

CURRICULUM VITAE

Dr Julie Evans

BSc (Hons), PhD, CEnvP SCS
NSW EPA Accredited Site Auditor

Julie Evans is a qualified geochemist specialising in the assessment and management of contaminated land. She has over 25 years' experience as an environmental consultant, and is a New South Wales Environment Protection Authority accredited contaminated site auditor.

Julie has been responsible for the design and implementation of research, investigation and remediation projects, over a range of media including soil, groundwater, sediments and air. She has worked on numerous (400+) contamination assessment and remediation projects and her experience is diverse, ranging from large industrial facilities such as mine sites, asphalt manufacturing plants, defence sites, manufacturing facilities, railway yards and refineries, through to putrescible and hazardous waste landfills, airport sites and a broad range of commercial facilities, such as service stations sites.

Her PhD thesis involved study of acid mine drainage systems, developing a geochemical model to quantify the origin and composition of acid mine drainage.

Julie is also a regular guest lecturer for the University of Technology Sydney (UTS) Contaminated Sites Assessment, Remediation and Management (CSARM) Short Course Series.

PROFESSIONAL QUALIFICATIONS

Doctor of Philosophy (PhD) – Environmental Geochemistry, Dept of Earth Sciences, University of Manchester (UK) (1996)

Bachelor Science (Honours) – Geochemistry, Dept of Earth Sciences, University of Manchester (UK) (1992)

NSW EPA Accredited Site Auditor under Contaminated Land Management Act 1997 (NSW).
Accredited in 2010

Certified Environmental Practitioner – Site Contamination Specialist (CEnvP SCS)

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

Environment Institute of Australia and New Zealand (EIANZ)

Australian Land and Groundwater Association



CONTACT INFORMATION Julie Evans

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PROJECT EXPERIENCE

Site Audits

Julie was accredited as a NSW Site Auditor in 2010 and has conducted over 70 statutory and non-statutory audits in NSW and ACT. Key projects include:

- **City of Sydney, Perry Park, Alexandria NSW** Audit of investigations and remediation of a former landfill which has been redeveloped into a park (public open space). Investigations included assessment of soil, groundwater and ground gas. Reviewed data in accordance with NSW EPA ground gas guidelines. Reviewed a RAP and issued interim audit advice on appropriateness of RAP. Part of site remediated using a “cap and contain” strategy and re-developed as an indoor sports facility. Signed off as suitable for the sports stadium use subject to implementation of a long term EMP.
- **Blacktown City Council**, Former waste water treatment Facility. Audit of investigations and monitoring of a former waste water treatment facility.
- **Ford Motor Company of Australia, Former landfill at Homebush, NSW.** Audit of ongoing operation and maintenance activities at a former landfill including landfill gas extraction system, leachate treatment plant and landfill gas/leachate monitoring. Audit on-going due to yearly monitoring requirements to satisfy development consent conditions.
- **City of Sydney Green Square Town Centre Infrastructure** (2016 – present). Audit of road construction and public open space (Drying Green park) within the Green Square Town Centre Precinct. Site was a former brickpit that has been historically landfilled. Remediation involves cap and contain using proposed infrastructure.
- **Johnstons Creek Parklands (City of Sydney)** Audit of public open space redevelopment at Annandale to certify site suitability following implementation of a cap and contain remediation strategy. The site has been filled and reclaimed resulting in hydrocarbon, asbestos and some heavy metal contamination, generally found in black sandy fill containing ash and slag.
- **Stratified Municipal Council, Matthews Park, Roberts Road, Greenacre** (Strathfield Municipal Council c/o International Property Group Pty Ltd) Audit of investigations and remediation of a former night soil depot. Auditor endorsed practical approach to assessment/remediation of asbestos on site. Issued Part A site audit statement certifying site suitability for commercial/industrial use. Received excellent client feedback particularly regarding responsiveness and overall timing of the audit.
- **Dyuralya Square, Amelia Street, Waterloo: City of Sydney and Structus Pty Ltd.** Audit of former scrapyard site located within the Lachlan Precinct. The site was remediated using a cap and contain approach, with capping installed as part of the park construction program. This required integration of the RAP into the construction program through development of a construction environmental management plan (CEMP). The audit required detailed review of waste management issues which required statutory notification to the NSW EPA. Notwithstanding this, the audit was completed on-time and within budget. Of particular note was the fact that the park was assessed under Part 5 of the EP&A Act, which required liaison with council to ensure appropriate enforceability mechanisms for the long term EMP.
- **Former gasworks at Goulburn NSW (Jemena)** Audit of investigation and remediation of large scale tar and dissolved phase contamination. Complex contamination profile which includes impacts to sediments in adjacent water course. Off-site migration of free phase (tar). Reviewed remediation action plan (RAP) involving in-situ solidification and stabilisation of tar containing materials. Site

is currently regulated and audit is being conducted as a statutory audit to comply with VMP conditions. with significant tar and gasworks associated contamination.

- **Viva Energy, Oyster Bay Service Station.** Audit of remediation of a service station with significant off-site migration of contamination under adjacent residential properties. Site was regulated by NSW EPA and subject to a voluntary management proposal. In-situ remediation was undertaken using in-situ chemical oxidation (ISCO). Signed off site as suitable for on-going service station use subject to implementation of an environmental management plan.
- **Former Fuel Depot Remediation (West Wyalong NSW)** Audit of investigations and remediation of a former fuel depot. Site was decommissioned and remediation. Some hydrocarbon impact remained and required consideration of the site specific setting and proposed use (road). Required to undertake an assessment of applicability of management limits at the site under the proposed use. Site signed off as suitable for use.
- **Barangaroo Point Reserve, Sydney NSW.** Audit of investigations and remediation of works to create a large public open space at Barangaroo Point. Remediation included quantitative risk assessment to calculate specific criteria for managing containment of contaminated material in a constructed mound under the park.
- **Former banana plantation site in northern NSW.** Significant widespread arsenic contamination of soils. An assessment of arsenic bioavailability was undertaken to assess risks and develop site specific arsenic remediation criteria. The site also included a former cattle tick dip site. Included sediment sampling to assess level of impact to various dams located across the property.
- **Former council works depot (creosote contamination), NSW.** Audit of off-site migration of creosote free-phase contamination under adjacent residential properties. Required detailed review of complex conceptual site model, soil gas sampling and human health risk assessment.

Contaminated Site Assessment and Remediation

Julie has extensive experience and has been responsible for the assessment and/or remediation of 400+ contaminated sites, the majority of which were located in NSW. Selected project experience includes:

- Responsible for annual groundwater monitoring reporting at the Castlereagh Waste Management Centre (WMC) in accordance with the conditions outlined in the Licence No. 004601, issued by the DECCW, for the site.
- Department of Public Works and Services, former landfill adjacent to Manly Lagoon. Responsible for design and implementation of a field monitoring program to support calculation of calculation of a contaminant loading to Manly Lagoon. Conducted risk assessment to evaluate bioavailable concentrations of zinc in Manly Lagoon. Undertaken to satisfy NSW EPA remediation order.
- Directly responsible for the senior technical output and approval of contamination assessment and/or validation reports for 50+ former or operating services station sites for major petroleum clients including Mobil, Caltex and Shell. Various hydrocarbon contamination issues including soil impact, phase separate hydrocarbons (PSH), dissolved phase groundwater plumes and off-site migration issues.
- Major Paint & Solvent Manufacturer, Sydney. Contaminated site assessment and remediation program at a site which included a tank farm (26 USTs) containing various hydrocarbon liquids such as xylenes, toluene, ketones, thinner, alcohols, mineral turpentine etc. Groundwater recovery system installed.

- Detailed assessment of over 20+ former tannery sites across the greater Sydney region (including the potential for TCE and chromium to be present and the likely fate and transport pathways for such contaminants).
- Camellia Peninsula. Designed and implemented investigation of a former Sydney Water depot, as part of the DECCW strategy to address hexavalent chromium contamination on the eastern side of the Camellia Peninsula. Report was forwarded to DECCW as part of the Camellia Peninsula investigation program.
- AGL Bowral - Groundwater pump and treat system designed to treat dissolved phase PAH contamination from an old gas works site. Responsible for the operation and maintenance of system which treats groundwater using vertical gravity separation and cyclonic dissolved air flotation technology.
- State Rail Authority NSW, Erskineville. Project managed investigation of rail corridor adjacent to a multi-storey residential apartment building in response to a request from EPA, following accumulation of hydrocarbon contamination (PAHs) in the basement carpark drainage system of the adjacent apartment building. Site was formerly a bitumen plant and residual tar was present at the site.

EMPLOYMENT HISTORY

2017 – current

Principal/NSW EPA Accredited Site Auditor, Metech Consulting Pty Ltd

Responsible for commercial and technical delivery of contaminated site audits. Working within a privately owned consulting firm specialising in contaminated site audits.

2010-2017

Senior Manager, Ramboll Environ Australia Pty Ltd, Sydney

NSW EPA Site Auditor conducting contaminated land site audits under the Contaminated Land Management Act (1997). Responsible for both the technical and commercial aspects of the audit process and managing expert support team members to allow delivery of audits on sites with complex contamination issues.

2003-2010

Associate Geochemist, Coffey Environments, (incorporating IT Environmental (Australia) Pty Ltd)

Responsible for the technical output of contaminated site assessment/remediation projects and provision of technical guidance to project managers and scientists/engineers. Authorised technical reviewer of contaminated land assessment and remediation reports. Conducted senior project management of site audits, environmental site assessments, monitoring programs and complex remediation programs involving risk assessment. Responsible for the technical development of junior scientists / engineers. As a member of the Coffey Environments “environmental chemistry specialist practice area” and the “audit specialist practice area” responsible for the provision of technical advice and support to Coffey Environments nationally.

2002-2003

Sulfide Solutions Business Unit, Australian Nuclear Science and Technology Organisation (ANSTO), Research Scientist

Worked within a team providing specialist geochemical consulting services to mining companies relating to the management of waste rock material and acid mine drainage. Responsible for conducting specialist geochemical modelling utilising an in-house geochemical computer code called

SULFIDOX, which models the oxidation of sulfidic material. Input into the model included mineralogy of the dump material and the rate of oxidation of the sulfidic material (measured using specialist in-house instrumentation). Enabled prediction of pollutant loads and concentrations of acid mine drainage for a number of mining clients across Australia.

1999-2002

IT Environmental (Australia) Pty Ltd, Senior Environmental Scientist

Responsible for the design and supervision of environmental site assessments, soil and groundwater remediation programs and environmental monitoring programs. Conducted fieldwork including drilling, soil sampling, installation of groundwater monitoring wells and supervision of drillers using drilling techniques such as rotary auger drilling, rock drilling (core drilling and rock roller) using mud and air recovery, soil gas sampling (using both soil gas probes and specialised gas well installations), surface water sampling and sediment sampling. Solely responsible for the preparation of technical reports including investigation reports, validation reports, remediation action plans and environmental management plans.

1996-1999

Allott & Lomax Consulting Engineers, Environment Division (UK), Environmental Scientist

Conducted environmental site assessments and remediation projects relating to contaminated land.

1992-1996

Dept of Earth Sciences, University of Manchester (UK), PhD Research Student

PhD research project, funded by the Natural Environment Research Council (NERC) (UK). Studied geochemical aspects of acid mine drainage systems relating to abandoned coal mines in northern England.

1990

Soil Mechanics Ltd (UK), Geotechnical Technician

Responsible for conducting geotechnical soil testing in accordance with BS1377.

PUBLICATIONS & PRESENTATIONS

PhD Thesis (University of Manchester, UK, 1996) "The Chemistry of Precipitates and Associated Waters from Acid Drainage Systems":

Lecturer for the University of Technology Sydney (UTS) Contaminated Sites Assessment, Remediation and Management (CSARM) Short Course Series.

COURSES/CERTIFICATIONS

Senior First Aid, NSCA

Defensive Driver Training Program, Drive Safe Australia

40 hour US Occupational Safety and Health Administration (OSHA) Course for Hazardous Waste Activities and regular bi-monthly online refresher training.