



Environmental Consultancy

Simmonds & Bristow is now better equipped than ever to solve your environmental challenges and compliance requirements. With the recent merge between Envirotest & Simmonds & Bristow in early 2007, we've broadened our range of experience in the environmental field, which means we can help you with almost any environmental compliance issue.

Whether you're dealing with a tricky development application or an occupational health hazard, Simmonds & Bristow has the expertise to find the right solution and ensure compliance. As environmental compliance becomes increasingly complicated, you don't want to have to revisit the same problem several times when it hasn't been handled correctly. We'll get it right from the start, finding the best environmental outcome and ensuring compliance, and ultimately saving you money.

- **Water & Wastewater Monitoring**
- **Land & Soil Investigations**
 - **Litigation Support**
 - **Occupational Hygiene**
- **Environmental Licensing**
 - **Impact & Risk**
- **Air Quality & Modelling**



Environmental expertise covers:

Water & Wastewater Monitoring and Assessments

It is increasingly necessary to monitor the impacts of developments, industry and other human activities on receiving waters. We can assist with:

- Monitoring program design & implementation
- EASI-Sample: sample collection or prepared sampling kits
- Routine compliance reporting & trend graphs with recommendations
- Stormwater monitoring, assessments and modeling - routine or rainfall based; WSUD design and MUSIC assessments
- Effluent irrigation assessments and modelling
- Algae control & management plans
- Recycled water: validations & management plans
- Cooling tower waters assessments & monitoring
- Ecotoxicology – effects of various agents on humans, flora, fauna & ecosystems

Land & Soil Investigations

At different stages of use, development, excavation or sale, it can be necessary to undertake various investigations on a property or tract of land. We're well versed in conducting:

- Contaminated Land Investigations: for purchasing or change-of-use decisions, or removal from the Environmental Management Register (EMR)
- Acid Sulphate Soils Assessments: commonly required for development in low-lying areas, to determine whether excavation may cause oxidising of pyrites into sulfuric acid, and if so, how to manage excavated soils
- Effluent Irrigation Studies: to determine the suitability of treated wastewater disposal via land irrigation, often using the MEDLI model

Litigation Support (Expert Witness)

Our senior team members are available to provide expert witness, analytical services and reports for appeals and litigation. Typical projects include:

- Quantification of water quality effects of residential developments
- Environmental effects of mining operations on local ecosystems and water resources in resource development appeals
- The sustainability of sewage treatment and effluent disposal systems, including effluent reuse and irrigation.
- Quantification, review and assessment of stormwater systems using WSUD techniques and MUSIC modeling



DATAMINE

See your results immediately with historical trends compiled for you!

Environmental Consultancy

Occupational Hygiene

Australian workplaces are required to comply with health and safety regulations and public safety. Exposure to substances in the workplace is regulated by state and federal bodies and requires assessment of workplace exposure levels, which may include regular monitoring. We offer the following services in this field:

- Sampling program design (site-specific)
- Microbiological & chemical assessments
- Results interpretation: results are compared with relevant standards (e.g. Australian Workplace Exposure Standards) and guidelines.
- Health risk assessments and management
- Occupational hygiene audits or workplaces
- Training workshops

Environmental Licensing & Development Support

New developments are going up everywhere, and developers and managers need consultants they can trust to assist with applications and negotiations with regulatory bodies. Site-based management plans for new developments include:

- Identification of environmental values on your site
- Identification of potential environmental hazards
- Risk minimisation strategies for each hazard
- Emergency response contingency procedures

- Reporting proformas to be issued to regulating authorities informing them of licence exceptions etc, and
- Environmental monitoring programs.

Impact & Risk

Impact Assessments and Risk Analyses are a necessity for most developments.

Environmental Impact Assessments

Potential impacts on surface and groundwater quality, soil, flora, fauna, and aesthetic amenity are assessed and predicted by our consultants. Predictions are supported by analysis of samples and computer modelling (e.g. Ausplume, MUSIC and MEDLI).

Hazard & Risk Analysis

Qualitative or quantitative analyses determining likelihood and consequences of potential scenarios can be carried out for a variety of circumstances:

- Dangerous goods
- Hazardous events (fire, explosion)
- Human health risks (e.g. recycled water, chemical release)
- Environmental risks (waterways, air and land)

Air Quality, Emissions & Dispersion Modelling

Indoor Air Quality

If staff or inhabitants are experiencing irritated eyes, nose, skin or throat, headaches, lethargy or poor concentration, you may need an Indoor Air Quality Assessment.

Key performance indicators include:

- Physical parameters: temperature, ventilation, carbon dioxide, dust
- Chemical parameters: carbon monoxide, volatile organic compounds (VOCs), formaldehyde, insecticides
- Microbiological parameters: bacteria, mould, fungi.

Air Emissions & Dispersion Modelling

Air emissions from a wide range of industrial, commercial and other land activities can be estimated and modelled. Computer-based modelling (e.g. Ausplume) is used to generate or predict various levels of exposure which may form the basis of risk assessments and design of risk management. Applications include:

- Dust emissions
- Chemical emissions (e.g. solvents, combustion gases)
- Spills
- Fire and explosion effects

WaterRMS

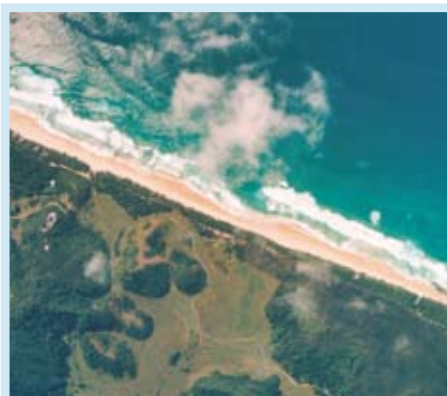
Water Resource Management System

A holistic support solution
in one service package

S&B's WaterRMS is a complete service package designed for regional resorts, utilities & industry. WaterRMS combines:

- State-of-the-art laboratories
- Integrated environmental & engineering consultancies
- Registered water industry training
- The DataMine: Online access to historical and current results, reporting tools, incident management and email notification of non-compliances

Whatever your environmental compliance needs may be, our WaterRMS will deliver the best, most cost-effective service solution for your requirements, minimising non-compliance and saving you time and money.



SB:0711



Simmonds & Bristow

Established 1965 ACN 010 252 418 Pty Ltd

WATER AND WASTE MANAGEMENT SOLUTIONS FOR • MINING • HOSPITALITY • COMMUNITIES • DEVELOPMENT
SIMMONDS & BRISTOW 40 Reginald Street Rocklea QLD 4106 | tel: (+61 7) 3710 9100 | freecall: 1800 620 690