CURRICULUM VITAE

Name of firm:	MDT Environmental (Pty) Ltd
Name of Staff:	CALMEYER T
Profession:	Environmental Assessment Practitioner
Date of Birth:	18 August 1967
Nationality:	South African

Professional Registration Certified with the ICB as an Environmental Assessment Practitioner (No 0067/05)

Membership in Professional Societies:

Member of the South African Environmental Law Association (ELA) Member of the International Association of Impact Assessment (IAIA), Past Chairperson (2014 – 2016) and current member of the IAIA Training and Professional Development Committee, Committee member of the Gauteng Department of Agriculture and Rural Development's Environmental Assessment Practitioner's Forum, Served on the Environmental Impact and Management Strategy: Conflict Resolution Committee: Theme 2 (26 April 2013), Past President (2012/2013) and current member of the South Africa affiliate of the International Association of Impact Assessment (IAIAsa), and Water Research Commission Proposal and Project Reports Reviewer.

KEY QUALIFICATIONS:

Ms Teresa (Terry) Calmeyer is a Director of MDT Environmental (Pty) Ltd and is a certified Environmental Assessment Practitioner. She has an MA in Environment and Society and specialises in Environmental Impact Assessments (EIA), the environmental components of project implementation and compliance monitoring.

Terry has been involved in a variety of different types of EIAs including for large dams, water supply projects, substations and power lines, renewable energy project, urban precinct developments, roads, railways, waste water treatment works and airports, in South Africa, Uganda, Lesotho, Botswana, Namibia and Mozambigue. She has been the Project Leader and/or Project Manager responsible for implementing complex Environmental and Social Impact Assessments, has been involved in water resource management and stakeholder engagement programmes on a number of projects, and has provided strategic environmental input on transportation planning projects. Terry has also been responsible for compiling and updating Environmental Management Programmes, the management of Environmental Control Officers (ECOs) and Environmental Officers (EOs) and providing environmental project implementation advice.

Terry has co-ordinated, lectured for and moderated examinations for several tertiary education courses and presented at external workshops and conferences.

EDUCATION:

MA (Environment and Society) University of Pretoria (with distinction) 2003 BA Hons (Geography with specialisation in Environmental Analysis and Management) University of Pretoria (with distinction) 1999

Diploma in Bookkeeping, Damelin 1995

BA, Majoring in Development Administration and Geography, UNISA 1993

ADDITIONAL COURSES

- South African Green Industries Council (SAGIC) Invasive Species Training Module 1: Identification and Legislation and Module 2: Permits, Directives and Control Plans 28 to 29 November 2017
- CPR course with Resuscitation Council of South Africa (Cert No. 8034) November 2017
- Workshop on Environmental Control Officers (presented by IAIAsa) 2017
- Workshop on Water Use Licencing (presented by the Department of Water and Sanitation)
- Short Term Training Solar and Wind Energy Course. The South African Germany Energy Programme (SAGEN), German International Cooperation (GIZ) 7 – 18 October 2013, Kassel, Germany
- Carbon Emission Reduction Expert Course (ISO 14064-2) (Canadian Standards Association Education and Training) – 10- 13 March 2013, Johannesburg 2013
- S21(c) and (i) Water Uses Comprehensive Training (DWA Directorate: Water Abstraction and Instream Use – 27 to 28 November 2012)
- Sustainability Assessment, IAIAsa 2011 (A Morrison-Saunders and J Pope) 2011
- Cumulative Impacts Assessment, Ghana IAIA09 (B Ross & L Canter) 2009
- Introduction to Geosynthetics 2009
 Advanced Microsoft Word 2007 2009
 Gauteng Tunnelling Challenges 2007
 Environmental Risk and Impact Assessment. Rhodes University 2006
- Environmental Risk and Impact Assessment, Rhodes University
 Project Management (Compu-Tutor)

EXPERIENCE RECORD:

MDT Environmental (Pty) Ltd (previously called ILISO Consulting Environmental Management (Pty) Ltd)

October 2012 to present - Director

- Environmental Impact Assessment for the *Somlolo 200 000 tons a year galvanizing plant* in the Coega Industrial Development Zone in Port Elizabeth (August 2017 ongoing).
- Compilation of **Integrated Environmental Management Plan** for the Ngwathe Local Municipality (October 2016 to April 2017).
- Independent review of Eskom Isundu Substation Environmental Impact Assessment Report. (September 2016).
- Environmental Screening and assessments for the proposed **Qunu City Development** in the Eastern Cape (September 2016 to June 2017).
- Basic Assessment and Registration of Water Use for the **Bhisho Office Precinct Development** (July 2016 to June 2017).

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- Project Leader for the EIA for **Eskom's Northern KwaZulu-Natal Strengthening project**. One new substation, approximately 280 km of 400 kV Transmission power lines and 65 km of 132 kV Distribution power lines. (May 2016 ongoing).
- Project Leader for the application for environmental authorisation for a **water supply pipeline** to the Kriel town (2015 to 2016).
- Project Leader for the application for environmental authorisation for **borrow areas** from which material will be sourced for the construction of various water supply pipelines in the Limpopo Province (2016 to 2017) (Incomplete due to non-payment).
- Environmental Impact Assessment and Management Programmes for the installation of solar photovoltaic power plants at Eskom's Arnot and Duvah Power Stations, including a Basic Assessment for a water supply pipeline (October 2014 to June 2016).
- Project Leader for the Environmental Impact Assessment, Water Use Licence Application and Relocation Policy Framework for the **Mzimvubu Water Project**. This R12.5 billion Strategic Integrated project (SIP3) conjunctive scheme consists of two new large dams, a potable water supply scheme, irrigated agriculture, hydroelectric power generation and associated infrastructure in the Eastern Cape (February 2013 to December 2015).
- Project Leader for the United Stated Agency for International Development (USAID). Tuberculosis Park home facilities delivered to 11 clinics within South Africa. (July 2014 – October 2014.)
- Independent Environmental Control officer (ECO) for the Department of Water and Sanitation's raising of the **HazeImere Dam**. (January 2013 ongoing).
- Environmental specialist on the Panel of Experts for the Mooi-Mgeni Transfer Scheme Phase 2. The project included the construction of the Spring Grove Dam, pumping station water transfer pipeline and outfall works in the Mpofana River, in the KzwZulu-Natal midlands. This tasks included drafting environmental specifications for the Contractor's tender documents, acquiring authorisation for housing for affected parties and for material sources, and representing the Engineer on the Environmental Panel of Experts that monitored project implementation and provided specialist environmental management advice.
- Presentation at the Parliamentary Portfolio Committee on Water and the Environment's Public Hearing on the efficacy of South Africa's EIA Regime. July 2013.
- Public Participation Task Leader for Eskom's Applications for Postponement of, and Exemption from, the Minimum Emissions Standards for 21 of Eskom's Coal and Liquid Fuel-Fired Power Stations.
- Environmental Impact Assessment and Environmental Management Plan for the de Beers Pass Route section of the N3. Assistant Environmental Assessment Practitioner. (February 2013 to May 2017).

- Project Leader for the independent Environmental Control Officer for the construction of the **Eskom's Thuso Substation** and turn-in in Centurion, Gauteng (2012 to December 2015).
- Project co-ordinator and Environmental Assessment Practitioner for the Environmental Impact Assessment for the Kobong pumped storage scheme off the Katse Dam and 65 km transmission power line in Lesotho.
- Sustainable Transport, Environmental Screening and Stakeholder Consultation for the **Gauteng Integrated Transportation Masterplan** 2035.
- Environmental Assessment Practitioner for **City of Tshwane's Bus Rapid Transit Line 2** from Pretoria Central to Menlyn via Hatfield. Included environmental screening for authorisations required, co-ordination of heritage issues and a public participation process. (April 2012 to December 2016).
- Environmental Assessment Practitioner for the development of a **PRASA mixed use precint at Naledi Station in Soweto**, including a Basic Environmental Impact Assessment. (April 2012 to 2014).

ILISO Consulting (Pty) Ltd August 2005 to September 2012 - Technical Director

- Environmental input to the **Provincial Land Transport Framework** for the Provincial Government Western Cape: Department of Transport and Public Works (2011).
- Internal Audit of the Disaster Management Responsibilities of the Department of Water Affairs (2011).
- Project Manager for the provision of three **Environmental Officers** to monitor compliance with the Environmental Authorisation and Environmental Management Plans for Eskom 765kV Transmission Power Lines for the Medupi Integration Project (2011 to June 2015).
- Environmental Impact Assessment and Environmental Management Programme for the upgrading and extension of the **Baviaanspoort Wastewater Treatment Works** for the City of Tshwane (2011).
- Internal Review of the Environmental Impact Assessment and Environmental Management Programme for the proposed 80 000 Tonnes per year Galvanizing plant in the Coega Industrial Development Zone (IDZ) (2012).
- Environmental Screening and project management support for the Olifants River Catchment Water Supply Reconciliation Strategy.
- Environmental Screening and Stakeholder Consultation of the Water Supply Reconciliation Strategy for the Greater Bloemfontein Area. (2009 2010).
- Rectification for the construction of a water supply pipeline from Witbank to Oogies in Mpumalanga. (2010).

Experience record:

- Amendment Application for the TCTA's Komati Water Supply Augmentation Project (KWSAP). (2010).
- Environmental scientist responsible for the finalisation of the Environmental Management Plans, Baseline Studies and assistance with environmental compliance aspects of the implementation of the Mooi Mgeni Transfer Scheme Phase 2. (February 2009 to June 2016).
- Task leader for the **Marketing Strategy** for the Department of Water Affairs and Forestry's **National Ground Water Strategy**. (2008 to 2009).
- Responsible for the Environmental Management and Public Participation components of the ORASECOM Capacity Building Project. (2008 – 2009).
- Department of Water Affairs and Forestry Dam Safety Rehabilitation Project Support to DWAF responsible for review and management of environmental issues related to the implementation of construction activities for the rehabilitation of dams in order to comply with dam safety requirements.
- Department of Water Affairs and Forestry Groot Letaba River Water Resources Development Project Environmental Impact Assessment – Project Manager for an EIA and EMPs for a proposed new large dam and bulk water supply infrastructure (pipelines and reservoirs). (January 2007 to December 2009).
- Public Participation task Leader for the **Eskom Mokopane Integration** project. (March 2008 ongoing, R800 000)
- Responsible for environmental screening, stakeholder consultation and project-coordination on the ORASECOM feasibility study of the potential for sustainable water resources development in the **Molopo-Nossob** watercourse (November 2007 – November 2008)
- Human Geographer on the Environmental Impact Assessment Study for a Pre-Feasibility / Feasibility on Utilization of the Water Resources of the **Chobe / Zambezi River**.
- Environmental Impact Assessment, Environmental Management Plan and Willingness and Affordability to pay lectures in the Course for the Water Sector in the Maldives (2 – 4 September 2007).
- Environmental Management Plan and monitoring implementation for the temporary emergency works on the **Usutu River** for the Department of Water Affairs and Forestry. (2007, fees R300 000).
- Gautrain Rapid Rail Link amendment applications for the Technopark, Zonkiziwe, TBM section, Remainder of Tunnel, Technopark 2 Viaduct 6 (Salvokop area) sections of the route. (Client Bombela. June present, fees +- R2 000 000-00).
- City of Tshwane Metropolitan Municipality Environmental Impact Assessment and EMP for the **Upgrading of the Zeekoegat Waste Water Treatment Works.**

Experience record:

- Department of Water Affairs and Forestry Olifants River Water Resources development Project Phase 2A – Support to DWAF responsible for management of environmental and social aspects related to the implementation of construction activities for the de Hoop Dam and related road realignments and flow gauging weirs.
- Project co-ordinator for the Department of Water Affairs and Forestry's project to determine the Future Roles and Functions for the National Water Resources Information Management Service. (June 2006 to June 1007).
- Project Manager for the BKS (Pty) Ltd Eskom Environmental Impact Assessment for the proposed 150km Umfolozi-Empangeni 765kV Transmission line and substation.
- Development of a draft Water Allocation Plan to Guide Compulsory Licensing in the Mhlathuze Catchment – Project co-ordination and public participation. (South Africa Department of Water Affairs and Forestry/United Kingdom Department of International development; (September 2006 – September 2007).
- Environmental Impact Assessment for the proposed Eskom **765kV Majuba-Umfolozi Transmission Power Line** – Project Manager. (July 2005 – October 2005).
- Gautrain Variant Alignment Authorisation Co-ordination of specialist input. (August 2005 August 2006).
- Gautrain Initial Works EMP Stakeholder Consultation Focus Group Meetings and Issues and Responses Report for the consultation of the Initial Works EMP for the Gautrain. (November December 2005).
- Environmental Impact assessment for the Upgrading of the Khutsong Wastewater Treatment Works.
- Environmental Impact Assessment for the Kokosi Wastewater Treatment Works.
- External Examiner for the Strategic Environmental Management Course (MBET834) in November 2005 and November 2006 for the University of Limpopo.
- Exam Moderator for the Environmental Management Third Year Course (EMG301T) at the Tshwane University of Technology in June 2006 2010.
- Guest lecturer on Strategic Environmental Assessment at Tshwane University of Technology in March 2007, and at Pretoria University from 2005 2007.
- External examiner for the Strategic Environmental Management and Environmental Paradigms courses at the University of Pretoria. (2006 2009).
- Co-coordinator for the Strategic Environmental management Module of the Masters Programme at the Centre for Environmental Sciences at the University of Pretoria. (June 2009).
- Relief lecturer at the Tshwane University of Technology responsible for the Environmental Management I and Environmental Management II courses in 2011.

BKS (Pty) Ltd August 1997 to July 2005 Associate Scientist (since 2002)

- Olifants River Water Resource Development Project Part of Project Management and Co-ordination Team. Specifically responsible for the Public Participation aspects (2003 2005).
- Crocodile West River Modelling and Reconciliation Strategy Studies Project Administration and Public Participation (DWAF 2005).
- Applications for **Exemption from Environmental Impact Assessments**: Road upgrades in various areas of Johannesburg and Pretoria, and Modimolle Water Tower. (2005).
- Environmental Authorisation (EIA and licence applications) for a dam and bulk water pipeline for the proposed **Mototolo** Joint Venture mining development. (Anglo Platinum. 2005).
- Application for exemption from the EIA process for the construction of new taxiways at **Makhado Air Force Base**. (2004 2005).
- Apies River: Rehabilitation north of the Magalies. City of Tshwane Metropolitan Municipality (2003 2005).
- Environmental and social impact assessments, project administration and technical report compilation for the Uganda rural town's water supply and sanitation study. The objective of the study is to define a technically feasible and socially and environmentally sound and sustainable, least-cost project for the provision of water supply and sanitation services, storm-water drainage and solid waste management for each of the rural towns of Apac, Iganga, Kigumba, Mityana, Mpigi, Nebbi and Pakwach in Uganda. (2001 – 2004).
- Department of Water Affairs and Forestry: Water Allocation and Registration Management System (WARMS) Data Quality Assurance project. In addition to technical assistance with error checking, correcting and reporting, the project involves data capturing and correction. For this purpose twenty-three contract workers who are located in the DWAF Regional Offices were employed and supervised. The project also included the training of new DWAF officials appointed to work on the WARMS system (2003 – 2004).
- Application for exemption from the EIA process for bulk water distribution pipeline in **Hercules** (Pretoria). (2004).
- Feasibility Study and EIA (Scoping) for a crump weir at the **Cowles Dam** in Springs. (DWAF, 2003 2004)
- Scoping Report for the rehabilitation of the Lake Mzingazi embankment. (2004)
- Terms of Reference for the Determination of Environmental Flow Requirements for the Elephants River in Mozambique.
- Review of the Sikhuphe Airport EIA Swaziland, (2003).

- Environmental aspects of the Truck Load Control Strategy for the Maputo Corridor (RSA and Mozambique) (2000 – 2002).
- Broad regional Scoping Assessment for the Sekhukhune Strategic Study and Infrastructure Plan which had the objective of formulating an appropriate, economical and sustainable strategy for water and sanitation service delivery and to provide a framework for the selection of feasible development projects in the Sekhukhune Municipal District.
- EIA for the proposed extension of the runway at Wonderboom Airport Includes public participation, project administration and report writing. (2000 2001).
- As part of the **Mpumalanga Feasibility Study** was involved in the Environmental Status Quo report for the Mlondozi Area. (2000)
- Assisted with finalisation of reports for the Bulk water supply in the Middle Olifants and Steelpoort River Area. Pre-feasibility study on bulk water supply to 1,3 million people in the Southern Districts of the Northern Province.
- Scoping report for Swartruggens Municipality Upgrading of Water Treatment Works and related infrastructure. (1999)
- Assisted with documentation of the Relocation Action Plan for the Luvuvhu Government Water Scheme Dam. (2000)
- Water Quality assessment based on salinity of the Olifants/Doring River. (1999)
- Waterval River Catchment Water Quality Management Plan Public Participation Team Leader (2003 2005).
- Modder Riet Catchment Management Strategy (CMS) (2003 2005). Responsible for the public participation and contributed to the drafting of the CMS.
- Prioritisation of activities for Commissioning Implementation of the National Water Act (2001 - 2002): Involved assistance with the development of a prioritisation matrix system and 15 workshops with DWAF Chief directorates and Regions.
- Khutsong cemetery EIA- Scoping public meeting.
- Project Administration and co-ordination as well as public participation for the drafting of the proposal to establish a Catchment Management Agency in the Olifants Water Management Area. (Public Participation Involved ten public meetings and five Stakeholder Reference group Meetings, as well as newsletters, correspondence and a stakeholder database). (1999 – 2003)
- For the Department of Water Affairs and Forestry formed part of the Project Management Teams on the **Olifants River Ecology Water Requirements Assessment** and Olifants River CMA project. Responsible for budget control, progress reports, minutes of meetings and liaison with team members and public participation.

Experience record:

- Project administration of the DWAF DFID project to identify and unpack the factors that may be taken into consideration when compensation is contemplated under Section 22(6-10) of the National Water Act and determine if the Water Use Allocation Process is consistent with Legislation (2003 – 2004).
- Project administration of the Nkomazi Water Management Plan Pilot Study.
- Preparation of presentation material for the National Water Resource Strategy, (2003).
- On the Vaal River System Analysis Update for the Department of Water Affairs and Forestry assessed the required and available data for the models used to manage the Vaal River system. Involved in setting up a database of data sources. (1997 1998)

• Preparation of marketing material and proposals. (Ongoing) Anderson Consulting, Pretoria November 1995 to January 1997 User Support

- Setting up procedures and software tool for the first line support of 12 state departments for an accounting system (BAS)
- User support including telephonic and face to face functional and technical support for the users of the accounting system
- Liaison with management and maintenance team (programmers) on problems experienced by the users
- User group meetings
- Development and processing of a statistics package for project and client management on reported problems
- Quality Control Procedure documentation for ISO 9000 Audit

Eastern Suburbs Computing August 1993 to August 1998 *ad hoc* Office Administrator

- Bookkeeping, cash flow management, secretarial and office management
- General office administration, correspondence, bookkeeping, VAT forms
- Hardware repairs, software testing and installations
- General office administration and liaison with clients

Consultburo March 1989 to March 1993

GIS Operator

- Geographic Information System work on the Department of Water Affairs and Forestry's Olifants River Basin Study including map work, data capture and manipulation and graphic representation using Arc Info.
- Participated in Community Participation aspects of rural water development projects.
- Assisted with documentation for engineering projects.

PUBLICATIONS, CONFERENCE, ACADEMIC AND WORKSHOP PRESENTATIONS

- The 2014 NEMA EIA Regulations: personal difficulties of practical implementation. Presentation at IAIAsa 2017 in August 2017.
- Reviewer of technical papers for the International Committee on Large Dams 2016 Symposium (18 May 2016).
- Environmental Aspects Related to Dam Implementation in South Africa. SANCOLD Short course. August 2012.
- Environmental Impact Assessment Process lecture for the Strategic Environmental Assessment Masters Course at the University of Pretoria. (2004 to 2012).
- Social and Ecological Impacts of Multi-criteria Decision Making in Dam Developments. The 78th International Commission of Large Dams (ICOLD) Annual Meeting in Hanoi, 23 – 26 May, 2010.
- Environmental Impact Assessment of Large Dams: Addressing Social Issues in South Africa. Impact Assessment and Human Well being. IAIA Ghana 17 – 22 May 2009. T Baker, K Legge, RA Pullen and M van Veelen
- Transformation from the Impact Assessment to the Environmental Implementation phase. Baker, T and Legge, K. (SANCOLD) Bi-annual Conference 4 – 6 November 2009, Alpine Heath Resort, Drakensburg, South Africa.
- First Regional Southern African IAIAsa Conference 2007. Managing Resources for Sustainable Development through Impact Assessment: Implementation of Environmental Management Plans. Baker, T, Legge, K and Mathekgana M.
- Integrated Environmental Management for the Roads Industry: The Authorisation Process. South African Roads Federation. 23 July 2003.
- Applying for a waste water discharge license: Environmental Authorisation. 2nd Annual Management and Treatment of Industrial Effluent Symposium. 9 October 2002.
- Part of the Secretariat and Organising Committee for the Appropriate Technologies for Sustainable Water Supply and Sanitation Services Conference (21 23 November 2001)

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• Ensuring Successful License Applications for Waste Water Discharge Works: Environmental Authorisation. 3rd Pollution Control Forum. 22 August 2001.

LANGUAGES:

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good