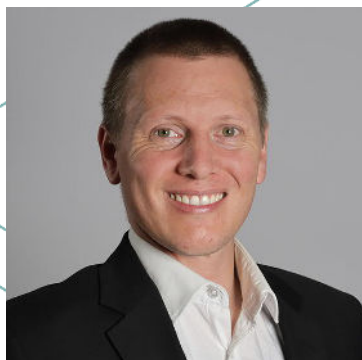




# Jarryd Finkelstein

Senior Consultant

## Summary

Jarryd is a consultant specialising in environmental science. He has several years of experience in environmental management while working on water engineering projects. His responsibilities have included environmental compliance of existing environmental authorisations, assisting with Water Use Licence Applications, managing the environmental impact assessment (EIA) process and related permitting processes, compiling, and ensuring compliance with method statements, tracking and management of issues/incidents, managing stakeholder, specialists, and property owner relationships. His project experience includes infrastructure development for bulk water pipelines, groundwater abstraction schemes, and water treatment works. His major roles have included that of portfolio manager, project manager and field consultant, with experience in the oil and gas, manufacturing, energy, construction, and automotive sectors. Jarryd also has environmental consulting experience in a site assessment and remediation department (contaminated land).

### Qualifications

MSc Geochemistry  
BSc (Hons) Geochemistry  
BSc Chemistry and Geology

### Professional registrations

Professional Natural Scientist,  
South African Council for Natural  
Scientific Professions (SACNSP)

### Specialisation

Environmental science

### Years in industry

10

## Relevant experience

### **Atlantis Aquifer New Water Programme (NWP), , City of Cape Town, 10/2021 - 06/2026, Environmental Manager (Contract ECO)**

The City of Cape Town is developing wellfields abstracting from the Atlantis Aquifer in order to augment their water supply sources and improve their resilience against droughts. The City of Cape Town commissioned Zutari to review the existing water treatment process at Witzands water treatment works (WTW) and the further development of the abstraction wellfield. In conjunction with the abstraction wellfield, the managed aquifer recharge scheme is also undergoing review and upgrades. Responsible for ensuring environmental compliance with the existing project EMPr, Water Use Licences, and ensure legal compliance with environmental and related legislation; assisting with further WUL applications; and managing EIA process and related permitting processes. Also responsible for securing all land and environmental authorisations, consents and approvals required to develop and construct wellfields; managing landowner relationships; managing engagements with key stakeholders; and interfacing with the engineering teams throughout the project development process. Other duties include the management of site environmental compliance officers and liaising with the City of Cape Town Environmental Management Department and Biodiversity Department.

### **Steenbras Trolley Track Refurbishment / Rehabilitation, , City of Cape Town, 10/2021 - 12/2022, Environmental Consultant**

Zutari was commissioned to design and implement the civil, mechanical and electrical components of a trolley track system from the Motor House to the 810mm and 840mm Break Pressure Tanks at the Steenbras Water Treatment Plant. Conduct a feasibility study for a new formalised system to transport valves and equipment to the upper and lower 750mm break pressure tanks at the Steenbras Water Treatment Plant. Conducted a high-level environmental screening and compiled the report under environmental regulations (NEMA, NWA and HRA) for the feasibility studies.

### **Cape Flats Aquifer MAR and Water Supply Scheme, , City of Cape Town, 10/2021 - 06/2022, Environmental Manager (Contract ECO)**

The City of Cape Town is developing wellfields abstracting from the Cape Flats Aquifer (CFA) in order to augment their water supply sources and improve their resilience against droughts. The City of Cape Town commissioned Zutari to oversee the design and construction of various water treatment plants (WTP's) within the CFA ranging from conventional water treatment to advanced AOP. In conjunction with the design build WTP's, Zutari is developing the abstraction wellfields to feed the WTPs. Responsible for ensuring environmental compliance with the existing project EMPr, Water

Use Licences, and ensure legal compliance with environmental and related legislation; assisting with further WUL applications; and managing EIA process and related permitting processes. Also responsible for securing all land and environmental authorisations, consents and approvals required to develop and construct water treatment works and associated pipeline infrastructure; interfacing with the engineering teams throughout the project development process. Other duties include the management of site environmental compliance officers and liaising with the City of Cape Town Environmental Management Department and Biodiversity Department.

**ENGIE framework agreement, , ENGIE Africa, 01/2020 - 01/2022, Environmental Consultant**

As part of the framework agreement for technical assessment and engineering advisory related services between ENGIE Southern Africa Proprietary Limited and Zutari, we were appointed to carry out a hydrology and flood analysis desktop study. Review of High level environmental screening report under NEM:WA (Phase1).

**Table Mountain Group (TMG) aquifer resilience project, South Africa, Western Cape, City of Cape Town, 10/2017 - 09/2021, Environmental Manager (Contract ECO)**

The City of Cape Town commissioned Zutari to design a treatment facility suitable to treat the water ahead of discharge to the Steenbras Upper dam from which it would receive further conventional treatment with the objective of removing iron and manganese in the water. A biofiltration process has been selected with a strong focus on reducing the waste solids production to a minimum. Responsible for ensuring environmental compliance with the existing project EMP, Water Use Licences, and ensure legal compliance with environmental and related legislation; assisting with further WUL applications; and managing EIA process and related permitting processes. Also responsible for securing all land and environmental authorisations, consents and approvals required to develop and construct wellfields; managing landowner relationships; managing engagements with key stakeholders; and interfacing with the engineering teams throughout the project development process. Other duties include the management of site environmental compliance officers and liaising with the City of Cape Town Environmental Management Department and Biodiversity Department.

**Feasibility studies as part of the risk mitigation independent power producer procurement programme (RMIPPPP) for Mulilo-Total Coega and Mulilo-Total Hydra., , Mulilo Renewable Project Developments, 11/2020 - 03/2021, Environmental Consultant**

Coega consists of a 216 MW solar photovoltaic (PV) facility at Nieuwehoop and a 200 MW gas reciprocating engine plant with liquefied natural gas (LNG) storage at Coega port. Hydra consists of a 216 MW solar PV and 150 MW/450 MWH battery energy storage system (BESS) to be installed at De Aar. Zutari undertook the feasibility studies on these two projects as part of the risk mitigation independent power producer procurement programme (RMIPPPP): Mulilo-Total Coega and Mulilo-Total Hydra. High level environmental screening under NEM:WA (Phase1).

**Programme Management of 94 Project Sites, , Astron Energy previously Chevron SA, 08/2018 - 12/2019, Programme Manager**

Environmental Resources Management (ERM) required a programme manager to run a team of six people that managed a portfolio of 94 project sites for an oil & gas client. The portfolio required the management of Phase II intrusive assessments (environmental drilling, groundwater sampling, soil sampling and vapour sampling), the installation, commissioning and maintenance of remediation systems and reporting thereof. The position also involves the internal training and mentoring programme of junior staff in fieldwork and risk assessment techniques, data management/visualization techniques, as well as project management skills. Responsible for ensuring compliance with Remediation Orders (RO's) and monitoring Orders (O's) which falls under Part 8 of NEM:WA and are issued by the national authority DFFE to the client. Responsibilities also included financial management and sales reporting, proposal reviews, regular client meetings and interfacing, report reviewing, stakeholder engagement and management, incident management and reporting, and management of safe work practices (leading and training staff).

**Project Management of 82 Project Sites, , Astron Energy previously Chevron SA, 04/2017 - 10/2017, Seconded Project Manager**

Environmental Resources Management (ERM) supplied a project manager to manage a portfolio of 82 project sites for an oil & gas client. The portfolio required the management of Phase II intrusive assessments (environmental drilling, groundwater sampling, soil sampling and vapour sampling), the installation, commissioning and maintenance of remediation systems and reporting thereof. Specific responsibilities related to this project included managing and planning all project tasks, ensuring all work was completed safely and in accordance with client specific Health & Safety policies, vetting the procurement of subcontractors with environmental consultants (including utility detection, drilling, as well as laboratories, couriers, and equipment manufacturers), liaising with the environmental consultants and stakeholders on site, coordinating and supervising the team of consultants and subcontractors involved on the projects, ensuring that the work was completed in accordance with government regulation and legislation (DEA NEMWA), providing technical guidance to staff conducting the projects as well as reviewing project reports and evaluating the scientific data within those reports, and ensuring all work is completed in accordance with international best practice and in accordance with client specific standard operating procedures (also including incident reporting and management.).

**Data Gap Closure Project, , Total SA, 01/2015 - 12/2015, Project Manager**

Environmental Resources Management (ERM) supplied a project manager for a data gap closure project for seven sites which included additional Phase II's (monitoring well installations, groundwater sampling, VI sub-slab probe installations and sampling). The project sites required detailed geological and hydrogeological characterisation, development of Conceptual Site Models, and identifying risk drivers following Tier 1 assessments of the data to identify potential risks to human health and the environment for each site. Responsibilities related to this project included managing and planning all project tasks, ensuring all work is completed safely and in accordance with ERM specific and client specific Health & Safety policies, procurement of subcontractors (including utility detection, drilling, as well as laboratories, couriers, and equipment manufacturers), liaising with the client and stakeholders on site, and coordinate and supervise a team of junior consultants and subcontractors performing the fieldwork, providing technical guidance to staff conducting the fieldwork on the project, developing a robust site investigation strategy to ensure ERM has all data needed to evaluate remediation and/or risk mitigation options, ensuring all work is completed in accordance with international best practice and in accordance with ERM specific standard operating procedures, analyzing and interpreting all data collected, and reporting on the outcomes of the assessments.

**Site Remediation Project , , Astron Energy previously Chevron SA, 03/2014 - 06/2014, Primary environmental consultant (site construction manager)**

Environmental Resources Management (ERM) was commissioned to manage the installation of a remediation system (soil vapour extraction) to manage the risks associated with a phase separated hydrocarbon plume under a building's concrete slab. The project required the installation of horizontal vapour extraction wells beneath the project site building that fed to a remediation compound via pipelines in the ground. The pipelines and horizontal wells were installed via excavation works (trenching and backfilling) which surrounded the building on three sides. The remediation compound consisted of a blower, two water knockout tanks, a PLC control system and an electrical DB board. The remediation system effectively removed hydrocarbon vapours from beneath the building slab through the horizontal wells, pipework and remediation compound and were expelled via the exhaust stack 6 meters above ground. Responsibilities included managing and planning all project field tasks, ensuring all work is completed safely and in accordance with ERM specific, client specific Health & Safety policies, and the Occupational Health & Safety Act of South Africa, liaising with the client and stakeholders on site (including landowner), coordination and supervision of a team of remediation engineers and civils subcontractors performing the construction, providing technical guidance to the staff conducting the construction on the project, conducting regular soil assessments during the installation of the remediation system, analyzing and interpreting all data collected; reporting on the outcomes of the assessments and compiling the construction report.