

Qualifications

Bachelor of Engineering, Swinburne University of Technology 1989

Process Safety Design & Mgt (Honours Course), JCU, 1996

Certifications

Registered Professional Engineer (RPEQ) (Chemical)

PM Certification: General Project Advanced (Aurecon)

Chartered Professional Engineer (CPEng) -National Professional Engineers Register (NPER)

Environmental Auditor (Exemplar)

Sustainable Sugar Production (Short Course)

Memberships

Australasian Land and Groundwater Association

Engineers Australia

Stormwater Industry Association

WMRR Association

Australian Water Association

Env. Engineers Society

CQMRG

Specialisation

Chemical Engineering

Environmental Engineering & Mgt

Project Management

Information Technology

Years in industry

33

Neil is a Senior Chemical Engineer with over 30 years of process and environmental engineering experience in project management, solid and liquid waste management, environmental audits, asset closure and transformation, environmental management plans, environmental impact assessment, natural resource management, water quality, contaminated sites, disaster and risk management, cleaner production, sustainability, process design & water/wastewater treatment. Neil also has experience in process design for food, pharmaceutical & light chemical products, hazardous materials & dangerous goods and IT services. Neil is a Registered Environmental Auditor (#14034) and RPEQ (Chemical) (#12051).

Contact Details

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Experience

May 2021 to current Blue Terrain Pty Ltd

Director / Principal Consultant

Blue Terrain Pty Ltd is a new consulting business focused on the environment and developing sustainable business operations.

Advice relating to water quality and wastewater overflow management/remediation.
 Confidential client. (2021/2022).

June 1996 to July 2020 Aurecon Australasia Pty Ltd

Technical Director - Advisory, Senior Chemical/Environmental Engineer

Highlights:

- Initiated and developed one of the largest environmental and spatial data consulting teams (up to 15 professionals) in North Queensland.
- Initiated & developed the contaminated land business across Aurecon, Australia/NZ.
- Client Manager for Defence Environment (5 years). Led the 2019/2020 bid for the largest ever Defence Infrastructure Panel – Environment, Heritage & Estate Engineering Services win for Aurecon.
- Initial development of asset transformation and mine closure capability.
- Development and support of the Aurecon waste management business in Australia, New Zealand and Asia.
- Aurecon Advisory (Australia/New Zealand), Environment & Planning Leadership Team.

ENVIRONMENTAL INVESTIGATIONS, MONITORING & ASSESSMENTS

Roles/activities - Project Director, project management, peer review, environmental impact assessment reporting, review of environmental factors (REF) assessment and reporting, air/noise/water quality monitoring and assessments, visual impact assessment,

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environmental approvals, environmental risk assessment, environmental design reports, environmental management plans. **Clients and industry** – Commonwealth, State and Local Government, Department of Defence, energy, mining and resources, construction, transport, land development, agriculture and tourism.

- Project Manager, Environmental impact assessments, proposed Port Access Rd, Mackay. Qld Transport & Main Roads (2019/2020)
- Review of Bushfire Management Plans. Department of Defence (2019/2020)
- Whitsunday Skyway tourism project Review of Environmental Factors (REF) & visual impact assessment.
 Confidential (2019)
- Project Manager and review of High-Risk Species Mgt Plan. NQBP (2019)
- Proposed Western Sydney data centre air quality review. Confidential. (2019)
- Project Manager, various mine rehabilitation projects. Meandu Mine, Qld. Stanwell & Downer EDI. (2015-2019)
- Assessment (technical & cost) of uranium mine closure plan. Confidential. (2018)
- Project Director, Burdekin Irrigation Area groundwater monitoring program (20 locations x 3 samples). Qld
 Department of Environment & Science (2017/2018).
- Review of process & environmental issues for proposed bioindustry facility. Bioprocessing Australia. (2017 2018)
- Closure Plan for remote Commonwealth Government science facility. Confidential (2017)
- Project Director, Vines Ck Bridge replacement planning & environmental approvals. Qld Main Roads (2016/2017)
- Project Director, Environmental constraints & risk assessment for development of waterfront areas in Mackay.
 Mackay Regional Council (2016/2017)
- Project Director, Brightly Quarry bushfire management plan. BRW Transport & Quarries Pty Ltd. (2016)
- Technical review and advice for wetland, surface and groundwater monitoring for the Roe Highway extension project. Main Roads Western Australia. (2015-2016)
- Project Director/Leader, Cape Gloucester subdivision environmental approvals. Aldabra Pty Ltd (2015-2016)
- Project Director/Leader, Open space assessment & mapping, Mackay Region. Mackay Regional Council. (2014/2016)
- Environmental review & Notice of Intent for proposed Northern Territory development. Confidential (2014)
- Project Director, West Funnel Ck Bridge Replacement Environmental Assessment Report (EAR). Mackay Regional Council (2013)
- Project Director/Leader, Contractor EMP reviews for construction works. Mackay Regional Council (2013)
- Update of Final Void Management Plan & Mine Rehabilitation, Baralaba Coal Mine. Cockatoo Coal (2012)
- Project Director/Leader, Planning Scheme Overlays update. Mackay Regional Council. (2011/2012)
- Project Leader, EIS for proposed new HV switching station in the Bowen Basin. Powerlink Qld. (2011)
- Project Director, Mine rehabilitation assessments of Eaglefield Mine area. Peabody Energy. (2010)
- Project Leader, Bakers Creek Managed Aquifer Recharge (Mackay Regional Council, 2010-2011)
- Project Leader Environmental Assessment (water mgt) for new coal mine (Togara North). Xstrata
- Risk assessment and waste management for Jilalan Rail Yard Expansion ElS. Queensland Rail
- EIS and EMP for a small access road to an industrial storage site, Hay Pt, Qld. G Turnbull
- Project Leader and reporting, Jubilee Pocket Substation EIS. Ergon Energy
- Project Leader, 80 km Innisfail-Edmonton HV Transmission Line Replacement EIS. Powerlink
- Stormwater and water quality advice for a Bowen development. Dept of Env & Water Resources

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- Environmental risk assessment for proposed power station in southern WA. Confidential client
- Review of water, noise and air quality monitoring for Hay Point Rail triplication. Queensland Rail
- Review of site-based stormwater management plans for urban developments. Various clients
- BMA Peak Downs Infrastructure Relocation Environmental Workpack Leader for EIS
- Project Leader and Review of Commonwealth Islands Work Plans project. GBRMPA
- Review of eight EIA's for upgrade works at Uluru Kata Tjuta National Park. Commonwealth DEH
- Six Environmental Impact Reviews and EMPs, Woodwark Bay Development, Whitsunday, Qld
- Project Mgt & Review of Avifauna Management Plan for HV Powerline Towers. Powerlink Qld
- REF/EMP for proposed Airlie Coast Development, Whitsunday. Grant Samuel (NSW).
- REF/EMP for proposed Explorer Estate Stage 3A development. Denar P/L.
- EDR for several sections of the Dawson Highway Upgrade, Central Qld. Qld Main Roads.
- EMP for Gracey Creek bridge upgrade in Far North Queensland. Qld Main Roads.
- EMP for upgrade of a section of the Bruce Highway at Ilbilbi, Qld. Main Roads
- REF/EMP for upgrade of Shoal Point Rd, Shoal Point. Qld Main Roads
- EMPs for various roadworks around Mackay. Mackay City Council
- REF for upgrade of Harbour Road, Mackay. Qld Main Roads.
- Environmental Design Report for upgrade of a section of the Fitzroy Development Road, QDMR
- REF for proposed Airlie Beach village bypass. Whitsunday Shire Council/Qld Main Roads.
- Review of Environmental and Cultural Heritage Assessment for Emerald Bypass. Qld Main Roads
- REF/EMP for proposed Norman River Bridge and approaches. Normanton. Qld Main Roads.
- Environmental overviews of eight oil shale deposits. Confidential client.
- Bruce Hwy upgrades at Glenella, Benaraby, Collinson Lgn, MacKenzie Ck/Aims Road, Marmor
- REF/EDRs for Dawson Highway upgrades, Onion Creek, Springsure, Banana, Rolleston, Comet Rv Bridge
- REF for new bridge and realignment of Ayr-Dalbeg Rd. Expedition Pass Creek, North Qld Main Roads
- REF for a proposed electrical substation near Mackay. Powerlink.
- Environmental Impact Review for proposed tourism development. St Bees Island, Qld
- Environmental Impact Review for proposed heavy engineering workshop. Westhill, Mackay
- Environmental Review & Site-Based Mgt Plan-Hazardous Waste Management facility. NQRR, Mackay
- Air, noise and infrastructure impact assessment. Proposed Shute Harbour Marina. G Betros & Assoc
- Environmental Impact Review for Proposed Dolphin Lakes Development, Mackay. G Fergus
- Environmental Management Plan (Construction), Azure Bay/Coral Passage, Keswick Island Pty Ltd
- Environmental Management Plan (Construction), Basil Bay, Keswick Island. Kevroy Pty Ltd.
- Site Based Management Plan for dredging of Paluma and Benham Creek weirs. Thuringowa Water
- Site Based Management Plan and IEMS for EPA Licence for a quarry. Joe Haber, Mackay (2003)
- Water Quality Monitoring Plan, Bakers Creek. Mackay Water
- Proposed Shute Harbour public boat ramp environmental assessment. Whitsunday Shire Council
- Mackay Effluent Reuse Project environmental review and risk assessment. Mackay Water

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- Site Based Management Plan, Hook Island Wilderness Resort. QLD
- Environmental review for proposed electrical substation. Ergon Energy, Townsville, QLD
- Env. update, Mackay Airport Strategic Plan and Port Development Plan. Mackay Port Authority
- Environmental Site Supervisor (Auditor), Keswick Island Development. EPA/Transtate
- EMP(Construction) for 10km upgrade of Landsborough Hwy, south of Tambo. Golding Civil
- Project management & EMP for Quarry Management Plan for Townsville guarry. Queensland Nickel
- Review of noise assessment and passive gas monitoring reports for Stuart Oil Shale site. Suncor
- Review of regular groundwater and surface water monitoring reports for Stuart oil Shale site. Suncor
- Water quality monitoring for Gooseponds Lake construction. Private client
- Review of EMOS for cyanide extraction of gold in Boyne valley. Gladstone Area Water Board
- Design/implementation of water quality monitoring, Mackay seaport & airport. Mackay Port Authority
- Initial Advice Statement (IAS) for a significant farm dam at Nebo, Qld
- Environmental Impact Statement (EIS) for a large housing development. Seaforth
- Investigations and preliminary design to improve environmental management. BHP Moura, Qld
- Environmental Impact Statement (EIS & EMP) for a proposed motor sport complex in Mackay

WATER AND WASTEWATER TREATMENT

Roles and activities – Project management, water and wastewater treatment design and technical advice, stormwater management assessment and advice, algae management, discharge systems design and advice, risk assessment, biosolids management and onsite wastewater treatment. Clients and industry – Resources and mining, Department of Defence, State and Local Government, Water Authorities, energy, land development, manufacturing, tourism, agriculture.

- Wastewater Treatment Plant Upgrade project management, design and technical advice. DBCT. (2019-2020)
- Management & treatment of algae in coal port dam. Confidential (2018)
- Technical advice, Laura WWTP operation, discharge & algae mgt. Dept of Defence. (2017 2019)
- Technical advice, WWTP overflow. Innisfail. Cassowary Coast Regional Council. (2015)
- Technical advice for chlorine attenuation in discharges. SEQWater. (2014)
- Technical advice & estimate, Awoonga Dam WWTP upgrade. Gladstone Area Water Board (2012-2014)
- Stormwater runoff risk assessment, GLNG LNG Facility, Curtis Island. GLNG (2013)
- Wastewater treatment advice and preliminary design. Austicks Pty Ltd (2012)
- Review of stormwater system audit, Callemondah Rail Yard, Gladstone., Queensland Rail. (2011)
- Technical review, Bakers Ck WWTP Managed Aquifer Recharge study. Mackay Regional Council. (2011)
- Gordonvale Wastewater Treatment Plant Biosolids Study. Cairns Regional Council (2010)
- Wastewater treatment advice for Jilalan Railyard Expansion project. CSAJ.(2009/2010)
- Oil/water separator standard design review. Ergon Energy (2010)
- Lead Auditor, refinery stormwater management & wastewater treatment review. Caltex. 2010
- Awoonga Dam catchment water quality/quantity hazard assessment. Gladstone Area Water Board (2008)
- SBMP for onsite wastewater treatment/disposal and greywater reuse, Mt Vista, Seaforth. Qld
- Greywater reuse and onsite wastewater treatment and irrigation, Midge Pt, Demiscto P/L Qld.

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- Biosolids Management Plans for Mackay's three wastewater treatment plants. Mackay Water
- Mt Bassett Biosolids Environmental Management Plan (56,000EP). Mackay Water.
- Technical advice and review for Water Management Plan, Curragh Coal Mine, Qld.
- Site Based Management Plan for onsite wastewater treatment and reuse. Cape Gloucester Ecoresort. Qld
- Greywater reuse concept and preliminary design for 1200 lot development. Plantation Palms. Mackay
- Site Based Management Plan for onsite wastewater treatment and reuse, Erakala subdivision. C&S Joy.
- Site Based Management Plan, Eden Waters Retirement Village onsite wastewater treatment and reuse. Qld.
- Site Based Management Plan for Broken River Retreat onsite wastewater treatment and reuse. Qld.
- Review of stormwater management, Thomas Borthwicks & Sons meatworks, Mackay.
- Planning report for wastewater management and reuse of four small communities. Burdekin Shire.
- Wastewater treatment, Mackay Bulk Sugar Terminal. Queensland Sugar.
- Environmental review and risk assessment for the Mackay Effluent Reuse Project Feasibility Study
- Oily water management. BMA Crinum Coal Mine, Central Queensland.
- Noah's Beach Campsite, Daintree water and wastewater treatment. Qld NPWS
- Review of water and wastewater infrastructure for Blackwater and South Blackwater mines. BMA
- Review of meatworks stormwater discharges and associated risks. CMG Rockhampton
- Sludge handling review, Mackay Water Treatment Plant. Mackay Water
- Specification/Contract documentation for water/wastewater treatment. BHP Blackwater
- Review and audit of abattoir wastewater treatment and re-use system. CMG Innisfail, Qld.
- Peer review of wastewater treatment for West Byron STP EIS. NSW Dept of Public Works.
- Advice for water and wastewater treatment. Proposed holiday resort. Fiji
- Augmentation of Aurukun sewage treatment plant lagoon system. Aurukun Shire
- Augmentation of Gracemere oxidation ditch STP to 9,000 EP, Fitzroy Shire Council
- Review of and advice for proposed effluent re-use. CSR Plane Creek Mill
- Concept and preliminary design for sewage treatment and effluent reuse at Jumbun, North Queensland
- Review water quality, dissolved oxygen and treatment performance of Red Mud Dam. QAL
- Operation and Maintenance Manuals for sewage treatment plant. BHP Saraji Mine
- Design for upgrade of aerated sewage treatment lagoons. Emerald Shire Council
- Advice and review for water treatment requirements for the townships of Rubyvale and Sapphire
- Review and preliminary design for wastewater treatment abattoir/meat pattie plant. Coominya

WASTE MANAGEMENT

Roles and activities – Project management, waste management and sustainable systems design and advice, waste management and minimisation strategies and plans, waste to energy assessments, waste and recyclables modelling, approvals, hazardous waste advice, landfill management, landfill gas management, landfill environmental monitoring, waste audits, leachate management. **Clients and industry** – State and Local Government, Department of Defence, University of Melbourne, resources and mining, manufacturing, transport, Ports, agriculture, land and built environment developers.

Resource Recovery objectives and targets for new development, University of Melbourne (2020)

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- Technical advice for new quarantine waste facility, Hay Point/DBCT. NQBP (2018-2020)
- Goods and waste services preliminary design for International airport terminal (2019)
- Waste system design advice for multi-storey office building, Sydney. Confidential (2018)
- Technical advice & review, Ipswich waste to energy assessment. Deloittes / Ipswich City Council. (2018)
- Waste system preliminary design for multi-storey office building, Sydney. Confidential (2017)
- Economic & transport assessments for waste & recyclables across Victoria. Sustainability Victoria. (2017)
- Waste sector infrastructure review across Victoria. Infrastructure Victoria (2015/2016)
- New landfill cell approvals assistance (Murrayville). Mildura Rural City Council. (2015)
- Landfill Gas Remediation Action Plan, Mildura Landfill. Mildura Rural City Council. (2015)
- Hazardous waste export regulatory advice. Senes Consultants (Canada) (2014)
- Technical advice & Plan for Lake St Landfill gas management. Rockhampton Regional Council. (2013-2014)
- Landfill Operational Risk Assessment. Mildura Rural City Council (2013-2014)
- Technical review/support, landfill gas and groundwater monitoring & risk assessment of two landfills. Mildura Rural City Council (2011-2013)
- Technical advice for landfill gas management. Webb Dock Redevelopment. Port of Melbourne (2103)
- Mackay Waste Management Strategy workshop & advice. Mackay Regional Council (2012)
- Technical Lead, Archer landfill decommissioning contamination assessment. Palmerston City Council, NT (2011)
- Project Director-Landfill gas monitoring for 3 former landfill sites. Mackay Regional Council, Qld. (2009 2013).
- Waste Audit of North Queensland Defence Facilities, Department of Defence
- Waste management section for Jilalan Rail Yard Expansion EIS. Queensland Rail
- Risk review and environmental planning for land associated with the Mackay Waste Facility. MCC
- Project Leader, QNI Waste Audit. QNI Yabulu. (2005)
- Waste Management Strategy for Mirani Shire. Mirani Shire Council
- Budget advice for Rockhampton waste management strategy. Rockhampton City Council.
- Landfill gas review for proposed development of former brickworks/landfill. Hornsby Council, NSW
- Landfill gas report review and advice for proposed PCYC building. Whitsunday Shire Council.
- Concept design and brief for leachate treatment, Myocum Landfill. Byron Council, NSW.
- Timber mill waste management. Builyan Timber Mill, Central Queensland
- Waste audit, management plan and contract specification, Stuart Shale Oil Plant. SPP/CPM
- Advice for relocation of Aurukun landfill. Aurukun Shire Council.
- Waste audit and management strategy for QAL including landfill, waste reduction, bioremediation, Gladstone

NATURAL RESOURCE MANAGEMENT

Roles and activities – Project management, environmental monitoring and management, catchment management plans, risk assessments, waterway management plans, development scenarios and assessment. **Clients and industry** – State and Local Government, resources and mining, transport, NRM and water authorities.

- Technical review and advice for wetland, surface and groundwater monitoring for the Roe Highway extension project. Main Roads Western Australia. (2015-2016)
- Project Director, Botanic Gardens Lagoons Catchment Management Plan. Mackay Regional Council (2015)

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- Project Director, Botanic Gardens Lagoons Catchment Analysis & Modelling. Mackay Regional Council (2014)
- Don River Sand Extraction and Catchment Study. Whitsunday Regional Council (2011)
- Awoonga Dam catchment water quality/quantity hazard assessment. Gladstone Area Water Board (2007)
- Project Manager, Isaac Connors Water Resource Development Scenarios. Local/State Government & Industry (2005)
- Ross River Waterway Management System. NQ Water, Townsville City and Thuringowa City (2005)
- Urannah Dam Environmental Investigation. Qld Department of State Development (2004)
- Project Leader for Social and Economic Assessment, South East Qld Western Catchment Group. (2003)
- Haughton River Integrated Catchment Management Plan. Burdekin Shire Rivers Improvement Trust (2003)

RISK AND DISASTER MANAGEMENT

Roles and activities – Project management, Environmental and operational risk assessments, risk management plans, natural hazards and disaster risk management. **Clients and industry** – Local Government, resources and mining, transport, energy, water authorities.

- Landfill Operational Risk Assessment. Mildura Rural City Council (2013-2014)
- Technical review, landfill gas risk assessment. Mildura Rural City Council (2013)
- Stormwater runoff risk assessment, GLNG LNG Facility, Curtis Island. GLNG (2013)
- Natural Hazards and Disaster Risk Management Study. Hinchinbrook Shire Council. (2008)
- Environmental risk assessment for Jilalan railyard upgrade. Queensland Rail.
- Awoonga Dam catchment water quality/quantity risk & hazard assessment. Gladstone Area Water Board (2007)
- Initial environmental risk assessment for proposed biofuels power plant at Kwinana. Confidential client.

SITE CONTAMINATION ASSESSMENTS AND AUDITS

Roles and activities – Project Director, project management, land and water contamination assessments, site management and remediation plans, site decommissioning, peer review, technical advisor, development and management of the Aurecon contaminated land portfolio across Australia and New Zealand from 1997 until 2015. **Clients and industry** – Resources and mining, Department of Defence, State and Local Government, water authorities, energy, land development, manufacturing, tourism, agriculture, ports, transport, universities.

- Technical advisor/peer review of contaminated land assessment & remediation projects in Asia Pacific (1996-2019)
- Technical advice & review, Defence Base detailed PFAS assessment in northern Australia. Dept of Defence.
 (2018-2019)
- Technical advice & review, Defence ranges lead audit. Dept of Defence. (2017)
- Technical advice & review, Defence Base detailed AFFF assessment. Dept of Defence. (2017-2018)
- Technical advice & review, Webberley St rail corridor site assessment & management plan. Mackay Regional Council (2016)
- Project Leader, LPG Storage Facility site assessment. Origin Mackay (2016)
- Technical review of development application site contamination reports. Moonee Valley Council (2016)
- Desktop review and site remediation cost estimates for two large Defence sites. Department of Defence
- Preliminary Site Investigation of former historic brewery site for the UniSA Great Hall Project. UniSA (2015)
- Technical review & advice, Northern Territory site assessment & remediation (incl asbestos). DHA

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- Technical advice for groundwater management for carpark expansion construction. Brisbane Airport Corporation (2015)
- Technical reviews of various site assessments for rail and substation projects in NSW. Novorail (2013 2015)
- Technical review & advice for assessment of a large redevelopment in Kew. Major Projects Victoria. (2014)
- Melbourne Airport review/update of two Detailed Site Investigations for airport expansion. Melbourne Airport (2014)
- Technical review & advice, soil assessment & remediation (PAHs, BTEX, metals), Adelaide Convention Centre Expansion. SA Govt. (2011-2014)
- Technical review & advice for marine sediment assessment associated with the Barangaroo Project and Ferry Terminal, NSW. (Confidential) (2014)
- Third party technical review & advice for marine sediment sampling & analysis plans. SEWPaC. (2103)
- Groundwater assessment of former landfill site adjacent to the Murray River. Confidential. (2013)
- Technical Review and SQP, Creative Industries Precinct. QUT. (2013)
- Peer Review, Adelaide Airport Expansion Stage 1 and Stage 2 Assessments. Adelaide Airport Ltd. (2012-2013)
- Stage 1 assessment & Site Management Plan for closure of cement factory. Cement Australia. (2011/2012)
- Project Leader, site assessment for transformer oil spill. Ergon Energy. (2011)
- Technical assessment & reporting for Stage 1 & 2 assessment & SMP for closed WWTP, Groote Eylandt. NT PWC
- Project Leader, Stage 1 & 2 contamination assessment for closure of mine industrial area. Ensham. (2010-2011)
- Project Leader, Stage 1 & 2 contamination assessments and MCU at a CQ coal mine. Ensham. (2010-2011)
- Project Leader Harbour Rd, Mackay rail line site assessment and remediation. NQBP (2010)
- Technical Leader, Archer landfill contamination assessment for decommissioning. Palmerston City Council, NT
- Project Leader Additional assessment & remediation of decommissioned West Belconnen STP. ACT LDA
- Technical advice, soil contamination for design & construction of aircraft parking extension. Sydney Airport Corporation Ltd.
- Technical advice for Stage 1 & 2 assessments of two decommissioned industrial sites, Mackay Harbour. NQBP.
- Technical advice for Stage 1 & 2 assessment of CCA treated waste area at a landfill. Banana Shire Council.
- Stage 1 & 2 site contamination assessment and SMP for former Mt Bassett WWTP. Mackay Regional Council
- Technical advice for excavation for a pipeline in a former rail corridor in Mackay. Mackay Regional Council
- Technical Advisor, Stage 1 & 2 Contamination Assessments in ACT. Department of Defence.
- Project Leader, Stage one and two assessment of former light industrial area, Marian. Fergus Builders.
- Project Leader, Stage 1 & 2 assessments, remediation and SMP of cattle dip site, Mackay. Plantation Palms
- Stage two sampling and analysis plans review for three rail lines. NSW (Confidential client)
- Stage one Environmental Assessments of 38 sites, include cattle dips and landfills, in North Queensland. Dept of Defence
- Stage two contaminated land assessment of oil spill at electrical substation. (Confidential client.)
- Stage one & two environmental assessment & remediation of retail site. Walkerston, Qld. (Confidential)
- Stage one site history and removal of site from EMR, Mackay Marina, Qld. (Confidential)
- Contaminated site assessment, remediation/validation and removal from EMR. Mackay. F Cortis

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- Site assessment advice and review for suspected radiation contamination. Gladstone. (Confidential)
- Stage one contaminated site audits for minerals processing plants, Townsville & Weipa (confidential)
- Design/review of assessment for metals refinery and rail site, Townsville. Main Roads
- Assessment and remediation of large sulphuric acid spill. Private client. Mackay
- Stage one contaminated site audit. CSR/Mackay Sugar Refinery, Mackay.
- Preliminary environmental site assessment of a contaminated site. Central Qld coal mine, BMA.

ENVIRONMENTAL AUDITS

Roles and activities – Project Director, project management, environmental audits, waste audits, dangerous goods audits, greenhouse gas audits. **Clients and industry** – Commonwealth, State and Local Government, Department of Defence, resources and mining, construction, transport, energy, manufacturing, agriculture.

- Technical advice and review, Boral Quarry Environmental and Operational Audit, Orange. Boral. (2017)
- Infrastructure reviews for the environment, science and waste sectors across Victoria. Infrastructure Victoria (2015/2016)
- Peer Review of National Greenhouse & Energy Reporting (NGER) audit reports for Clean Energy Regulator.
 Various confidential clients. (2014-2017)
- Lead Auditor for annual audit of GLNG LNG Facility MCU Approval, Curtis Island. GLNG Pty Ltd. (2012-2016)
- Audit (Lead Auditor) of Aldoga construction area. Bechtel Pty Ltd (2012 2013)
- Audit (Lead Auditor) of Port Central construction laydown area for Gladstone LNG facilities. GLNG Pty Ltd (2012)
- Audit (Lead Auditor) of RG Tanna construction laydown & works area for Gladstone LNG facilities. Santos. (2011)
- Audit of dredging works against EA Conditions for proposed LNG facilities. Gladstone Ports Corporation. (2010)
- Review of AS-1940 Audit of bulk fuel facilities around Gladstone. Gladstone Ports Corporation. 2010
- Lead Auditor, Statutory audit of stormwater system for a petroleum refinery in Brisbane. (2009/2010)
- Oil Management Audit, Queensland Alumina Refinery, Gladstone.
- ClimateSmart Business Cluster Audits for 7 Mackay businesses. Qld Dept of Env & Resource Mgt 2009-2010
- Waste Audit of North Queensland Defence Facilities, Department of Defence
- Environmental summaries, performance report and EMS update. Townsville Port Authority
- Project Leader, QNI Waste Audit. QNI Yabulu. (2005)
- Waste audit, management plan and contract specification, Stuart Shale Oil Plant. SPP/CPM
- Waste audit and management strategy for QAL including landfill, waste reduction, bioremediation, Gladstone
- Audit and site-based management plan for refined sugar terminal. Sugar Australia, Mackay Port
- Eco-efficiency audit of automotive workshop. Ken Day Automotive/EPA, Bundaberg
- Initial Eco-efficiency audit for Austicks as part of Qld EPA pilot study. Gladstone
- Review and audit of abattoir wastewater treatment and re-use system. CMG Innisfail, Qld.

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CLEANER PRODUCTION / SUSTAINABILITY / ECOEFFICIENCY / CLIMATE CHANGE

Roles and activities – Project Director, project management, sustainability assessments and management advice, greenhouse gas assessments and advice, climate change assessments and advice. **Clients and industry** – Commonwealth, State and Local Government, land and built environment development, transport, energy, manufacturing.

- Review and advice, greenhouse gas reporting requirements. Gladstone Area Water Board. (2019)
- Peer Review of National Greenhouse & Energy Reporting (NGER) audit reports for Clean Energy Regulator.
 Various confidential clients. (2014-2017)
- ClimateSmart Business Cluster Leader (Mackay) for 7 businesses. Qld Dept of Env & Resource Mgt 2009-2010
- Climate change assessment for disaster risk mgt study. Hinchinbrook Shire Council
- ESD recommendations for 1500 lot land development, Mackay. Plantation Palms Pty Ltd.
- Eco-efficiency audit of automotive workshop. Ken Day Automotive/EPA, Bundaberg
- Initial Eco-efficiency audit for Austicks as part of Qld EPA pilot study. Gladstone

PROCESS ENGINEERING, HAZARDOUS MATERIALS AND CONTROL SYSTEM DESIGN

Roles and activities – Project Director, project management, process design review and advice, dangerous goods and hazardous materials assessments and design, wastewater process design. **Clients and industry** –State and Local Government, Department of Defence, land and built environment development, resources and mining, water authorities, transport, energy, manufacturing.

- Review of process & environmental issues for proposed bio-precinct in North Qld. Confidential (2020)
- Dangerous goods assessments for proposed data centres in NSW, Qld & Vic. Confidential (2017-2020)
- Review of process & environmental issues for proposed bioindustry facility. Bioprocessing Australia. (2017 2018)
- Dangerous goods technical advice. Defence fuel storage projects. (2016)
- Review of operation & approvals for quarantine waste equipment. North Queensland Bulk Ports (2016)
- Process review & estimate, Awoonga Dam WWTP upgrade. Gladstone Area Water Board (2012-2014)
- Review of AS-1940 Audit of bulk fuel facilities around Gladstone. Gladstone Ports Corporation. (2010)
- Advice and design review for storage and handling of hazardous materials. BHP Blackwater Mine. (2008)
- Audit of oil and waste oil management at alumina facility. QAL, Gladstone
- Advice and design review for storage and handling of mercury amalgam sludge. Pasminco, SA
- Completion of contract management for Eungella Dam pump station. DNR
- Advice on design for storage of HCl and inorganic cyanides. Carpentaria Gold
- Design of frother reagents tank farm for a coal mine in Central Queensland. BHP
- Design of options to improve water quality in a cooling tower, Sarina, Qld

1991 to 1996 Pitt & Sherry, Hobart & CMPS&F, Hobart

Chemical/Environmental Engineer

WATER AND WASTEWATER TREATMENT

- Preliminary design of process water treatment system for Tasmanian Alkaloids
- Preliminary design and EIS/EMP for Woodbridge Sewerage Scheme, Kingborough Council, Tas

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- Preliminary design/Contract administration of Hobart Airport aerated sewage treatment plant. FAC
- Contract admin for trade waste treatment plant. Cadbury Schweppes chocolate factory, Tas
- Operation and analysis of upflow anaerobic sludge blanket (UASB) pilot plant. Cadbury Schweppes
- Treatment plant upgrade, fish processing facility, Margate, Tasmania
- Design for pH pre-treatment of textile mill wastewater using CO2 and waste boiler flue gas. TIA
- Design of an effluent treatment process for timber reconditioning

WASTE MANAGEMENT

- Waste management study for paper mill, including waste minimisation, reuse/recycling. Boyer
- Waste management study (part of BPEM study) for timber mill. Scottsdale, Tasmania.
- Environmental Management Plan for fishwaste composting site. Southern Tasmania

ENVIRONMENTAL INVESTIGATIONS, AUDITS, MONITORING AND ASSESSMENTS

- EMP for a potato processing factory wastewater treatment plant. Northern Tasmania
- Air emissions reduction investigation for a chemical manufacturing facility in northern Tasmania
- EMP for a timber mill, landfill and CCA timber treatment plant. Auspine Pty Ltd
- Best Practice Environmental Management audit of a timber mill and CCA plant. Scottsdale, Tasmania

SITE CONTAMINATION ASSESSMENTS AND AUDITS

- Contaminated land assessment of CCA treated timber storage area. Auspine, Tasmania
- Site assessment and remediation of former metals foundries. Launceston and Hobart (Confidential)
- Contaminated Land Audits of 33 depots around Tasmania for Works Tasmania and HEC
- Contaminated Site Assessment of the Wapping area in Hobart. Dept of Environment
- Environmental Audit of Coca-Cola Amatil bottling facility. Tasmania
- Contaminated land assessments for Hoechst Australia, Altona Petrochemical Co., Salta Constructions, State Bank of SA, Melbourne Water Corp, Dept of Education, Shell and other private companies. Victoria

PROCESS ENGINEERING, HAZARDOUS MATERIALS AND CONTROL SYSTEM DESIGN

- Preliminary design of pipework to burn volatile air emissions in fuel oil burners, Tasmanian Alkaloids
- Process/mechanical design of flavours batching area, dangerous goods handling. Philip Morris Ltd

1988 to 1991 Crooks Michell Peacock Stewart Pty Ltd, Melbourne

Process Engineer

PROCESS ENGINEERING, HAZARDOUS MATERIALS AND CONTROL SYSTEM DESIGN

- Dangerous goods audit of, and recommendations for an existing warehouse for L'Oreal (Marigny)
- Preliminary mechanical design and equipment layout for refrigerants storage facility. Lovelock Luke
- Process/mechanical design for tomato paste manufacture, bulk and difficult liquids, general flow & level measurement. MasterFoods Australia Pty Ltd. NSW
- Process heating design, mechanical/process design and testing of a new wax products plant
- Process/mechanical design/specification for toothpaste manufacturing. Reckitt and Colman

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- Dangerous goods study. Reckitt & Colman Pharmaceuticals, NSW
- Dangerous goods audit and recommendations to contain contaminated fire water. Rhone Poulence
- Process/mechanical/control system design, specification & commissioning for new therapeutic goods plant to manufacture antiseptic solutions in accordance with Good Manufacturing Practice (GMP)

INFORMATION TECHNOLOGY EXPERIENCE

- 2012 current: System Administrator Ideas Kitchen Consulting Pty Ltd.
- 2008 current: Web developer, Leeway Beach House (Holiday rental).
- 1997 2006: Web Developer for IEAust Mackay Local Group Internet site
- 1996 2007: Senior technical support for IT personnel. Aurecon Mackay
- 1999 2000: Web Advisory Group/Taskforce. Institution of Engineers, Australia and Qld Division.
- 1999: Web development, Mackay Festival of Arts Inc
- 1997 2000: Web Developer for Environmental Engineering Society (EES) Internet site.
- 1991 1996: Computer network administrator CMPS&F and Pitt & Sherry, Hobart, Tasmania
- 1990/91: Control system programming (Forth), wax manufacturing facility. Dussek Campbell Vic
- 1990: Control system programming for therapeutics goods facility. Gibson Chemicals. Vic

OTHER EXPERIENCE

- 2008 2010 Executive Committee (Qld Branch), Australian Contaminated Land Consultants Association (ACLCA)
- 2003 2009 Mackay Regional Electricity Council
- 2004 2005 CQU Library Society Film Festival Committee Member
- 2001 2002 Chair, Mackay and Region Cultural Industries Association
- 1999 2002 Chair, Institution of Engineers Australia, Mackay
- 1996 2003 Committee Member, Institution of Engineers Australia, Mackay
- 1999 Mackay Festival of Arts Committee
- 1995 1996 Chair, Environmental Engineering Society (Tasmania Chapter)
- 1995 1996 Committee Member, Institution of Engineers Australia, Tasmania Division
- 1987 Trainee Chemical & Environmental Engineer, Melbourne Water
- 1985 (~ 12 months) Laboratory Technician (QA and R&D), Taubmans Powder Coatings, Melbourne
- 1983 Trainee Chemical Engineer, Comalco, Weipa, Queensland
- 1982 Laboratory Technician, Comalco, Melbourne, Victoria.

AWARDS

 John Connell Innovation Award 2004. Development of the Haughton River Integrated Catchment Management Plan.

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