rating and is also responsible for conducting the first EMP compliance audit and training of the DEO to carry out subsequent audits. Client: J.P Morgan Chase & Company.
- Compilation of Environmental Management Plans West Plant Metalloys, Meyerton, Gauteng, South Africa (2011): Consultant. The project included the undertaking of an environmental risk assessment for all facilities and activities at West Plant. Environmental management plans were compiled from the results of the risk assessments. Client: Samancor Manganese (Pty) Ltd Metalloys.

Environmental Management Programme Reports

Separation of the Union Section Operational Environmental Management
Programme (and Addendums) into 'Carved Out' versus 'Retained' categories,
Swartklip, North West Province, South Africa (2017): Project Manager. The
Section is in possession of an approved Environmental Management
Programme as well as numerous addendums for mining, concentrating and
smelting, operations. The Section is in a restructuring process which involves
the selling and/or disenfranchising of certain of the operations. WSP/PB
restructured the Sections's consolidated Environmental Management
Programme to align with the future goals/strategies of the Mine. Client: Anglo
Platinum Limited - Rustenburg Platinum Mines Limited.



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- EMPR Updates Vaal River and West Wits Operations, Gauteng and North West, South Africa (2014-2016): Project Manager. The alignment of the West Wits (WW) and Vaal River (VR) Operations Environmental Management Programme Reports (EMPR) in accordance with the requirements of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA). Client: AngloGold Ashanti (Pty) Ltd.
- Environmental Management Programme Report Consolidation and Alignment of Union Mine: Rustenburg Platinum Mines, North-West, South Africa (2014): Project Manager. The EMPR consolidation and alignment process combined the original EMPR and authorised EMPR amendments into a complete and comprehensive document, which will become the overarching EMPR for the mine lease area and will be used as a concise management tool for all employees operating within mine lease area. Client: Anglo American Platinum Ltd.

Waste Management

- Applications for Samancor Manganese (Pty) Ltd Metalloys in terms of section 20 of the Environment Conservation Act 73 of 1989, Meyerton, Gauteng, South Africa (2014): Consultant. The project entailed applications, by way of risk assessments, in terms of section 20 of the Environmental Conservation Act, for the North Plant Sludge Dam, West Plant Sludge Dam, Bag Filter Material storage Facilities and Slag Stockpiles at Metalloys. Subsequent to the receipt of the waste management licences in terms of the National Environmental management: Waste Act (No. 59 of 2009) an amendment process was also undertaken. Client: Samancor Manganese (Pty) Ltd.
- Applications for Afrisam, Vanderbijlpark, in terms of section 20 of the Environment Conservation Act 73 of 1989. Vanderbijlpark, Gauteng, South Africa (2014): Consultant. The project entailed applications in terms of section 20 of the Environmental Conservation Act, for the slag stockpiles at Afrisam, Vanderbijlpark. Subsequent to the receipt of the waste management licences in terms of the National Environmental management: Waste Act (No. 59 of 2009) an amendment process was also undertaken. Client: AfriSam South Africa (Pty) Ltd.
- Waste Management Licence Application for The Existing And New Waste Management Facilities At Columbus Stainless Complex In Middleburg, Mpumalanga Province, South Africa (2014): Project Manager. Columbus Stainless (Pty) Ltd (Columbus) proposes to license existing waste management facilities and a new hazardous waste store within the footprint of the Columbus Complex. The Environmental Authorisation process by way of Scoping and Environmental Impact Reporting is required in order to license the said facilities. The facilities requiring licensing involve, but is not limited to: storage, recovery, bailing and treatment. WSP is responsible for obtaining a Waste Management License for the said activities via the Department of Environmental Affairs in line with relevant legislation. Client: Columbus Stainless (Pty) Ltd.
- Establishment of a Waste Monitoring Committee, Meyerton, Gauteng, South Africa (2011): Consultant. The project included the identification of potential members for the monitoring committee and the establishment of the committee. The establishment of the committee included the compilation of the constitution and committee meetings. Client: Samancor Manganese (Pty) Ltd.

Legal Compliance

 External Waste Management Licence Audit at Impala Platinum, Gauteng, South Africa (2016): Lead Auditor. External compliance audit of the WML for the Salvage Yard at Impala Springs. Client: Impala Platinum refiners.



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- External Environmental Compliance Audit Tarlton Intermixture Fractionator Plant, Gauteng, South Africa (2014 and 2016): Lead Auditor. An external environmental compliance audit of the record of decision for the Transnet Pipelines Tarlton Intermixture Fractionator Plant was undertaken in order to establish whether Transnet Pipelines are compliant with the conditions specified therein. The audit was undertaken by means of site observations, interviews and verification of available information. Client: Transnet Pipelines (GOC) Ltd.
- Used Oil Industry Audits, Countrywide, South Africa (2014-2016): Lead Auditor. Country-wide environmental compliance auditing of the South African recycled oil industry, comprising sixteen oil refinery operations, and twenty nine drum re-conditioning plants. The audits are primarily focussed on compliance to legislation and ensuring that each site follows international best practice. The audits include a review of the refineries ISO14000 auditor's findings, and tracking of compliance in regards to corrective actions. Client: ROSE Foundation.
- Waste Management Licence for the Remediation and Decommissioning of Tar Residue Pits, Rustenburg, North-West, South Africa (2015): Lead Auditor. A c lose-out audit was undertaken to compile compliance with the Waste Management Licence conditions during remediation and decommissioning. Client: Anglo Platinum Limited - Rustenburg Platinum Mines Limited.
- Water Use Licence Audit for the Landau Colliery, Mpumalanga, South Africa (2014): Auditor. The audit of the Water Use Licence was conducted in accordance with the relevant requirements of the National Water Act and conditions stipulated therein. The audit report included a summary of findings and compliance criteria, as well as recommendations for future corrective and preventative actions if required. Client: Anglo American Thermal Coal.
- Waste Management License Audit for the Slagment Operation, Vanderbijlpark, Gauteng, South Africa (2014): Lead Auditor. This project involved the annual environmental compliance auditing for AfriSam's Slagment Operation in Vanderbijlpark in Gauteng Province. The audit included AfriSam's compliance to the conditions of their waste management license. Client: AfriSam South Africa (Pty) Ltd.
- Legal Compliance Audit, Olifantsfontein, Province, South Africa (2012): Lead Auditor. The project included undertaking a legal compliance audit of the atmospheric emissions licence and waste management licence at A-Thermal Retort Technologies (Pty) Ltd. A-Thermal, in Olifantsfontein. Client: A-Thermal retort Technologies (Pty) Ltd.
- Metalloys Water Use Licence Audit, Meyerton, Gauteng, South Africa (2012):
 Auditor. The project entailed undertaking a compliance verification audit of
 the water use licence conditions of Metalloys. Recommendations were also
 provided in the audit report for non-compliance or potential concerns. Client:
 Samancor Manganese (Pty) Ltd.
- M14 Furnace Legal Compliance Audit, Meyerton, Gauteng, South Africa (2010 & 2012): Auditor. The project included undertaking a legal compliance audit at Samancor Manganese (Pty) ltd (Metalloys) to verify their compliance to the conditions of the record of decision issued for the M14 Furnace and the associated atmospheric emissions licence. Client: Samancor Manganese (Pty) Ltd.
- Annual Audit of the Record of Decision and Environmental Management Plan for the Fouriespruit Stream diversion and Old Slag Area, Meyerton, Gauteng, South Africa (2009 & 2010): Lead Auditor. A legal compliance audit on the record of decision and the associated environmental management plan was undertaken to establish whether the upgrading of the existing stream



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- diversion and the closure and rehabilitation of the old slag disposal area comply with the conditions contained therein. Client: Samancor Manganese (Pty) Ltd.
- Goedgevonden Mine Water Use Licence Audit, Ogies, Mpumalanga, South Africa (2009): Auditor. The project entailed undertaking a compliance verification audit of the water use licence conditions of Goedgevonden Mine. Recommendations were also provided in the audit report for non-compliance or potential concerns. Client: Xtrata Coal South Africa.

Site Assessments

- Screening Assessment of Proposed Waste Management Facility at Vodacom Campus, Midrand, Gauteng, South Africa (2017). Project Manager. Screening assessment to prepare a business case based on the facts so that the options for Vodacom's development vs. the potential requirement to identify an alternative site can be objectively evaluated by Vodacom. Client: Vodacom Group Limited.
- Site Assessment of a culvert on Sappi Forest Property, plantation Nooitgedacht

 Camelot South, Ngodwana, Mpumalanga, South Africa (2015): Project
 Manager. A site assessment of a recently completed culvert development on
 Sappi Forest property, plantation Nooitgedacht Camelot South, Mpumalanga.
 The purpose of the site assessment is to evaluate the works undertaken on site in respect of the National Environmental Management Act (107 of 1998) as amended and National Water Act (36 of 1998) and relevant regulations promulgated under these acts. Client: Sappi Southern Africa Limited
- Legal Assessment for the a Proposed Development of a barley Malting Process in Alrode, Germiston, Gauteng, South Africa (2013): Senior Consultant.
 Undertaking of legal assessment to identify and assess potential scenarios based on environmental assessment triggers for the proposed development at erven 283, 289 and 1607 in Alrode Extension 2. Client: South African Breweries (Pty) Ltd

Environmental Management Systems

- Voorspoed Internal ISO 14001 Audit, Klerksdorp, Free State, South Africa (2010): Auditor. An internal audit was undertaken of the Voorspoed Mine, ISO 14001 System. During the audit conformance to ISO 14001 and the effective implementation of such was assessed. Client: De Beers Group Services (Pty) Ltd.
- Venetia Internal ISO 14001 Audit, Musina, Limpopo, South Africa (2009):
 Auditor. An internal audit was undertaken of the Venetia Mine, ISO 14001
 System. During the audit conformance to ISO 14001 and the effective implementation of such was assessed. Client: De Beers Group Services (Pty) Ltd.

Environmental Due Diligence and Liability Assessments

- Environmental Due Diligence for Rolfes Chemicals, Germiston, Gauteng, South Africa (2014): Auditor. Environmental Due Diligence for the acquisition of a Processing Plant and associated facilities. Client: Rolfes Chemicals Alberton.
- Environmental and Social Due Diligence of 22 FMCG facilities, Country-wide, South Africa (2014): Lead Auditor. Transactional Environmental and Social Due Diligence for the acquisition of 22 FMCG facilities mainly in the food manufacturing and consumer formulated chemical sectors situated across South Africa for an international private equity and real estate investor. Client: Abraaj Investment Management Ltd..
- Environmental and Social Due Diligence of Medrock, Johannesburg, South Africa (2014): Lead Auditor. Transactional Environmental and Social Due



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Diligence for the acquisition of 3 medical supplies facilities situated in Johannesburg. Client: Confidential.

Environmental Authorisation Amendments

 Environmental Authorisation Amendment Process for the Ventilation Shaft at Siphumelele 1 Mine, Rustenburg, North-West, South Africa (2016). Part 2 Amendment Process for the proposed establishment of the Ventilation Shaft at Siphumelele 1 Mine. Client: Rustenburg Platinum Mines Limited