Tonkin + Taylor (T+T) have provided specialist contaminated land management services for over 50 years. Our staff have been involved in significant brownfield development and research projects, practical trials and development of protocols for investigation, sampling and remediation.

We have completed many notable contaminated site and groundwater remediation projects throughout New Zealand. Our staff have developed innovative solutions and are known for implementing new contaminated land remediation technologies.

**Expertise**

We have experience in all areas of soil and groundwater contamination chemistry and processes, in New Zealand and overseas. Our strengths lie in site investigation, risk assessment and development of optimal practical remediation solutions. We have worked in a wide range of industries, with many different soil and groundwater contaminants.

**Pre-purchase assessments**

We offer a range of pre-purchase or sale assessments and audit services. Our internationally respected team of site contamination specialists identify potential contamination and assess its cost and use constraints significance.

We have recently completed pre-purchase assessments for:
- A & G Price (Thames)
- Masport Industries (Auckland)
- Lion Brewery (Newmarket, Auckland)
- Christchurch Airport
- Gobus (NZ wide)
- Christchurch City Council
- NZ Steel/Bluescope
- NZ Insulations (Christchurch and Temuka)
- Methven Tapmakers (Dunedin)
- NZTA surplus land (New Zealand wide)
- Rymans Healthcare (New Zealand wide)
- Victoria Park Market (Freemans Bay, Auckland)
- Siemens/United Networks Ltd (North Island)
- Petrol stations and truck stops (NZ wide)
- Ajax Industries (Mt Wellington, Auckland)
- NZ Post Auckland Regional Mail facility
- Former NECAL/ESR laboratories.

**Site investigations**

We have completed many hundreds of preliminary site investigations (PSI) and detailed site investigations (DSI). These are often followed by design of remedial works, regional council and NES soil consent applications and monitoring.

Our team is also experienced in a wide range of hazardous and industrial activities and contaminants. These include petroleum hydrocarbons, chlorinated and oxygenated solvents, heavy metals, asbestos, PCBs, PCP and other timber treatment chemicals, pesticides, herbicides and PFAS.

**Risk assessments**

We are expert environmental risk assessors, with a wide range of experience in risk assessment work. This includes simple qualitative evaluations, semi-quantitative and quantitative techniques and extensive quantitative modelling.
Our staff are trained in the latest USEPA models, and are able to apply these techniques to real-life issues and achieve useful and applicable results.

**Examples of our risk assessment projects include:**

- Quantitative human health and environmental risk assessments for a variety of sites (including drycleaning, bitumen plants, gasworks, landfills and chemical, solvent and pesticide manufacturing and storage sites)
- Qualitative risk assessment for many timber treatment, gasworks, service station, landfill and pesticide disposal sites
- Semi-quantitative risk assessment of the Mobil Oil Seaview Terminal and Caltex’s Timaru Terminal
- Government (FRST) funded research to develop New Zealand-specific environment risk assessment modelling tools.

**Policy and management**

We also prepare site monitoring, management and contingency plans for development projects and to satisfy resource consent requirements. Our practical contaminated site management experience can help regulatory authorities develop policies and implementation strategies to manage contaminated sites.

**Examples of our work include preparation of:**

- Contaminated Site Register Database and Code of Practice for Marlborough District Council
- Technical Manual and Management Plan for Wellington Regional Council
- Regional Management Plan (a qualitative risk assessment and action plan) for Northland Regional Council
- Contaminated Site Assessment and Management Plan for Otago Regional Council
- Contaminated Site Database and Management Strategy for Taranaki Regional Council
- Contaminated Site Screening Guide for Waikato District Council.

**Remediation**

We have completed a large number of successful remediation projects. These include physical clean-up works, clean-up validation, post-clean-up monitoring, and management and regulatory ‘sign-off’.

Our team are leaders in brownfield redevelopment works and remediation projects.

**Examples of our remediation projects include:**

- Remediation of over 30 sites contaminated by timber treatment chemicals (CCA, Boron and PCP) intended for industrial and residential use
- Redevelopment of eight former gasworks sites in New Zealand, including the prestigious Beaumont Quarter development on the former Auckland gasworks site
- Remediation of a range of small industry sites for commercial and residential use, including metal working, chemical storage and manufacturing, coatings and resins, and automotive industries
- One-off remediation programme for a number of Carter Holt Harvey contaminated sites, including the construction of two hazardous waste containment cells
- The assessment and remediation of nine childcare centres in Auckland for Auckland Council
- Remediation of asbestos contaminated soil associated with demolition material and fill for a range of public and private facilities for CERA, MoE, MoH and Auckland Council.
- Redevelopment of sites affected by vapour intrusion, including pre-emptive mitigation measures for buildings.