

CURRICULUM VITAE

Name: **MARIA CATHARINA EKSTEEN**
Date of birth: March 21, 1968
Years of experience: 28
Nationality: South African
Profession: Environmental scientist

MEMBERSHIPS IN PROFESSIONAL SOCIETY:

Registered as a Professional Environmental Scientist (Pr.Sci.Nat.) at the South African Council for Natural Scientific Professions – Registration No. 400090/02

Member of the Land Rehabilitation Society of Southern Africa (LaRRSA): Membership ID 30835

KEY EXPERIENCE:

Water Quality Management – Water use licencing. Ground and surface water impact assessments. Water quality objectives. Water quality management strategies. Management options. Mitigation measures. Waste discharge charges.

Mine Water Management – Best practice guidelines. Water use and waste management assessment. Environmental management programmes (EMPs). Impact assessments. Management options. Mine rehabilitation. Closure risk assessments. Mine closure costing.

Environmental – Environmental legal compliance. Ground and surface water pollution control. Environmental impact, scoping and risk assessments. Policy development. ISO14001 implementation.

EDUCATION:

1992 MSc Exploration Geophysics, University of Pretoria, RSA.

CAREER:

Jacana Environmentals cc (January 2006 -) – Managing Member.

Pulles Howard & de Lange Inc. (January 2004 - December 2005) – Associate Director, managing the Mine Water Division and associated projects.

Ingwe Collieries Limited (August 2001 - December 2003) – Environmental Manager at Khutala and Douglas Collieries situated in Mpumalanga Province.

Department of Water Affairs and Forestry (March 1993 - July 2001) – Water quality manager in the mining division.

Genmin (August 1990 - March 1993) – Exploration geophysicist.

TECHNICAL COURSES

- Water Quality Management Short Courses – UP (1994 & 1995)
- Integrated Environmental Management (IEM): Theory and Practice – UCT (1995)
- Integrated Environmental and Water Management Course (IEWM) – Denmark (1997)
- Environmental Law Course – UP for CHE (1998)
- Managing Conflict: Public Involvement in EIA – UP for CHE (1999)
- Study Tour to France on Catchment Management – France (1999)

- ISO training: Integrated SHEQ Management Systems – Wynleigh International (2001)
- Introduction to Life Cycle Assessment – Technicon of Pretoria (2002)
- Facilitator Leadership Skills / Accelerating Change & Transitions – Destra Consulting Group (2003)

PUBLICATIONS:

Van Dalsen, M.C. and Hinds, R.C., 1991. Evaluation of dip move-out algorithms on South African seismic data. Presented at the SAGA Technical Conference at the University of the Witwatersrand.

Van Dalsen, M.C., 1992. A comparison of dip move-out algorithms - a South African case history. MSc Thesis

Eksteen, M.C., Rothmann, J.F., Tuffin, A. and Totman, D., 1997. Wasbank River Water Quality Management Plan - Community Consultation and Facilitation. Presented at the Water Africa '97 Conference, Harare.

Eksteen, M.C., 1997. Water Quality Management Plan - Nkongolwana River Catchment. Presented at the WISA Mine Water Division one-day seminar on Catchment Management Plans, Randfontein.

Glendinning, J., Waygood, C. and Eksteen, M., 1998. Assessment of contamination resulting from defunct coal mines in the Ermelo area. Poster presentation at the Water Institute of Southern Africa Biennial Conference, Cape Town.

Eksteen, M.C. and Schwab, R., 2005. DWAF best practice guideline on mine closure – Practical implications and guidance, WISA Mine Water Division Conference, Randfontein, April 2005.

Heath, R. and Eksteen, M.C., 2005. Regulating the mining industry, addressing the legacy of abandoned mines and prevent new environmental problems

Schwab, R. and Eksteen, M.C., 2005. Development of best practice guidelines for water quality management in the SA mining industry - current status, WISA Mine Water Division Conference, Randfontein, October 2005.

SELECTED KEY EXPERIENCE:

Appointment Date	Client	Project	Details and Level of Responsibility	Status
2019	Glencore	Goedgevonden Colliery EMPr amendment	Full responsibility for EMPr amendment and process	In progress
2019	Bosveld Mines	Klipwal Gold Mine	Environmental Legal Compliance audit, Financial Provision determination	Completed
2019	Consol	Rietkol Re-application project	Project manager for compilation of EIAR/EMPr and IWULA Compilation of GN1147 Rehabilitation & Closure Plan	In progress
2019	South32	VDDC Lifex Project	Environmental Licensing Lead: May-Dec'19	In progress
2019	Catnis	Uitkoms Silica Quartz Mining	Environmental Legal Compliance audit, Financial Provision determination	Completed
2019	South32	VDDC dewatering project	ECO for construction phase	In progress
2019	Subiflex	The Duel Coal Project	EAP for re-application for Environmental Authorisation	In progress
2018	MIT Logistics Hub	Mactransco Siding IWUL	External Water Use Licence Compliance Audit, annual review of Remediation Plan	Completed
2018	Nozala Coal	Gruisfontein Project, Lephalale	Project manager for compilation of EIR/EMPr and IWULA as part of new MRA	In progress
2018	Aqua Optima	Brits Tilapia Aquaculture Hub	EIA application for listed activities and public participation	Completed EA approved
2017	MAC Group	Mactransco Siding IWUL	External Water Use Licence Compliance Audit, compilation of Remediation Plan	Completed
2017	Bushbuckridge LM	Belfast Community Water Supply Project	EIA application for number of listed activities, specialist studies and public participation	Completed EA approved
2017	MC Mining	Makhado EMPr amendment	Full responsibility for EMPr amendment and process	Completed, EA amendment approved
2016	South32	KLX Feasibility Study	Environmental Contract for 36 months, overall responsibility for all environmental aspects during Feasibility Phase and for environmental authorisations	Completed
2016	Anglo Platinum	Amandelbult Schilpadsnest Opencast	Strategic advisor to Aurecon (EAP), lead on the compilation of IWULA	Completed
2015	Consol	Rietkol Silicon Quarry	Project manager for compilation of EIR/EMPr and IWULA as part of new MRA	EA application lapsed, process halted by client
2015	South32	MMS Rising Main	ECO for construction phase	Completed

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2015	Coal of Africa	Vele River Diversion project	EA application and IWULA for additional listed activities, consolidation of EMPr's	Completed, EA and IWUL granted
2015	Subiflex	The Duel Coal Project	Project manager for compilation of EIR/EMPr as part of new MRA	Process completed
2014	Glencore	Overvaal IWULA	Compilation of IWULA for Overvaal Mining Project	Process completed
2014	Silicon Smelters	Silicon DC Furnace	EA and AEL application	Completed, EA approved and AEL granted
2014	Glencore	Vlakfontein Project	Compilation of IWULA / NEMA application	Process halted by client
2014	BECSA (South32)	Leandra Environmental Authorisation	Project manager for compilation of EIR/EMPr and IWULA as part of new MRA	Process halted by client
2013	XCSA	Goedgevonden Expansion Project	Project manager for NEMA EA application.	Completed, EA approved
2013	Ibutho Coal	Fuleni Anthracite Mine	Project manager for EIR / EMPr / IWULA / specialists	Process halted by client
2012	XCSA	Goedgevonden EMP amendment	Overall responsibility	Completed, EMPr approved
2012	Coal of Africa	Greater Soutpansberg Project	Project manager for EIR / EMPr / specialists	EIA completed, in decision-making phase
2012	Optimum Coal	TNC EMP amendment	Public participation	Completed
2012	BECSA	Middelburg Water Reclamation Project	ECO for construction phase	Completed
2012	Tshipise Energy	EMP performance assessment	Audit and review of EMP compliance	Completed
2012	Thandululo Coal	EMP performance assessment	Audit and review of EMP compliance	Completed
2012	Cousins Coal	Vogelspruit prospecting EMP amendment	Report compilation and coordination	Completed, PR approved
2012	Metmar	Sefateng Chrome Mine	Project manager for EIR / EMPr / specialists	Completed, EMPr approved and mining licence granted
2012	Coal of Africa	Greater Soutpansberg EMP amendments (6)	Report compilation and coordination for PR amendments	Completed
2011	MAC Group	Mactransco Siding IWULA	Compilation of IWUL application	Completed, IWUL granted
2011	Coal of Africa	Morgenster Prospecting EMP	Report compilation and coordination	Completed
2011	BECSA	BECSA Coal Processing Dust Fall-out Plan	Compilation of the dust fall out plan and gap analysis	Completed
2011	Ferrox Holdings	EMP for Tivani Project	Compilation of EIA / EMPr / specialists	Completed, EMPr approved and mining licence granted

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2011	Silicon Smelters	EMP performance assessment	Audit and review of EMP compliance	Completed
2011	Tshipise Energy	EMP for coal bed methane	Report compilation and coordination	Completed
2010	Optimum Coal	Overvaal Project EMP	Project manager of 7 sub-consultants, with overall responsibility for delivery	Completed, EA and MR granted
2010	Coal of Africa	EMP / IWULA for Makhado Colliery Project	Project manager of 7 sub-consultants, with overall responsibility for delivery	Completed, EA and MR granted, IWUL approved
2010	Silicon Smelters	Integrated Water & Waste Management Plan	Overall responsibility	Completed
2009	BECSA	EMP for Weltevreden Colliery	Project manager of 6 sub-consultants, with overall responsibility for delivery	Process halted by client
2009	Silicon Smelters	EMP for Mahale Quartzite Mine	Overall responsibility	Completed, EMP approved
2008	Coal of Africa	EMP / IWULA for Vele Colliery Project	Project manager of 7 sub-consultants, with overall responsibility for delivery	Completed, EA and MR granted, IWUL approved
2008	Optimum Coal	EMP for Vlakfontein Coal Mine	Project manager of 8 sub-consultants, with overall responsibility for delivery	Completed, decision pending
2007	Siyanda Coal	Koorfontein Mine EMP performance assessment	Audit and review of EMP compliance in conjunction with African EPA	Completed
2007	XCSA	Rehabilitation plan for Impunzi #5 seam opencast	Design and rehabilitation plan	Completed
2007	VTI Construction	EIA for Craigieburn/Rooiboklaagte secondary bulk water pipeline	Overall responsibility	Completed, EA approved
2007	EVN Africa	EIA for Olifantspoort bulk water supply scheme	Overall responsibility	Completed, EA approved
2007	Pieterse Du Toit	EIA for new township development in Polokwane X79	Overall responsibility	Completed, EA approved
2007	EVN Africa	EIA for Rolle-Oakley road upgrading project in Bushbuckridge	Overall responsibility	Completed, EA approved
2007	BHP Billiton	Environmental Manager: DMO Execution	Overall responsibility for all environmental aspects during Execution	Completed.
2007	XCSA	Zaaiwater East EMP amendment	Overall responsibility	Completed, EMP approved
2007	MRES	EIA for bulk facilities	Overall responsibility	Completed, EA approved
2007	Molemo Consulting	EIA for Kumana-Ludlow pipeline at Bushbuckridge	Overall responsibility	Completed, EA approved

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2007	BHP Billiton	Middelburg Water Reclamation Scheme	Specialist input into feasibility study	Completed
2006	XCSA	Atcom rehabilitation plan	Design and budget for rehabilitation plan, management of rehabilitation process	Completed
2006	XCSA	EIA for new TCP raillink	Managing EIA process, including public participation, negotiations with authorities and sub-consultants	Completed, EA approved
2006	XCSA	EIA for potable & raw water pipelines to new Goedgevonden Colliery	Managing EIA process, including public participation, negotiations with authorities and sub-consultants	Completed, EA approved
2006	Silicon Smelters	EIA for Spoonet railway siding	Managing EIA process, including public participation and negotiations with authorities	Completed, EA approved
2006	Silicon Smelters	EIA for the upgrading of raw materials stockpiles	Managing EIA process, including public participation and negotiations with authorities	Completed, EA approved
2006	EVN Africa	SDA3 sewage pipeline and pumpstation	Managing EIA process, including application for exemptions, public participation and negotiations with authorities	Completed, EA approved
2006	XCSA	Long-term water management strategy	Legal assessment & strategic development	Completed
2006	Vametco	IWWMP for Vametco Minerals Corporation	Overall responsibility	Completed
2006	Ingwe	Douglas-Middelburg Optimisation Project	Overall responsibility for environmental aspects for Feasibility Study	Completed
2005	De Beers	IWWMP for Cullinan Diamond Mine	Overall responsibility	Completed
2005	EVN Africa	EIA Scoping report for Bushbuckridge bulk water supply pipelines	EIA process for 4 bulk water supply pipeline in Bushbuckridge, including application for exemptions, public participation and negotiations with authorities	Completed, EA approved
2005	XCSA	Goedgevonden Colliery Project EMP	Project manager of 7 sub-consultants, with overall responsibility for delivery	Completed, EMP approved
2004	Ingwe	Douglas EMP amendment	Project manager of 8 sub-consultants, with overall responsibility for delivery	Completed, EMP approved
2004	Ingwe	Boschmanskrans EMP amendment	Project manager of 5 sub-consultants, with overall responsibility for delivery	Completed, EMP approved
2004	DWAF	Development of Best Practice guidelines for the mining industry	Project manager of the project, responsible for final delivery	Completed
2004	De Beers	Closure cost assessment for Cullinan Mine	Technical inputs, risk assessment	Completed
2004	Ingwe	Closure cost assessment for Douglas Colliery	Overall responsibility	Completed

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2004	De Beers	Water use and waste management assessments for Cullinan and Kimberley Diamond Mines	Overall responsibility	Completed
2004	Xstrata	Rehabilitation plan for Atcom	Project leader, final rehabilitation strategy	Completed
2002	Ingwe	Environmental Manager: Douglas Colliery	Overall responsibility and management of the environmental division, rehabilitation projects and environmental budget	N/A
2002	Ingwe	Rehabilitation plan for Vlaklaagte Open Pit	Overall responsible for project - Development of rehabilitation plan and final designs, tender procedure and appointment of contractor, management and monitoring of contractor, standards and project schedule and finances	N/A
1999	DWAF	Development of a Waste Discharge Charge System for South Africa	DWAF project leader – Managing appointed sub-consultants, project management (financial, technical & public consultation), quality control, technical input	N/A
1997	DWAF	Development of GN704 (mining regulations)	DWAF project coordinator – Development of regulations, internal & external consultation	N/A
1995-	DWAF	Development and implementation of water quality management strategies for catchments where mining activities have an adverse effect on water quality, e.g. Wasbank, Mkuze, Nkongolwana, Enyati, Mooi River, Grootdraai Dam catchments	DWAF project manager – Managing of sub-consultants, technical input, public liaison	N/A