

JON McSTAY, BSc (Hons) PhD**Director (Engineering and Environmental Geologist), Environment and Energy****YEARS WITH THE FIRM**

13

YEARS TOTAL

25

AREAS OF PRACTICE*Soil and groundwater contamination**Remediation of contaminated land**Hazardous waste and landfills**Environmental transaction advisor**Geotechnical Investigations**Geophysical Investigations**Engineering Geology and Ground Engineering**Marine Geotechnical and Reclamation**Expert Witness***CAREER SUMMARY**

An engineering and environmental geologist with twenty five years of consulting experience, Dr Jon McStay has considerable experience in site characterisation, risk assessment and remediation of contaminated land. He has experience of the closure, rehabilitation and monitoring of solid waste landfills and residue deposits and the classification of hazardous wastes. He has acted as an environmental transaction advisor in due diligence processes.

Dr McStay was Lecturer in Engineering Geology at the University of Cape Town from 1989 to 1995.

Steering Committee: Network for Industrially Contaminated Land in Africa (NICOLA) 2014-2016.

EDUCATION

Doctor of Philosophy, Geology and Mineralogy, University of Cape Town, South Africa 1992

Bachelor of Science (Honours), Geological Services, University of Birmingham, United Kingdom 1982

PROFESSIONAL EXPERIENCE**LANDFILLS AND WASTE MANAGEMENT**

- Kolongo Landfill. Rehabilitation and improvements to solid waste landfill, Bangui, Central African Republic (2017). Technical leader, responsible for risk assessment for site operations. Client United Nations Operations.
- Rehabilitation of Foundry Sand residue deposits, Atlantis Foundries, Western Cape, South Africa (2015-2017). Project leader, responsible for remediation plan and Site Risk Assessment.
- Mortimer slag residue deposit, Union Mine, Limpopo, South Africa (2015) Project Director for the risk assessment and rehabilitation plan for slag residue deposit. Client Anglo Platinum.
- Landfill risk assessment for Due Diligence on industrial land near Springs, South Africa. (2015). Client Confidential.
- Expert Witness (2014-2015), Dispute over hazardous waste classification and waste delisting. Client Confidential.
- Swartklip Landfill Closure, Cape Town, South Africa (2014). Groundwater and landfill gas risk assessment and monitoring plan.
- Hazardous Waste Classification for Atlantis Foundries (2014).
- Environmental Due Diligence for Solid Waste Management Company including numerous operational landfills across South Africa for major shareholder. Client Confidential.
- TC Newman Hospital, Paarl, Western Cape, (2012-2013) Remediation of Health Care Risk Waste dumps.
- De Beers (2011) Waste Classification.
- Metalloids, Risk Assessment and Waste Classification, Meyerton, Gauteng, South Africa (2011). Project leader: Risk Assessment and Waste Classification of Dormant Waste facilities. Client: BHP Billiton.

- Marine Oil Refiners Remediation Plan, Cape Town (2009). Independent Technical Reviewer of Remediation Planning for mixed-use re-development of fish oil refinery site contaminated with nickel and the risk associated with two landfill sites. Client: Department of Environmental Affairs and Development Planning.
- Best Practicable Environmental Option for Management of Priority Hazardous Waste Streams in the Western Cape (2006). Author of quick reference guides. Client Department of Environmental Affairs and Planning.
- Titanium Smelter, Industrial Waste Toxicology Study, Saldanha, Western Cape, South Africa (2004). Project Leader of industrial waste toxicology study for titanium smelter. Water Licensing for residue dams and recycled process water. Client: Namakwa Sands.
- Mare Chicose Landfill, Mauritius (2002-2003). Specialist Consultant for the assessment of environmental risks associated with operational landfill, including leachate, landfill gas, odours, surface water and groundwater quality.
- Vissershoeck Waste Disposal Site, Cape Town, South Africa (2000-2003). Project leader of comprehensive groundwater monitoring programme. Client: City of Cape Town.
- Waste Disposal Site Closure, Paarl, South Africa (1999-2002). Project leader of groundwater monitoring and pollution plume mapping of a closed landfill site.

CONTAMINATED LAND

- Dom Pedro End to End Remediation Strategy, Port Elizabeth, South Africa, (2015-2016). Project Director of Remediation Contract for the decommissioning and environmental clean-up of fuel storage facility in Port Elizabeth Harbour. Interim remediation works, development of remediation strategy and expert witness in arbitration. Client: Shell.
- Gas plant nitrate study, Temane, Mozambique, (2015) Project leader for forensic stable isotope investigation of nitrate contamination of groundwater, Client : Sasol
- BTD Wetton Remediation (2014-2016) Project leader for decommissioning and remediation of timber treatment facility, Wetton, Cape Town. Client: Massmart.
- Sigouri Gold Mine, Environmental Baseline, Guinea (2011-2012). Project Manager of Environmental Baseline of mine footprint, including air quality and mine dust, tailings storage facility, cyanide heap leach pad, soil, surface water and groundwater assessment, pit wall stability, biodiversity baseline and ecosystem services and technical inputs for mine closure planning. Client: Anglo Gold Ashanti.
- Property Valuers Guide for Contaminated Land, South Africa (2011). Author of introductory guidance for the valuation of contaminated land for the Institute of Valuers. Client: South African Banking Association.
- Cape Town International Airport, Cape Town, South Africa (2010). Project Manager for forensic investigation of jet fuel contamination using compound specific stable isotopes and advanced chemical diagnostics. Client ACSA.
- Framework for the Management of Contaminated Land, South Africa. (2009-2010). Project Manager for the development of national norms and standards for remediation of contaminated land, responsible for compiling technical reviews of international policy and practice and developing a unique South African approach consistent with existing environmental legislation. Client: Department of Environmental Affairs.



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- Green Point Urban Park, Cape Town (2009-2010). Project Leader for the investigation, risk assessment and remediation planning for a large area of urban reclaimed land as part of the re-development of the 2010 FIFA World Cup Stadium Precinct. Client: City of Cape Town.
- Decommissioning and Remediation of Denel Munitions Factory, Philippi., Western Cape, South Africa (2008). Project Director for the remediation and closure plans for a munitions factory. Client: Denel Land Systems.
- OR Tambo International Airport, Stormwater Pollution Prevention Plan, Johannesburg, South Africa (2007-2008). Project Leader for Water License and authorisation process for the upgrade of stormwater detention facilities to mitigate against pollution from the accidental release of jet fuel as a response to a major contamination incident. Client: ACSA.
- Remediation Strategy, South Africa (2003-2005). Technical Leader of the South African Remediation Consortium to formulate the standards and methodologies for the remediation of contaminated land and protection of the water resource in South Africa. Client: Department of Water Affairs and Forestry.
- Expert Witness in Arbitration, South Africa (2003). Professional opinion on environmental compliance and remedial costs associated with the clean-up of hydrocarbon contamination. Client: Caltex Oil SA (Pty)
- Water Quality Investigation, Grand Baie, Mauritius (2002). Project Leader of multi-disciplinary team of international specialists in the investigation of water quality concerns of lagoon and wetland systems. Client: Department of Environment.
- Kelvin Power Station Phase I and Phase II Environmental Investigations, Kempton Park, Gauteng. South Africa (2000-2003). Project leader of soil and groundwater investigation and assessment of environmental liabilities. Client: Fieldstone Southern Africa (Pty) Ltd, and Greater Johannesburg Metropolitan Council
- Due Diligence Process, Somerset West and Sasolburg, South Africa (2000-2002). Project leader of Phase I and Phase II contaminated land investigations of vinyl coatings plants. Client: Renolit GmbH, Vynide (Pty) Ltd.
- Thesen Islands, Ground Contamination Investigation & Remediation, Knysna, South Africa (1999-2002). Project leader and consultant to Environmental Management Committee. Ground contamination investigation and remediation of timber yards contaminated with creosote and CCA. SAICE award for Environmental Engineering. Client: Thesen & Co.
- Remediation of DTF Site, Rooiels, Western Cape, South Africa (1998). Project Leader: Review of soil contamination, risk assessment and remediation proposals for ammunition testing site. Negotiation and implementation of comprehensive monitoring protocol. Client: Somchem.
- Maputo Iron and Steel Project EIA, Mozambique(1997). Project Leader: Phase I Site Assessment of industrial sites in Maputo including fertiliser factory, cement works and coal terminal. Client: IDC.
- Chemical storage terminals, Durban, South Africa (1996). Project leader: Phase 2 environmental investigation involving eight monitoring wells and full sampling and testing of over 200 soil and groundwater samples. Client: PD Terminals.