With stricter environmental regulation and accelerating urban growth, a landfill’s environmental performance has the potential to directly impact on the future viability of an operation.

As development on and around former landfill sites becomes more common, accurate and timely assessments of a landfill’s environmental performance are more critical than ever before.

Tonkin + Taylor’s (T+T’s) landfill team includes dedicated scientists and engineers who specialise in landfill environmental management - with extensive local and international experience in monitoring and assessing groundwater, leachate, landfill gas, surface waters along with dust and odour testing at and around landfill sites.

**Expertise**

**Environmental monitoring and sample collection**

- Monitoring programmes
- One-off sampling events
- Field monitoring, sample collection and troubleshooting
- On-site equipment calibration (as required) and decontamination
- Monitoring data management.

Additional information on our specialist skills in landfill gas monitoring is presented in our Landfill Gas Specialists capability statement.

**Assessment and interpretation of monitoring**

- Compliance reporting (i.e. comparison monitoring results against predefined beneficial use guideline limits)
- Risk-based assessments considering factors relevant to the site operating environment.
  This includes the preparation of hydrological assessments and conceptual site
- Provision of advice to address data gaps in monitoring programs and remediate or otherwise manage risk associated with monitoring results.

Additional information on our capabilities in preparing and/or revising monitoring and other on-site management documents is presented in our Landfill Planning and Design capability statement.

**Drilling, installation, leak testing, maintenance and decommissioning of monitoring wells**

- Drilling and installation of groundwater, leachate and landfill gas monitoring wells
- Preparation of factual “Bore Construction Reports” for submission to relevant authorities
- Helium leak testing of landfill gas monitoring wells
- Purging of groundwater monitoring wells to establish and/or maintain hydraulic connection with the study aquifer
- Maintenance/repair of environmental monitoring wells.

**Installation and maintenance of real-time monitoring equipment**

- Installation and maintenance of pressure transducers for real-time monitoring of groundwater and leachate elevations
- Installation and maintenance of dust monitoring equipment.