Profile

James is an experienced water industry auditor, with expertise in the areas of water quality, risk assessment and process improvement. This expertise has been gained through 15 years of practical experience and qualifications in auditing and science.

James was the first Queenslander to be certified as a Drinking Water Quality Management Lead Auditor with Exemplar Global. He has developed a strong reputation in the area of water quality and has delivered training programs for the Queensland regulator.

James was heavily involved with the SEQ Water Grid. He has undertaken risk assessments of all the major assets including the Western Corridor Recycled Water Scheme, Tugun Desalination Plant, 40 water treatment plants and the bulk distribution network. This experience is now being utilised in projects across Queensland, New South Wales and Victoria, with recent engagement by utilities, NSW Health, IPART, Victoria Health and Queensland Health.

Project Experience

Auditing

James has been undertaking audits since 1999 and has built up a wealth of experience in this area. He has a pragmatic approach to auditing always looking to add value for the auditee and audit client. He has undertaken audits in the following specialities:

- Drinking water
- Recycled water
- Environmental management
- Quality Management
- Asset management
- Workplace health and safety

James currently holds certification for drinking and recycled water auditing, as well as being a skills examiner.

Some of the related projects James has worked on are as follows:

Lend Lease – Barangaroo South Pre-operational Audit (2015)

Viridis is currently undertaking the pre-operational audit for Barangaroo South recycled water scheme under the *Water Industry Competition Act 2006*. James is the lead auditor for water quality.

IPART – Hunter Water Corporation Audit (2014)

Viridis undertook an audit of Hunter Water Corporation's operational licence for the NSW Independent Pricing and Regulatory Tribunal



Qualifications

- BSc (Applied Chemistry)
- MSc (Environmental Management)

Certifications

- Exemplar Global Drinking & Recycled Water QMS Lead Auditor
- Exemplar Global Associate EMS Auditor
- Exemplar Global Skills Assessor
- Lean Six Sigma Green Belt

Memberships

Australian Water Association

Specialisations

- Environmental Licensing and Compliance
- Risk Management
- Asset Management
- Environmental Auditing
- Drinking Water Quality
- Management and Auditing
- Waste and Wastewater Management

Work History

2008 - Present

Viridis Consultants Pty Ltd Director

2005 - 2008

Opus International Consultants (PCA) Ltd, Brisbane Work Group Manager Environmental Management



(IPART). This was the third operational licence audit that James has undertaken for IPART. The first two were audits of the Sydney Catchment Authority.

This audit covered drinking water, recycled water and asset management.

GWMWater – DWMS Risk Management Internal Audit (2014)

Viridis undertook an audit of GWM Water's Risk Management Plans for the 21 water supplies that GWM Water manage. The purpose of the audit was to determine where management systems could be improved, as well identify any high risks not management appropriately.

Victoria Health - Coliban Water Audit (2013)

Viridis undertook a review of Coliban Water's drinking water operations and practices in relation to risk management and the provision of safe drinking water.

Jupiters Limited (Jupiters) – Recycled Water Audit (2013)

Viridis undertook an external audit of the Jupiters Recycled Water Management Plan (RWMP). This was submitted to the Queensland regulator in compliance with licence requirements.

Teys Australia (Biloela) – Environmental Evaluation (2013)

Viridis was engaged by Teys and approved by DEHP to prepare an Environmental Evaluation (Audit) in accordance with the provisions of the *Environmental Protection Act 1994*.

Queensland Urban Utilities – Scheme Provider plan Audit (2012)

James undertook an internal audit of the Recycled Water Management Plan, which is a scheme provider plan for the Western Corridor Recycled Water Scheme. The audit was undertaken over a number of days and covered source control and the Bundamba and Luggage Point sewage treatment plants.

This audit was a licence requirement and was provided to the Queensland regulator.

Risk Management

James has been undertaking risk assessments for over 10 years and he has gained a high level of expertise. At Viridis, James

2004 - 2005

Brisbane Water Senior Environmental Officer

2001 - 2004

Biolytix Technologies, QLD Operations Manager

2000 - 2001

Logan City Council Environmental Management Officer

1999 - 2000

Hornsby Shire Council Environmental Officer

1997 - 1999

Searle Pharmaceuticals Ltd, UK Quality Assurance Chemist

1993 - 1994

Sandoz Chemicals (UK) Ltd, UK Research & Development Chemist

Achievements

Design of a package domestic wastewater treatment plant, developed a prototype and gained certification to ASNZS 1546.3

First RABQSA certified Drinking Water QMS Lead Auditor in Queensland.

Successfully started and operated a niche water consultancy.

Publications

Ozwater 2015. Technical paper – Lean Six Sigma Application to Water Utilities: Getting Value for Money out of Water Quality Monitoring . 2015

BusinessBNE. Carbon Tax – Good, Bad or Ugly?, Edition 3, 2011.

North Queensland AWA Regional Conference. Technical paper – Water Quality Risk Assessment – Useful Tool or Expensive Doorstop. 2009.



has developed a custom risk assessment methodology for water quality risk assessments, which has been adopted by utilities, consultants and regulators.

Some of the risk management projects that James has worked on include:

Queensland Health - Investigation: Affect of Incoming Water Quality on Legionella Proliferation in Hospitals (2014)

Viridis investigated the impact of incoming water quality on the risk of *Legionella* growth in hospital water reticulation systems. The project identified risk factors for *Legionella* growth and provided a tool allows healthcare facilities determine the potential of *Legionella* proliferation.

NSW Health – Drinking Water Management Systems Risk Assessment Workshops (2012 – 2014)

Viridis developed risk-based drinking water management systems for Singleton Council, Macquarie Generation, Inverell Shire Council, Parkes Shire Council, Armidale Dumaresq Council, Tibooburra Water Trust, Inverell Shire Council and Parkes Shire Council and Essential Water.

Victorian Department of Health - Risk Review (2013)

Viridis was engaged by the Department of Health to undertake a risk review of a Victorian water utility. This was a review of all operations and practices to determine the root cause of any deficiencies in risk management, in relation to the provision of safe drinking water.

Management Systems

James has considerable experience in the delivery of management systems for local government, water utilities, private companies and the water industry in general. This work has included the development, audit and review of environment (ISO 14000), quality (ISO 9000), asset (ISO 55000 and PAS 55) and water quality (ADWG) management systems.

Some of the relevant projects that James has worked on include:

Seqwater - Asset Management System Development (2013)

Viridis was engaged by Seqwater to develop an Asset Management System that will form part of the corporate Integrated Management System. The system must be compliant with the ISO 55000 standard and use, where appropriate the existing Asset Management Framework. In developing the system the International infrastructure Management Manual and PAS 55 were taken into consideration.

Brisbane City Council – Environmental Improvement Project (2013)

Viridis defined and set up the Environmental Objectives and Targets register in compliance with the Environmental Management Standard, reviewed and finalised the respective procedure. Also included in the scope of works, Viridis reviewed and finalise the Legal and other Requirements Procedure and scoped out the Environmental Improvements Programs in compliance with ISO14001:2004.

LinkWater - ISO 22000 Implementation (2011)

LinkWater adopted best practice in controlling and maintaining drinking water quality through the implementation of certified ISO 22000 system. Viridis developed this system in conjunction with LinkWater and guided them through to third-party certification.



Facilitation

James is experienced in facilitating risk assessment, environmental aspects and impacts and drinking water management system implementation workshops, underpinned by his extensive industry experience. James has facilitated approximately 100 risk assessment workshops.

Some of the related projects James has worked on are as follows:

Seqwater – Water Quality Risk Assessments and HACCP Plans (2008)

Over the span of four projects Viridis Consultants was commissioned to undertake risk assessments of 40 water treatment plants. James facilitated risk assessments for all of these workshops. This series of workshops were extremely valuable tools in gathering information about each of the water supplies, providing education to staff in risk management and providing a forum to discuss and find solutions to issues.

Department of Infrastructure and Planning QLD – Wyaralong WTP Design Workshop Facilitation (2010)

Viridis Consultants was commissioned to facilitate a series of workshops for the Wyaralong Water Treatment Plant. The workshops topics were as follows:

- Water quality specification
- Process design
- Equipment
- Safety, accessibility and constructability

Department of Environment and Resource Management QLD – DWQMP Training for Medium and Small Drinking Water Service Providers (2011)

The objective of the project was to develop and implement a training package on the practical application and use of the DWQMP regulatory guideline, developed by DERM (now DEWS), using a combination of presentations, case studies and practical activities. This training package was delivered through a series of workshops that were aimed at contributing to the development of DWQMPs that met the regulatory requirements for approval.

