



Capability Statement

Company Profile

4T Consultants Pty Ltd is an Environmental Services company based in Emerald, Queensland.

At 4T Consultants, we assist our clients in addressing the environmental challenges and priorities affecting projects and the communities in which they operate. Our company policy of employing only qualified environmental scientists as lead personnel allows us to offer our clients a high level of technical advice on environmental issues.

Our consultants work closely with clients to identify best fit (environmental and cost management) solutions for environmental monitoring and management. We provide an end-to-end service, covering pre project work through to full scale operations in a range of industries and ventures. Our qualified field personnel are able to assess the on-ground situation at all times, and discuss sampling and other issues with on-site environmental officers as they arise.

With over 55 years of combined industry experience we have earned our reputation for providing a reliable value for money service delivered on time, ensuring a high level of safety and duty-of-care.

4T provides environmental services to a wide range of clients, both domestic and international. Strategically located in Emerald, we are able to provide a regional based, quick response service to the Bowen and Galilee Basins of Queensland.



4T Consultants Pty Ltd

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Year established: 1997

Supporting Locals

4T and 4T personnel are active members of the local community and support the following:

- Emerald Tigers Ladies Rugby League Team 2014 sponsor
- Dan's FAST Run 2012— Raising money for stroke research



- CH Science Centre - Monetary, program and support contributions.



The Way 4T Works

4T is committed to:

Providing independent and reliable natural resource and environmental management services

Working with clients to find environmental solutions and **ensure compliance with legislation.**

Using recognized methods to provide reliable data and information to assist with **rapid report generation**

Providing a safe working environment and systems of work that **enhance on-site efficiency and quality of work**

Maintaining the highest level of scientific and ethical integrity that **assures rigorous, high quality results**

Making a positive contribution to natural resource management, not merely pointing out problems, resulting in **client-specific innovative solutions to waste management and rehabilitation.**

Constant improvement of our services, products and systems, giving the **client maximum value for money.**



Capabilities & Capacity

Water and Soil

- **Surface Water Monitoring**

Surface water monitoring is completed in accordance with:

- Monitoring and Sampling Manual, (2009), DERM.
- AS/NZ 5667.1:1998
- AS/NZ 5667.4:1998
- AS/NZ 5667.6:1998

- **Groundwater Monitoring**

Groundwater Monitoring is completed in accordance with:

- Monitoring and Sampling Manual, (2009), DERM.
- AS/NZ 5667.1:1998
- AS/NZ 5667.4:1998
- AS/NZ 5667.11:1998
- Technical Guidance on Low-Flow Purging and Sampling and Minimum-Purge Sampling. Second Edition. Nielsen D. (2002)

- **Stream Gauging and Water Storage Profiles**

- **Soil and Sediment Sampling**



Partnerships

We have also aligned our company with highly recognised consultants to provide specialist services in:

- Soil science
- Vegetation management
- Site rehabilitation
- Groundwater studies
- Water management



Biological Monitoring

- Stygofauna
- Macroinvertebrates
- Aquatic Vertebrates

Automatic Monitoring Equipment

- Water quality
- Weather
- Stream loggers
- Vibration
- Telemetry
- Dust
- Monitoring equipment rental
- Long or Short-term
- Hand held or installed

Compliance

- Data Management and Interpretation
- Compliance reporting - REMP, EA and EIS
- Environmental Risk Assessments
- Regulatory reports– MCU, RAL and SCL applications



Our Teams' Experience

We recognise the importance of our skilled staff to the company and focus heavily on providing internal and external training to enhance skill levels.

4T employs eight Environmental Scientists and Field Officers, and two administration personnel. All field personnel have generic black coal inductions. All field personnel meet the criteria for competency as described in the DERM Monitoring and Sampling Manual (2009), and provide services to the applicable AS/NZS standards.

Senior environmental scientists have advanced training in:

- Environmental science, monitoring and management
- Water monitoring and management
- Stygofauna, Macroinvertebrate and Aquatic vertebrate sampling
- Groundwater
- Soil science
- Erosion and Sediment Control

Equipment, Software, and Systems

4T uses modern, well maintained equipment that is calibrated and serviced correctly and regularly.

We have invested heavily in database software to assist clients in extracting relevant and real time information from well organized data.

- EQuIS and EDMS for environmental data
- Vista Data to provide real-time and remote access to monitoring station data

Groundwater pumping is done using low flow pumping techniques to ensure a more accurate sample than traditional sampling methods. Our groundwater pumps have been developed over a long period of time and are manufactured exclusively for 4T.

Significant Projects

4T's clients include Rio Tinto, Xstrata Coal, Anglo American, Ensham Resources, Peabody Energy Australia, Hancock Coal, Adani Australia, New Hope Coal, Arrow Energy, QGC, Central Highlands Regional Council, and numerous other government, mining, industrial and agricultural clients.

Recent Projects

Mining:

- Depositional Dust, Surface and Groundwater Monitoring
- REMPE, Fish and Macroinvertebrate Sampling and Reporting
- Installation and Maintenance of Weather and Water Quality Stations
- Management and reporting of environmental data

Coal Seam Gas:

- Baseline Soil Survey
- Baseline Groundwater Studies
- Stygofauna Impact Assessment Report—Bowen Gas Project

Local, State and Federal Governments:

- Catchment and dam monitoring and reporting
- Macroinvertebrate studies
- Bird distribution studies

Rural and Agricultural:

- Land and water management planning
- Contamination studies
- Water trading and management

Management Systems

4T maintains an electronic employee information system (TKO™ from Transform Business Systems) which contains all Company Policies, Procedures and other relevant information. TKO has full document control and versioning capabilities and is designed to be ISO9001 compliant.

The TKO system covers the:

- Quality Management System,
- Occupational Health and Safety System
- Environmental Management System
- Business Planning and Operations and
- Human Resource Management systems.

4T maintains all appropriate insurances for equipment and vehicles.

Health, safety and environment (HSE) and Risk Management

Risk management and safety are central to 4T's operations. Risk management systems are fully documented, implemented and recorded. The company provides all PPE (including personal flotation devices) to employees.

4T has mobile radios, and all employees have mobile phones. Satellite Tracking devices or Satellite phones are used in remote areas. Safety checks are carried out with other team members at three (3) hourly intervals if 4T employees are working remotely. At all mine sites, 4T is currently safely meeting or exceeding all the KPIs for environmental services. 4T has not sustained a serious LTI injury in 12 years and is totally committed to maintaining this record.



4T Depositional Dust Gauge

Quality Management

All personnel share a commitment to a vision of excellence in all aspects of our business. The management of 4T value our employees' input and contributions to these goals.

At regular meetings, 4T staff share ideas to improve the way we do business and provide additional value to our clients, and all staff participate in cycles of improvement. 4T has a very flat management structure and as a result, implementation of improvements is achieved in shorter timeframes.

The company also utilizes an electronic Corrective Action Request system so that ideas, innovations and changes can be captured and recorded, and appropriate actions completed.

Additionally 4T maintains sample and data management quality standards in accordance with the DERM Monitoring and Sampling Manual 2009.

All sampling/analysis field equipment used by 4T is supplied by high quality manufacturers (e.g. Merck™), is technologically up-to-date, and is maintained according to schedule and serviced regularly. Service and calibration schedules/register are maintained.



4T Automatic Monitoring Station

Customer Service and Client Response

Industry Associations

4T and 4T personnel are members of the following industry associations:

- Central Queensland Mining Rehabilitation Group
- Environment Institute of Australia and New Zealand
- Australian Institute of Agricultural Science and Technology
- Australian Land and Groundwater Association
- The Incorporated Society of Planters

As a regionally based company employing local staff, 4T is able to provide a high level of service flexibility. This becomes particularly valuable to our clients during rain events, where 4T staff can mobilise rapidly to meet legislative monitoring requirements.

4T is committed to continuous improvement, not only of our own systems, but also the operations of our clients, by continually seeking improvements and cost effective methods of operation. Arrow Energy and 4T are currently working together to devise more efficient, less costly and environmentally sustainable methods for removal and re-use of drilling waster. It is anticipated that these methods will result in significant cost savings for Arrow Energy.

Ensham Resources worked with 4T when facing the unique challenge of flooded mine pits following the 2008 floods. 4T worked closely with Ensham, providing local knowledge and expertise which assisted Ensham in recovering from a high loss, high risk environmental incident.

Insurance

4T carries the following insurances:

Workers Compensation

Public Liability Insurance to the value of \$20,000,000

Professional Indemnity Insurance to the value of \$10,000,000

Appropriate Building, Contents and Vehicle Insurance

Typical Value of Projects

4T Consultants is capable of undertaking projects up to \$1.5m p.a.

Some of our Client Survey Responses:

"Solution-oriented approach"

"Professional, helpful and flexible"

"Friendly, knowledgeable staff"

"Like the close distance and price"

"They were able to accommodate our urgent timelines and still deliver a quality product"

"Thanks for the report, it was exactly what we were after. And Thank you for coming to site with such short notice on Christmas eve to try and resolve our issues."

"Team members are easy to work with, reliable and willing to align processes with business needs"

