



SKILLSETS

Contaminated land & remediation



Contaminated land auditing



Groundwater



Strategic Advisory



Expert witness



Asbestos



MARKET SECTORS



Property



Construction



Defence



Government



Industrial



Resource

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BRAD MAY

Principal Environmental Engineer/ QLD Contaminated Land Auditor/ NSW EPA Contaminated Site Auditor/ Director

Brad has developed assessment and remediation strategies to address and identify environmental risks at a vast number of complex degraded sites. Key investigations and subsequent remediation projects have included the assessment of soil and groundwater, groundwater and soil gas modelling, and the preparation of health risk assessments for major sites. Brad has designed and utilised numerous remediation technologies including bioremediation, air sparging, bio venting, chemical fixation / stabilisation, pump and treat, and traditional excavation projects. Brad has comprehensive experience in the preparation of tender documentation, site supervision, and project management of remediation projects up to the value of \$59M AUD. Mr May was engaged as the Environmental Manager for the Hunter River Remediation Project on behalf of Thiess Services. The HRRP project comprises the removal of up to 1.4M m3 of contaminated sediment, treatment and encapsulation with a capital expenditure of \$490M.

QUALIFICATIONS

- 1994** University of Queensland / Bachelor of Environmental Engineering (Process)
- 2002** UNSW / Master of Technology and Business Management
- 2005** QLD DES / Accredited Suitably Qualified Professional (Site Contamination)
- 2015** QLD DES / Approved Contaminated Land Auditor (under the QLD EP Act 1994)
- 2017** NSW EPA / NSW Contaminated Site Auditor
- 2017** Registered Exemplar Certified Lead EMS Environmental Auditor

MAJOR PROJECTS

- Major projects have involved the design of new waste collection and treatment processes particularly in the areas of clinical and hazardous wastes.
- Brad has also completed the design of landfills incorporating leachate collection and barrier systems using traditional and geosynthetic membranes.
- He has also undertaken numerous studies on closed landfill sites and developed rehabilitation and remediation strategies for landfill sites.
- Brad has also developed soil and water management plans and LEMPs for disposal facilities, estimation of expected lifespan of existing facilities, and the management and collection of waste.

AFFILIATIONS

- Chartered Member, Institution of Engineers, Australia (CPEng)
- Member, Environmental Engineering Society, Australia
- Member, Australian Water Association
- Member, Waste Management Association of Australia
- Member, Australian Contaminated Land Consultants Association
- Member, Australian Institute of Project Management

EXPERIENCE

CONTAMINATED LAND AND GROUNDWATER ASSESSMENT

- **Project / Technical Director. Gold Coast Light Rail Stage 2- CPB, Landfill Gas and Remediation Program.** Brad acted as the project and technical director for management of environmental aspects during construction of the Stabling yard work located on a former landfill site. The contract required that the works resulting in no net worsening of environmental conditions and required a baseline for soil, groundwater and landfill gas to be established and verified following construction. Design and control features were also incorporated into the project to manage landfill gas and establish a robust risk assessment framework
- **Project / Technical Director. Economic Development Queensland Friable Asbestos Waste Characterisation, Northshore Hamilton.** Brad acted as the project and technical director for the assessment a former asbestos disposal site to obtain a Contaminated Soil Disposal Permit from the QLD EHP for the disposal of over 125,000t of friable asbestos waste soil.
- **Project / Technical Director. Byron Bay Council, Brunswick Heads WWTP Stage 1 and 2 Assessment and Remediation NSW.** Brad acted as the Project Director and Technical manager for the assessment of and remediation of the Brunswick Heads WWTP to allow the site to be decommissioned and returned for public use.
- **Project Director, Airport Link, Northern Busway and Airport Roundabout, Queensland - (Thiess John Holland).** Brad was Project Manager responsible for all Contaminated Land and Acid Sulphate Soil Assessment for the Airport Link Project and acted as SQP for all assessment works. Brad developed numerous assessment strategies and reports along entire corridor on both State and Commonwealth administered land and prepared in accordance with relevant guidelines for TPR and regulatory review.
- **Project Manager and Technical Lead. GENCO Hazardous Waste Treatment Facilities Environmental Site Assessments, Thailand.** Project Manager and Lead Assessor in the Stage 1 ESA program for 5 Hazardous Waste Treatment and Disposal facilities across regional Thailand. The program included a series of details inspections and interviews with operator and the preparation of ESA reports and recommended corrective actions.
- **Technical Review and Project Director, Queensland Water Infrastructure, Wyaralong Dam Assessment and Remediation Program.** Site specific remediation works the livestock dips within the full supply level of Wyaralong Dam, which were required to be managed before inundation could take place. The site works required impacted soil to be buried at depth and encapsulated using a natural clay layer and geosynthetic clay liners to address potential migration of contaminants.
- **Technical Review and Project Director, Western Sydney Parklands, Stage 1 and 2 ESA programs followed by the develop of RAPs for each section.** Environmental Site Assessments across five specific areas of the Western Sydney Parklands for property divestment and redevelopment purposes. Program requiring supervision of project management, undertaking fieldworks for soil and groundwater sampling, reporting and liaison with client.
- **Technical Review and Project Director, OneSteel/Arrium, Numerous Stage 1 and Stage 2 Environmental Site Assessments.** Environmental Site Assessments across five states (NSW, QLD, VIC SA and WA) for property divestment purposes. Program requiring project management, undertaking fieldworks for soil and groundwater sampling, reporting and liaison with client. Unique challenges faced including satisfying state legislation, diverse historical site use including industrial and landfill and a range of potential contaminants.
- **Project Director and Technical Review, AGL Upstream Gas, Surat Basin, QLD.** Environmental site assessments were undertaken at seven separate AGL Upstream Gas sites to assess the levels of potential impact during the operational life of the plants. The sites included gas processing facilities, gas compressor stations, multiple above-ground storage tanks, evaporation ponds and historic landfarms. Brad liaised with the client in providing a focused proposal document based upon their tender and provided oversight for the ESA works, investigation personnel, sub-contractors, results and reports with visits to the sites and meetings with the client at key milestones.
- **Technical Review and Project Director, Delta Electricity, Wallerawang Coal Plant Targeted Environmental Site Assessment, Wallerawang, NSW.** Intrusive soil assessment for a UST associated with coal loading facility, as a result of a contamination notice submitted to regulatory body. Completion of all project deliverables including drilling, soil sampling, reporting, project management and client liaison.

- **Project Director, Gold Coast Desalination Alliance, Queensland.** Brad was the Project Manager for the assessment and management of contaminated land for the Tugun Desalination Project. Works included numerous assessment reports due to historical landfilling and decommissioned WWTP.
- **Project Manager, Rockdale City Council, New South Wales.** Brad was the Project Manager for a contamination Investigation of 80 residential properties affected by industrial waste. Areas contaminated with Volatile Organic Compounds such as TCE and Hexachlorobutadiene were delineated and remediation strategy outlined. A Quantitative risk assessment was undertaken as part of the remediation options.
- **Project Manager, State Rail Authority, New South Wales.** Brad was the Project Manager for the Wollie Creek Groundwater Assessment and Modelling and Remediation. Brad conducted a detailed groundwater assessment and 3D computer modelling of TCE, PAH and TPH impacted groundwater and development and installation of a groundwater remediation system.
- **Project Manager, State Rail Authority, New South Wales.** Brad conducted an Ecological and Human Health Risk Assessment of former gasworks site in Macdonaldtown, Sydney. Projects included the development of site specific clean up criteria through a formal human health risk assessment. Sophisticated groundwater modelling was used to determine the ecological risks posed by the site. Remediation strategy was developed to address risks at the site.
- **Project Manager, New South Wales Department of Aging, Disability and Home Care/ New South Wales Department of Commerce.** Brad completed a Stage 2 ESA program for the Stockton residential centre located near Newcastle. Potential contamination sources were identified and included an uncontrolled landfill that comprised medical waste, hazardous material and asbestos location within the dune sands, a petroleum UST farm and coal fired boiler house. The Stage 2 ESA included an assessment of soil, waste and groundwater to develop cost effective management strategies for the site.
- **Project Manager, Department of Defence - Bulimba Barracks South Queensland Joint Logistics Unit, Queensland.** Brad conducted detailed Stage 2 Contaminated Site investigations including the installation of a network of groundwater wells, comprehensive soil sampling and soil vapour screening across the entire site. Intrusive investigations focused on underground storage tanks, waste disposal locations and effluent disposal locations. The Stage 2 ESA reports were prepared on behalf of Defence as part of a national baseline assessment of Defence logistic properties.
- **Project Manager, Department of Defence - Damascus Barracks, Sugarmill Road, Meeandah, Queensland.** Brad conducted detailed Stage 2 Contaminated Site investigations including the installation of a network of groundwater wells, comprehensive soil sampling and soil vapour screening across the entire site. Intrusive investigations focused on underground storage tanks, waste disposal locations and effluent disposal locations. The Stage 2 ESA reports were prepared on behalf of Defence as part of a national baseline assessment of Defence logistic properties.
- **Project Manager, Department of Defence - North Head Artillery School, New South Wales.** Brad was the Project Manager for the detailed Stage 2 Investigation and subsequent remediation of the strategic sites prior to hand over the Sydney Harbour Foreshore Trust. The assessment included the management of a detailed UXO (unexploded ordinance) assessment and survey program of historical practice firing ranges. Intrusive sampling was conducted in key areas of risk including underground storage tanks, hazardous material storage and waste disposal locations. A review of historical activities identified a number of potential radioactivity risk areas and was screened for residual risks. Areas of impact associated with hydrocarbon impacted soil and groundwater was completed and the areas successfully validated prior to disposal by Defence.
- **Project Manager, LBB JV, North South Bypass Tunnel, Queensland.** Brad was involved in a number of asbestos and contamination investigations for the northern and southern portals as part of the tunnel construction works including delineation through stage 2 site investigations. Remedial strategies were developed for offsite disposal of waste soils and on site containment.
- **Project Manager, Miriam Vale Council, Queensland.** Brad conducted a detailed groundwater assessment of landfill and sludge disposal sites in Agnes Waters and Bororen. Installation and a groundwater monitoring networks and environmental sampling.
- **Project Manager, Trackstar Alliance, Queensland.** Brad conducted a groundwater assessment for historical landfill site including assessment of regional impacts and leachate quality. Detailed hydrogeological assessment was utilised to assist in the developed of remediation strategies.

- **Project Manager, Auckland Railyard Stage 2 Investigations, New Zealand.** Brad was the Project Manager for the Stage 2 investigation of disused railways lands extensively filling with harbour silts and sediments including waste disposal and remediation strategies.
- **Project Manager, City of Sydney, Glebe Foreshore Contamination Investigations, New South Wales.** Brad was the Project Manager for Stage 2 Soil and Groundwater investigations along 3km of Sydney Harbour foreshore as part of proposed redevelopment. Project identified significant Hydrocarbon and heavy metal contamination at the foreshore. Remedial strategies were developed to address environmental and human health risks.
- **Project Manager, Australand Discovery Point, New South Wales.** Brad prepared a Site Specific Contaminated Soil management plan for Development area to manage residual PAH soil contamination.
- **Project Manager, Randwick City Council, New South Wales.** Brad was involved in Identification and Environmental Assessment of 18 Landfill sites throughout the Randwick LGA. Identification and Hazard mapping was followed by site specific investigations for all hazard areas.
- **Project Manager, Albury City Council, New South Wales.** Brad conducted the Stage 2 Site Investigation of former gasworks site and assessment of environmental and human health risks. He also prepared a RAP for the site incorporating SVE/MPE and excavation works and Monitored Natural Attenuation.
- **Project Manager, State Rail Byron Bay Rail Site, New South Wales.** Brad conducted a detailed site investigation of SRA property including residential and commercial land use.
- **Project Manager, New South Wales State Rail Authority, New South Wales.** Brad conducted a site investigation of large complex industrial site and formulation of remediation strategies for Leichhardt Bus Depot Site. Site was impacted with multiple areas of free phase products and variety of lay down mechanisms.
- **Project Manager, Caltex Australia.** Brad completed the Assessment of Numerous Retail and commercial petroleum sites through Australia, included the assessment of groundwater, soil and soil vapour. Remediation strategies were included site supervision and validation.
- **Project Manager, Meriton Apartments Rhodes, New South Wales.** Brad completed the Assessment of Acquisition site at the Rhodes Peninsular development area. Assessment of impacted fill soils to comply with the proposed redevelopment plan for the site.
- **Project Manager, Yass Shire Council, New South Wales.** Brad conducted a review of existing site information and development of a suitable remediation strategy for rural gas works site.
- **Project Manager, Sydney Water Corporation Environmental Site Assessment, New South Wales.** Brad was the Project Manager and conducted an Environmental Site Assessment of SWC Fairfield Wastewater Treatment Plant. This assessment included soil, groundwater and surface water samples and environmental and Human Health risks posed by facility.
- **Project Manager, Hunter Water Corporation Environmental Site Assessment, New South Wales.** Brad was the Project Manager for Environmental Site Assessment of HWC West Wyalong Wastewater Treatment Plant. Project work included Assessment included soil, groundwater and surface water samples including analysis for human pathogens and viruses; Assessment of Environmental and Human Health risks posed by facility. Recommendations included advice of plant decommissioning.
- **Project Manager, Hunter Water Corporation Environmental Site Assessment.** Brad was the Project Manager for Environmental Site Assessment of HWC Marmong Point Wastewater Treatment Plant. Project work included Assessment included soil, groundwater and surface water samples including analysis for human pathogens and viruses; Assessment of environmental and Human Health risks posed by facility; and recommendations included advice of plant decommissioning.
- **Project Manager, Sydney Water Corporation Environmental Site Assessment, New South Wales.** Brad was the Project Manager for Environmental Site Assessment of SWC Toongabbie Sewerage Transfer Station. Project work included Assessment included soil, groundwater and surface water samples including analysis for human pathogens and viruses. Assessment of environmental and Human Health risks posed by facility. Recommendations included advice of plant decommissioning.
- **Project Manager, Sydney Catchment Authority, New South Wales.** Brad was the Project Manager for the Environmental Assessment of sensitive SCA Lands. Investigation and remediation options of SCA remote lands

including sheep dips sites, pesticide testing facilities and remote homesteads in order to protect the existing water quality in the catchment.

- **Project Manager, Diverse Property Group, Brisbane.** Brad conducted the Stage 1 Due Diligence assessment for property acquisition in Townsville. Site was previously quarried and utilised for encapsulation of 100,000m³ of cement kiln dust. Remediation options and cost estimates were prepared to assist in the property transaction and negotiations.
- **Project Manager, BHP Steel, New South Wales and Queensland.** Brad was the project manager of Contamination Investigations for three BHP Tubemakers sites in NSW and QLD. He conducted extensive investigation of soils, groundwater and surface water contamination and radioactivity investigation, and managed areas impacted with heavy metals, Phenol and PAHs.
- **Project Manager, Integral Energy, New South Wales.** Brad was the Project Manager for Contamination Investigation of 16 Sites throughout NSW. Site had been impacted by petroleum, creosote and PCB's. Management options and remediation options presented for each site.
- **Project Manager, Energy Australia, Sydney.** Brad was the Project Manager for Contamination Investigation of 10 Energy Australia site. He worked on areas impacted by PCB's Heavy Metals and PAH's identified and remediation options were presented.

SITE REMEDIATION

- **Project Director, Economic Development Queensland/Liberty Industrial, Asbestos Remediation, Theodore Barcham Link, Northshore Hamilton.** In this project, Brad acted initially as the SQP and later as the project and technical director for the remediation of a former asbestos disposal site. The project required the removal and disposal of over 125,000t of friable asbestos wastes to allow the development of a new link road and future residential development. The site was successfully validated in accordance with the QLD EP Act and approved by the appointed Auditor.
- **Environment Manager, Thiess Services, BHP Billiton Hunter River Remediation Project, New South Wales.** Brad was the environment manager for the \$890Mill remediation project to remove over 1.4 Million m³ of impacted sediments from the Hunter River. He was responsible for all regulatory approval and compliance and on site management of environmental monitoring and occupational exposures, full time on site presence through the works to ensure remediation goals achieved.
- **Technical Review and Project Director, Thiess Services, Orica Car Park Waste Encapsulation (CPWE) Remediation Project, Banksmeadow, NSW.** Supervision of validation of soil materials treated through Directly-heated Thermal Desorption Plant (DTDP) and validation of final excavated surfaces for waste materials generated from historical production of industrial organic chemicals that was encapsulated within a deteriorating containment cell. Contaminants of concern include: hexachlorobenzene (HCB), hexachlorobutadiene (HCBd) as well as other chlorinated VOCs.
- **Technical Review and Project Director, Milsearch/ Department of Defence, Columboola Old Chemical Warfare (OCW) Project.** Assessment and UXO Destruction project commissioned by the Department of Defence (DoD) to address remnant Unexploded Ordnance (UXO) and chemical warfare agent (CWA) containing munitions due to the past use as a US Army Ammunition Depot.
- **Project Manager, Airport Link, Northern Busway and Airport Roundabout- (Thiess John Holland).** Brad was responsible for management and remediation of a number of degraded sites including historical landfill, petroleum sites and bulk fuel supplies. Projects incorporated the development of suitable assessment programs and remediation plans to address soil and groundwater remediation and allow the construction of various surface and subsurface infrastructure.
- **Project Manager, Gold Coast Desalination Alliance, Queensland.** In this project, Brad's duties included management of landfill gas impacts adjacent the project site and formulation of a landfill gas management

strategy. The strategy included a monitoring program throughout construction and the design and specification of a Landfill gas barrier wall adjacent the historical landfill areas. The barrier wall consisted of a Vinyl sheet piling system in conjunction with a landfill gas collection and ventilation system.

- **Project Manager, Trackstar Alliance/Thiess Services, Queensland.** In this project, Brad's duties included site supervision and management of remediation project for the Robina to Varsity Lakes Railway project. The Station site was previously used as an illegal landfill that presented a risk to development through methane generation and impacted groundwater and soils. Full time supervision over 18mth works program and environmental monitoring. A final Validation Report was prepared to demonstrate that environmental goals were achieved and allowed the site to be removed from the QLD EPA Environmental Management register.
- **Project Manager, ESA and Remediation Options Assessment, Tiplers Resort, South Stradbroke Island, QLD.** Services provided to the client with an Environmental Site Assessments undertaken at the iconic Tiplers Resort to determine the level of impact during its operational life. Brad provided the client with open and honest communication relating to issues on and off the site prior to the Gold Coast City Council could proceed with the re-development phase of the resort. Reports detailing additional environmental works were provided to the client with the required works still being undertaken at the site.
- **Project Manager and Technical Reviewer OneSteel, Pagewood Project NSW, Groundwater investigations and remediation at a former industrial site.** Prepared a numerical model (solute fate and transport) to assess the suitability and effectiveness of monitored natural attenuation (MNA) in reducing concentrations of dissolved phase chlorinated solvents, primarily trichloroethene (TCE) and tetrachloroethene (PCE). Prepared a remediation feasibility assessment and remediation action plan (RAP). Undertook a quantitative microbial assessment of bio stimulation and bioaugmentation as a preferred remedial option, which included sampling and analysis of genetic sequences and quantifiable populations of dechlorinating bacteria. Designed remediation injection trials using surfactant enhanced groundwater flushing. Prepared a sampling, analysis and quality plan (SAQP) for a groundwater monitoring program to collect reliable and useful groundwater data. Prepared and managed tender process for vapour intrusion investigation works and Quantitative Health Risk Assessment (QHRA).
- **Project Director and Technical Advisor. OneSteel, Sunshine Project, VIC. Project Groundwater investigations and remediation at a former industrial site.** Managed and Peer Reviewed supplementary groundwater investigation and remediation works. Conducted technical interpretation of groundwater data. Prepared a RAP and designed and managed pilot remediation works to assess the suitability and effectiveness of surfactant enhanced groundwater flushing in reducing free phase hydrocarbons. Prepared an SAQP for a groundwater monitoring program to collect reliable and useful groundwater data.
- **Project Director and Technical Advisor. Orica and Thiess Services, Botany Car Park Waste Encapsulation Project.** Responsible for reviewing data provided by the contractor in relation to the environmental performance to ensure that works comply with the requirements of the RAP and EPL and provide guidance on environmental management, systems and plans relating to the operation of the thermal desorption plant. Where necessary assist Orica and Thiess to assess opportunities for varying the EPL. Brad has also been responsible for developing and implementing the mechanisms and registers that the contractors are required to maintain for review, in order for these mechanisms and registers to comply with the requirements of the RAP and the EPL.
- **Project Manager, Caldas Developments, Sydney.** Brad was involved in the design and installation of an In-situ air sparging bio-venting remediation system. System was designed and installed around a proposed development to remediate volatile organic compounds in soil and groundwater.
- **Project Manager, Thiess Services, Gold Coast Desalination Alliance, Queensland.** Brad was involved in the development of the Site Remediation Action Plan for the Removal of 280,000m³ of landfill wastes. The RAP

included the design of an onsite Containment Cell and remediation of excavated areas. He also managed onsite works including soil validation, groundwater monitoring and discharge, landfill gas monitoring, asbestos in air monitoring and general compliance with the RAP over the 5-month remediation program. The program included the validation reporting and liaison with the Appointed TPR.

- **Project Manager, Trackstar Alliance, Queensland.** Brad was involved in the development of the Reedy Creek Remediation Action Plan for the relocation of 1,000,000 t of landfill wastes. The RAP included an assessment of the existing environmental constraints including the extraction and disposal of groundwater impacted by leachate, atmospheric monitoring and site validation to the satisfaction of the appointed TPR.
- **Project Manager, LBB JV, North South Bypass Tunnel, Queensland.** Brad was involved in the development of remedial strategies for asbestos impacted soils including offsite disposal and on site encapsulation. He provided ongoing site supervision for compliance with the RAP and validation sampling.
- **Project Manager, Thiess Services Homebush Bay Remediation Site, New South Wales.** Brad performed a review of existing Environmental and OH&S procedures manual for the remediation of Dioxin Contamination in Homebush Bay NSW. The review was designed to provide a third-party review of the proposed trigger levels and OH&S monitoring trigger levels and detailed biological OH&S monitoring program.
- **Project Manager, Department of Defence.** Brad was the Project Manager for the Design and Documentation of a contaminated soil monofil in Rockhampton, site selection and design specifications. The design had to take into account 100 years' flood levels and future land use.
- **Project Manager, Abbotsford Gasworks Remediation project for Australian Gas Light Company, NSW.** Brad conducted an assessment of up to 20 residential properties developed on a historical gasworks. The gasworks was closed in the 1900s and residual gasworks wastes and infrastructure remained at the site. Remediation through the excavation and disposal was completed over 18 months.
- **Project Manager, Fabcott (Woolworths), New South Wales.** Brad's project work included remediation of 13000t of Asbestos impacted soils from Sydney development site; development of remediation strategy and onsite management of remediation contractors and site validation reporting.
- **Project Manager, Leichhardt Bus Depot Site for Sate Rail Authority, New South Wales.** Brad was the Project Manager for pilot testing of Bioremediation technology on site. The remediation strategy called for an innovative strategy in accordance with the SRA commitment to sustainable development.
- **Project Manager, International Client (Confidential).** Brad provided remediation and management advice for asbestos clean-up in Western Australia. Specialist advice on the management of impacted site prior to large-scale development of 70 ha site including preparation of Asbestos management plan for construction.
- **Project Manager, Tyco Water, Sydney.** Brad's project work included remediation supervision and validation of fill materials impacted with heavy metal, Lead and Zinc and TPH. An XRF unit was used to obtain real time on site data to direct plant and equipment with minimal down time.
- **Project Manager, State Rail Authority, NSW.** Brad conducted a Groundwater Assessment and Modelling and Remediation for Wollli Creek. He was the Project Manager for a detailed groundwater assessment and 3D computer modelling of TCE, PAH and TPH impacted groundwater and development and installation of a groundwater remediation system.
- **Project Manager, DPWS (NSW EPA), NSW.** Brad's project work included Site Remediation and Validation of a residential property impacted with industrial waste. Previous investigations identified TCE, PCE and HCBd compounds present in site soils. SKM undertook remediation and validation work to be signed off by the NSW EPA under the Environmental Trust funding.

- **Technical Adviser, Wollie Creek Site Remediation for Rail Access Cooperation, New South Wales.** Brad was a full time on-site technical adviser for the management of remediation project for the Airport Rail Link. He prepared validation report for the successful remediation of 20 000m³ of PAH, TPH and Heavy metal impacted soil.
- **Project Manager, Department of Housing, Abbotsford.** Brad's project work included remediation of PAH impacted soil on residential properties. Brad prepared a validation report outlining the successful remediation of the site.
- **Project Manager, Chullora Rail Yards Redevelopment, NSW.** Brad inspected hazardous materials of rail manufacturing site. Brad prepared technical specifications for the demolition of entire site and management procedures for hazardous materials, and he provided supervision of demolition contracts.
- **Project Manager, Royal Prince Alfred Hospital Demolition, New South Wales.** Brad conducted a soil contamination assessment of demolition site and identified contamination and contamination management options, validated sampling and reporting.
- **Project Manager, Department of Defence, North Territory.** Brad prepared the Lee Point Receiver Station Validation Report Defence Property Lot 9737, Nightcliffe Darwin. Brad developed a validation sampling program for the remediation works at the Receiver station including the removal of underground storage tanks and associated impacted soils. The validation program was compiled into a validation report for submission to Defence prior to disposal of the property. Brad was involved in numerous remediation projects for petroleum sites throughout Australia for a wide variety of Clients including Caltex, Department of Defence and property developers.

ENVIRONMENTAL RISK ASSESSMENT

- **Project Manager, Rail Authority, New South Wales.** Brad conducted Ecological and Human Health Risk Assessment of former gasworks site in Macdonaldtown, Sydney. Projects included the development of site specific clean up criteria through a formal human health risk assessment. Sophisticated groundwater modelling was used to determine the ecological risks posed by the site.
- **Project Manager, Pacific National, NSW.** Brad developed a remediation strategy to address risks at the site. Brad was the Project Manager for preliminary health risk assessment for site impacted with scheduled wastes and VOC impacted groundwater. Development of risk assessment models and derivation of exposure routes.

ENVIRONMENTAL MANAGEMENT AND PLANNING

- **Project Manager, Sydney Catchment Authority, New South Wales.** Brad contributed to the development of a site-specific REF for the SCA drilling program in the Megalong Valley located in the Blue Mountains. The REF was designed to facilitate community consultation and negotiations with stakeholders as well as providing the environmental goals for the drilling program.
- **Project Manager, Cescastle Waste Recycling Centre EIS preparation, New South Wales.** Brad provided specific waste processing and management component of EIS including site layout and equipment and operations specification.
- **Project Manager, Cescastle Waste Recycling Centre EIS preparation, New South Wales.** Brad provided specific waste processing and management component of EIS including site layout and equipment and operations specification.

HAZARDOUS BUILDING MATERIALS AND OH&S

- **Project Manager, Telstra.** This project was designed to identify asbestos products prior to major refurbishment and develop remediation and removal strategies. Brad managed the Inspection program for 12 Strategic Telstra Facilities across the Sydney Metropolitan area.
- **Project Manager, Tyco International.** Brad provided Asbestos Awareness training for multiple businesses across the Tyco Group in ACT, Victoria and NSW. Group specific training packages were developed to assist in the workshop session for, managers, technical and sales staff.

- **Project Manager, Investa Property Group.** Brad provided Asbestos Awareness training for multiple businesses across the Investa Group in Queensland, Victoria and NSW. Group specific training packages were developed to assist in the workshop session for Facility Managers and Business Unit leaders.
- **Project Manager, Australian Water Technologies, New South Wales.** Brad's project work included OH&S and Dangerous Goods design review and site audit for a water treatment plant near Lismore NSW. The initial inspection of the detailed design was completed with a site inspection of the completed facility to ensure OH&S recommendations were effectively implemented.
- **Project Manager, Australian Broadcasting Corporation, New South Wales.** Brad's project work included OH&S and Environmental Risk Review of ABC broadcasting centres across NSW; development of a Specific OH&S risk register and actions improvements strategy. The review was designed to provide a third-party review of the proposed trigger levels and OH&S monitoring trigger levels and a detailed biological OH&S monitoring program.

POSITION SUMMARY

● 2015 – Present	Managing Director/ Principal Environmental Engineer	Epic Environmental Pty Ltd
● 2011 - 2014	Managing Director/ Principal Environmental Engineer	CDM Smith Australia
● 2007 - 2011	Managing Director/ Principal Environmental Engineer	E3 Consult
● 2006 - 2007	Contaminated Land Manager (including Geochemical and Groundwater sections)	HLA Envirosciences
● 2004 - 2006	NSW Manager (responsible for establishing MPL Sydney Office and development NSW business)	MPL
● 1997 - 2004	Contaminated Land Manager (NSW groundwater and geotechnical services group)	Sinclair Knight Merz