



Environmental

Geotechnics

Environment

Groundwater

Rock Mechanics

Geophysics

Earthworks

*Integrated Practical
Solutions*



Environmental Services



Our 50 years of experience gained over 100,000 completed projects, combined with our highly skilled and hands-on team of consultants, delivers clients innovative advice and solutions across a wide range of industries.

Expertise from the Earth's Surface Down

Douglas Partners provides understanding and solutions for projects that interface with the Earth's surface. Specialist disciplines include geotechnical engineering, rock mechanics, contaminated land, groundwater, geophysics and earthworks.

We have wide regional coverage, with over 500 staff in 20 branches across Australia including 15 NATA registered laboratories. This allows staff and resources to be available on the ground to service projects quickly and reliably. Our specialist disciplines work closely together to provide integrated and efficient service and solutions.

Quality is a hallmark of our work. Of course we have an ISO9001 accredited QA system, however our dedication to quality runs much deeper than this, it's part of the culture and can be summed up by our mantra: "Keep it Simple, Get it Right, Do it Well".

With an in-house team of professional consulting staff specialising in the development, control and protection of environmental resources, Douglas Partners' highly qualified Environmental specialists provide clients with services and support across a wide range of industries.





Services Across Sectors

Douglas Partners consulting services provide our clients with a range of integrated and specialist skills with the aim of delivering practical solutions across a large number of business sectors including:



DEFENCE



PROPERTY & BUILDINGS



WASTE MANAGEMENT



ENERGY



RESOURCES



WATER



HEALTHCARE



SPORT & RECREATION



LAND DEVELOPMENT



TRANSPORT



MARINE



TELECOMMUNICATIONS



Integrated Practical Solutions

Environmental Services



Utilising the expert skills of our in-house environmental engineers, scientists, occupational hygienists and auditors, Douglas Partners has a proven track record in assisting clients to navigate the labyrinth of complex regulatory responsibilities faced by project teams to ensure environmental compliance is achieved across all stages of the project cycle.

Our team of highly experienced and innovative environmental consultants specialising in the protection and sustainability of environmental resources, provides services and support to a range of market sectors, both government and private, in the following specialist areas:

Assessment and Management of Contaminated Land

Douglas Partners employs the best available technologies and methodologies to assess, and if necessary, provide specialist advice on the clean up and management of contaminated sites. The processes employed and services provided to manage land contamination include:

- Preparation of environmental management plans;
- Compliance with regulatory and statutory requirements;
- Mitigation of human health or environmental risks;
- Preliminary site investigations;
- Preparation of sampling and analysis plans;
- Detailed site investigations;
- Contaminant fate and transport modelling;
- Hazardous building materials assessments;
- Assessment of asbestos impacts in soil;
- UPSS regulation compliance services;



- Vapour risk assessments;
- Environmental and health risk assessments;
- Preparation of remediation action plans;
- Validation of remediation;
- Court representation;
- Risk communication and community engagement; and
- Contaminated land audits.

Waste Management

Douglas Partners provides services to clients requiring:

- Waste management planning;
- Environmental improvement;
- Hazardous waste management;
- Waste minimisation;
- Resource recovery;
- Waste classification to maximise beneficial reuse and minimise costly disposal;
- Occupational health & safety audits;
- Waste stream assessments / audits;
- Waste emission, monitoring inventory; and
- Liaison with regulatory authorities & communities.

“Without exception Douglas Partners have been able to add value to the project work we have been jointly involved in. We have found their staff to be knowledgeable, experienced, flexible, and a pleasure to work with.”

*John Eggleston
Senior Project Manager
Robert Luxmoore Pty Ltd*



Environmental Services



Remediation Services

Douglas Partners provides remediation services to a wide range of clients including state waste management authorities; local government authorities; state government departments & authorities; federal government departments; private landfill operators; land developers; and industrial/contaminated land owners.

Our remediation services include:

- Site investigations;
- Development of cost-effective and practical remediation strategies and action plans;
- Remediation options evaluation for soils including soil vapour extraction, soil washing, stabilization/solidification, containment cell, thermal desorption, vitrification, bioremediation and phytoremediation;
- Remediation options evaluation for groundwater including pump and treat, air sparging, multi-phase vacuum extraction, in-situ chemical oxidation, bioremediation (biostimulation and/or bioaugmentation), permeable reactive barrier, monitored natural attenuation and phytoremediation;
- Predictive modelling;
- Design of soil and groundwater remediation systems;
- Design of soil gas mitigation systems including active or passive sub-slab ventilation and passive barriers;
- Supervision, and validation of remediation works;
- Management of environmental protection and OH&S during remediation; and
- Contaminated spoil/fill management and disposal.



Salinity and Acid Sulfate Soils Assessment

Douglas Partners provides services to assist clients in determining the presence, extent and treatment options for salinity and acid sulfate soils (ASS). Client needs for salinity and ASS assessments and management plans can arise due to:

- Proactive compliance with local government requirements for development;
- Site development planning;
- A need to manage and treat ASS on site prior to disposal; and
- A need to determine potential effects on structures.

Our services include:

- Preliminary assessment of potential for salinity and ASS through desk-top studies;
- Assessment of potential and extent of ASS through field investigations comprising sample collection and testing;
- Field-testing and laboratory analysis;
- Compliance with regulatory requirements;
- Preparation of management plans to ensure safe and effective management of ASS and salinity; and
- Validation of treatment and management of ASS and salinity during and after site development.

Environmental Services



Environmental Management Plans

Douglas Partners provides services to clients requiring environmental plans to satisfy acceptable environmental goals. Client needs for environmental management plans can arise due to:

- A need to manage operations in line with environmental standards and acceptable practices;
- Site development planning;
- A need to demonstrate due diligence in environmental management;
- Documenting a site remediation monitoring program;
- Proactive compliance with regulatory requirements and accreditation.

Our services provided include:

- Preliminary overview of the site including location and environmental characteristics;
- Structure and operational review of the site;
- Assessment of environmental status and potential impact from site activities and processes;
- Compliance audits;
- Land management and conservation of the environment; and
- Auditing, reporting and follow-up.



Landfill Services

Douglas Partners has considerable experience with landfills and has facilities to assist in all aspects of design, gas control, water control and site management; including liaison with regulatory bodies and supervision of works on site. All works are designed and carried out to the most relevant and current legislation and are undertaken with due diligence to provide best value for clients and the environment.

Landfill Design

- Cell and capping design with clay, HDPE (cell), LL DPE (capping), geo-composites and protective geo-fabrics tailored to site conditions;
- Leachate drainage and collection systems;
- Surveying to provide design base levels and production of construction drawings;
- 3 dimensional modelling for waste and soil (extraction) volumes;
- Slope stability assessment and settlement calculations;
- Restoration and post closure plans including final height contours, both pre and post settlement; and
- Terrain analysis, geological mapping, desk studies and investigations for the siting of new landfills.

“Sheargold use Douglas Partners for all of its geotechnical and contamination consulting because their services bring a brand of high quality and trusted service that is recognised by all stakeholders in the development industry.

When Sheargold engage Douglas Partners for assistance with challenging geotechnical issues, we are confident that we are getting the industry’s best practice solutions with a cost-conscious approach to the project.”

*Ryan Duff
Development Manager
Sheargold Group*



Environmental Specialists



Landfill Services (cont.)

Water and Leachate

- Hydrology and hydrogeology assessments;
- Groundwater and surface water monitoring;
- Water balance studies;
- Surface water control design;
- Leachate control and treatment studies; and
- Lagoon design.

Landfill Management

- Landfill Environmental Management plans;
- Operational and closure plans; and
- Phasing plans for sites including drawings, volumetrics and soil balances.

Landfill Gas

- Due diligence on current and former operational landfill sites;
- Design mitigation for construction over or near former landfill sites including ventilation, extraction and barrier systems;
- Site management and action plans for the control and remediation of landfill gas migration;
- Assessment of landfill gas migration using chemical and carbon fingerprinting techniques;
- Gas field design including well placement, design and installation quality assurance;
- On site gas monitoring including composition of gas, flow of gas and capping/well integrity; and
- Investigation and mitigation of subsurface fires.



Marine Dredging and Environmental Studies

Douglas Partners provides services to clients seeking to determine the physical and chemical characteristics of marine and estuarine sediments and their potential to impact on the environment by:

- Chemical contamination of the water column or the surrounding marine environment in which they are deposited;
- Suspended sediment content in the water;
- Fluvial processes.

Our range of services, backed by an innovative drilling and field services unit, include:

- Environmental assessment of marine and estuarine sediments;
- Acid sulfate soil assessment of sediments;
- Specialist in-situ sampling and testing of fine sediments;
- Geotechnical investigation for dredging works design;
- Harbour reclamation studies;
- Dredged spoil disposal advice;
- Conductivity Cone Penetration testing to determine stratification and comparative contaminant levels;
- Geophysical surveys of bottom sediment type and depth; and
- Validation of sediment remediation.

Environmental Specialists



Occupational Hygiene Services

The occupational hygiene services provided by Douglas Partners include management of asbestos/hazardous building materials, including asbestos, as well as identification, assessment and control of numerous other chemical, biological and physical stressors in the workplace. Our qualified and experienced consultants include members of the Australian Institute of Occupational Hygienists (AIOH), Licensed Asbestos Assessors (LAA's) and Competent Person(s) who conduct assessments in accordance with Australian legislative requirements, standards, codes of practise and industry guidelines.

Our occupational hygiene services include:

Asbestos / Hazardous Materials

- Sample collection and analysis;
- Classification of materials and soils containing asbestos impacts;
- Building surveys (general compliance, due diligence and demolition purposes);
- Air monitoring for asbestos, lead and other contaminants;
- Clearance inspections and certificates;
- Management plans;
- Technical supervision of removal work; and
- Investigation of unexpected finds.

Occupational Hygiene

- Air monitoring;
- Noise dosimetry, surveys and mapping;
- Thermal stress assessments;



“At all times we have found that Douglas Partners has provided a high level of service to us. Their advice has been reliable and they have been very timely in their service delivery. Based on our experience to date, we wouldn’t hesitate to engage them in the future.”

*Stephen Parkin
Director
Armstrong Parkin Architects*

- Lighting assessments;
- Vibration assessments (hand-arm and whole body);
- Radiation assessments (ionising and non-ionising);
- Mould/fungi and bacteria assessment;
- Indoor air quality (IAQ);
- Odour investigation;
- Analysis of unidentified substances; and
- Occupational health and safety audits.



Metropolitan and Regional Coverage

For information on how Douglas Partners can assist on your project, please contact one of our branches below or email info@douglaspartners.com.au

BALLINA	☎ (02) 6681 1744
BRISBANE	☎ (07) 3237 8900
CAIRNS	☎ (07) 4055 1550
CANBERRA	☎ (02) 6260 2788
CENTRAL COAST	☎ (02) 4351 1422
COFFS HARBOUR	☎ (02) 6650 3200
DARWIN	☎ (08) 8948 6800
GEELONG	☎ (03) 5221 0711
GOULBURN	☎ (02) 4822 8395
GOLD COAST	☎ (07) 5568 8900
MACARTHUR	☎ (02) 4647 0075
MELBOURNE	☎ (03) 9673 3500
NEWCASTLE	☎ (02) 4960 9600
NTH WEST SYDNEY	☎ (02) 4666 0450
PERTH	☎ (08) 9204 3511
PORT MACQUARIE	☎ (02) 6581 5992
SUNSHINE COAST	☎ (07) 5351 0400
SYDNEY	☎ (02) 9809 0666
TOWNSVILLE	☎ (07) 4779 9866
WOLLONGONG	☎ (02) 4271 1836