

CURRICULUM VITAE

Brad Palmer

BMarSc (Hons)

ENVIRONMENTAL SCIENTIST

Perth, Western Australia

Education Bachelor of Science majoring in Marine Science (Honours), University of Western Australia, 2003

Professional Membership Immediate Past President, Australian Contaminated Land Consultants Association – Western Australia (ACLCA WA)

Member, Australasian College of Toxicology and Risk Assessment (ACTRA)

Member, Australian Land and Groundwater Association (ALGA)

Member, Australasian Remediation Industry Cluster (ARIC)

Languages English



1 CURRENT POSITION

Brad Palmer is the Director of Galt Environmental Pty Ltd. He has been working in the environmental field in Australia and Europe since 2001. Brad's key skills include contaminated site assessment, implementation of site remediation programs, acid sulfate soil investigation and dewatering management, dust and air quality assessment, marine environmental management and geographic information systems. Brad's experience has been gained while working as an environmental consultant predominantly in the mining, construction and land development industries.

In his current role, Brad is responsible for the design and implementation of assessment and remediation projects, preparation of proposals, staff scheduling, engaging and managing subcontractors, project management, staff mentoring and training, report review, invoicing and financial reporting. Brad is also responsible for all aspects of business development and marketing and contributes strongly to the development and implementation of corporate marketing plans and strategies.

2 SPECIFIC PROJECT EXAMPLES

2.1 CONTAMINATED SITE ASSESSMENTS

FORMER FUEL STORAGE FACILITY, CAPE LAMBERT, WESTERN AUSTRALIA

Groundwater contamination assessment of a former fuel storage facility at Rio Tinto Iron Ore's Cape Lambert operations. Hydrocarbon impacted soils were detected in previous investigations and a detailed groundwater assessment was required. A strategic review of previous studies was undertaken and detailed hydrological model developed to model fate and transport of contaminants of concern. A quantitative health risk assessment was also undertaken to develop site specific target levels for onsite workers.

CAR DUMPER AND CRUSHER, CAPE LAMBERT, WESTERN AUSTRALIA

Soil and groundwater investigation undertaken at Rio Tinto Iron Ore's Cape Lambert operations. Port expansion works required the decommissioning of a rail car dumper and crusher and an investigation into the potential human health risks of known contaminants was undertaken. A series of soil bores were advanced to determine the nature and extent of contamination around the car dumper. Based on the results of the investigation, suitable procedures were implemented to remediate the area.

DETAILED SITE ASSESSMENT, SERVICE STATION, DAWESVILLE, WESTERN AUSTRALIA

Groundwater contamination assessment at a 0.3 hectare (ha) former service station. All site infrastructure was demolished and removed between February and April 2007. Previous investigations undertaken between 1998 and 2007 identified hydrocarbon impacted soil at various locations with soil remedial works undertaken during 2007. An assessment of groundwater quality beneath the site was not undertaken during previous site investigations.

FORMER ELECTROPLATERS, WELSHPOOL, WESTERN AUSTRALIA

Multiphase contaminated site investigation comprising data gap analysis, soil assessment, groundwater assessment including vertical profiling, soil remediation and development of a site management plan.

ALBANY SPINNING MILLS, WESTERN AUSTRALIA

Multiphase soil and groundwater assessment at the Albany Spinning Mill site prior residential development. Investigations conducted at the site identified areas of tetrachloroethene (TCE), lead and total petroleum hydrocarbon (TPH) impacted soils and/or groundwater. Initial involvement included review of previous information including Auditor comments on an initial draft and provision of a final report to improve inconsistencies particularly with regards to the requirements under the contaminated sites management series. Further works were designed to provide additional information regarding the vertical and lateral extent of groundwater impact.

Recent input involved in providing expert input into the soil, groundwater and vapour assessment, risk assessment and scoping of a remediation action plan for works required at the site.

FORMER POWER STATION, BUNBURY, WESTERN AUSTRALIA

Peer review of a DSI report prepared by Coffey Environments for the Former Western Power Bunbury Power Station. The review focused on an evaluation of whether the assessment was undertaken in accordance with appropriate regulations and guidelines; an evaluation of the contamination status of the site; an assessment of whether the contamination status of the site poses or potentially poses a risk of harm to human health, the environment or any environmental value; an assessment of whether the contamination status of the site has, or potentially has, a detrimental effect on the beneficial use of the site, including surface and/or groundwater resources; an assessment of whether any further investigation/remediation is required; an evaluation of the suitability of the site for current or proposed land uses and a recommendation of any restrictions relating to the use of the site.

FREMANTLE PORT DREDGING AND RECLAMATION PROJECT, FREMANTLE, WESTERN AUSTRALIA

Independent environmental advice as to the level of risk, (discernible from the Fremantle Port Authority (FPA) and the Environmental Protection Authority (EPA) reports), of contaminants entering Cottesloe waters, that may unduly or unnecessarily impact the aesthetic, recreational or other uses of the waters as a result of the dredging of the Fremantle Inner Harbour, Entrance Channel and the Deep Water Channel. Included preparation of a briefing document for presentation to the Town of Cottesloe Committee, draft letters for the Town of Cottesloe to send to the Fremantle Port Authority, Federal Minister for the Minister for the Environment, Heritage and the Arts and Department of Environment and Conservation.

CONTAMINATED SITE ASSESSMENT, FORMER PRINTER, CANNINGTON, WESTERN AUSTRALIA

Phased Contamination Assessment of a former printing facility. The site was historically used as a market garden for over 20 years until approximately 1965, and then as a printing facility from 1967 until 2004. The site currently serves as a distribution depot for white good products and is proposed to be subdivided and redeveloped into smaller lots for commercial/industrial purposes. Works included preliminary site investigation, detailed site investigation, remediation action plan and remediation and validation works.

DATA GAP ANALYSIS AND HEALTH RISK ASSESSMENT, NORTH COOGEE, WESTERN AUSTRALIA

Data Gap Analysis and Health Risk Assessment (HRA) across the northern portion (north of Rollinson Road) of WAPC Reserve 44945 (Lot 2110) in North Coogee in order to determine the nature and extent of soil contamination, potential for unacceptable risks to human health in the context of the proposed site use and requirements for further works including the need for remediation.

CONTAMINATED SITE ASSESSMENT, MUNDARING, WESTERN AUSTRALIA

Phased assessment including PSI, DSI and remediation action plan (RAP) of the DEC Mundaring District Offices proposed to be developed for use by Water Corporation for the Mundaring Water Treatment Plant (MWTP). Investigations confirmed the presence of impacted soils and a RAP was prepared to outline strategies and methods to be followed to remediate the site.

PRELIMINARY SITE INVESTIGATION, WESTERN AUSTRALIA

PSI, including groundwater assessment, of an operational service station. The site has been classified as “Possibly Contaminated – Investigation Required” due to hydrocarbon impacted groundwater migrating off-site impacting the groundwater beneath neighbouring sites. Accordingly the DEC has identified the Site as a “Source” site. Previous investigations undertaken at the site, confirmed hydrocarbon impacted groundwater beneath the site, migrating off site. Included design of assessment program and completion of a PSI report including review of historical information and desktop resources, development of a conceptual site model (CSM), data assessment and reporting with reference to the DEC guidelines.

CONTAMINATION SITE ASSESSMENT, BAYSWATER, WESTERN AUSTRALIA

Phased contamination assessment at a former non-putrescible landfill. The site was historically used as a dumping ground for building rubble and other non-putrescible wastes until around the early 1980’s. The site is located immediately adjacent to the Swan River and is currently vacant and accessible to the public. The site is proposed to be handed to the City of Bayswater for management as Parks and Reserve, in line with the surrounding land.

PRELIMINARY SITE INVESTIGATION, GERALDTON, WESTERN AUSTRALIA

Engaged by the Geraldton Port Authority to conduct a preliminary site investigation (PSI) for the Geraldton Port site bordered by Marine Terrace, Ian Bogle Road and Connell Road, Geraldton. The site consists of a six-berth inner harbour, a fishing boat harbour, associated land-side leases, port-related infrastructure and storage sheds. A wide range of products have been handled through the current port site and as such a PSI was required to provide information on the potential contamination status of the land. Works included a detailed site inspection, review of historical land uses using title information, historical aerial photography and interviews, review of previous reports and supporting documentation, search of DEC databases and a Freedom of Information (FOI) search through the Department of Mines and Petroleum, development of a Sampling and Analysis Plan (SAP) for further works and Health, Safety and Environment Plan (HSEP), determination of a net present value (NPV) taking into account the cost for remediation of the site and assessment and reporting with reference to the DEC Contaminated Sites Management Series (2001-2010).

PRELIMINARY SITE ASSESSMENT, WELSHPOOL, WESTERN AUSTRALIA

PSI with limited soil and groundwater sampling of a bituminous products facility. The objectives of the PSI were to identify the potential for contamination to be present on the site, and to determine whether

further investigation and/or remediation works are required prior to redevelopment of the rear portion of the site to include permanent asphalt mixing and car parking. Contaminants of concern included TPH and PAHs.

CONTAMINATED SITE ASSESSMENT, WOODVALE, WESTERN AUSTRALIA

Phased contaminated site assessment of a former poultry farm classified as “Possibly Contaminated – Investigation Required”. The site is proposed to be transferred to DEC to enable its inclusion into the Yellagonga Regional Park.

Investigations indicated elevated nutrient levels in groundwater and soils attributable to the discharge of wastewater generated from poultry shed clean-outs into a sump.

Included design of the sampling and analysis plan for additional investigations in order to fully characterise the nature and extent of contamination, DSI report and design of the remediation action plan (RAP) with ongoing senior advice throughout the project.

DUE DILIGENCE ASSESSMENT, LIME INDUSTRIES, OSBORNE PARK, WESTERN AUSTRALIA

Limited due diligence contamination and environmental assessment of a 1.1 ha operational lime manufacturing facility with associated offices and workshops. The site is classified as a prescribed premise within Schedule 1 of the Environmental Protection Act 1987 (Category 43, Cement and Lime Manufacture) and operates under a licence containing a number of air pollution and water pollution control conditions plus the need for an annual audit compliance report. The objectives of the due diligence assessment was to identify the potential sources of contamination, associated contaminants of concern and locations of contamination that may be present. Included detailed site inspection, review of the lime manufacturing processes utilised on site and identification of potentially contaminating activities/areas and final report.

INGLEWOOD SERVICE STATION, INGLEWOOD, WESTERN AUSTRALIA

Engaged by the land owner to undertake a detailed soil and groundwater investigations at a former service station site to facilitate the development of the land into residential units. Hydrocarbon impacts to soil and groundwater were identified and successfully remediated. Community consultation was undertaken throughout the assessment process resulting in all stakeholders formally approving a site management plan.

REDCLIFFE BUS DEPOT, REDCLIFFE, WESTERN AUSTRALIA

Engaged by the land owner to undertake soil and groundwater investigations at a former bus depot. The works included a detailed site history study, intrusive soil and groundwater investigations and a health risk assessment. Remediation of hydrocarbon impacted soil was undertaken in an area former used for fuel storage.

ROYDHOUSE STREET INDUSTRIAL WAREHOUSE, SUBIACO, WESTERN AUSTRALIA

Engaged by the land owner to undertake a detailed site investigation at a light industrial premises in Subiaco. Limited soil impact from pesticides historically used across the site was identified and remediated. During demolition works, asbestos was identified in slab construction materials. An asbestos investigation was undertaken at the site with limited soil remediation works required to mitigate potential health risks. The site was subsequently classified as 'Decontaminated' by the Department of Environment and Conservation.

MANGLES BAY REDEVELOPMENT, MANGLES BAY, WESTERN AUSTRALIA

Engaged by joint venture partners to undertake a strategic detailed site investigation to characterise the nature and extent of potential contaminants across the site and develop a detailed scope of work for future investigations. The site contained a range of potentially contaminating activities and was in close proximity to sensitive land uses. A health risk assessment was undertaken subsequent to detailed soil and groundwater investigations and formed the basis for further works.

FORMER SERVICE STATION SITE, DAWESVILLE, WESTERN AUSTRALIA

Groundwater contamination assessment at a 0.3 hectare (ha) former service station. All site infrastructure was demolished and removed between February and April 2007. Previous investigations undertaken between 1998 and 2007 identified hydrocarbon impacted soil at various locations with soil remedial works undertaken during 2007.

2.2 CONTAMINATED LAND AUDITS

PERTH CITY LINK RAIL PROJECT, PERTH, WESTERN AUSTRALIA

Auditor's representative for the Perth City Link Rail Project to sink the Perth rail link between Northbridge and Perth CBD. The role includes document review included multiple PSI, DSI and groundwater studies, client and regulator liaison, inspection of site works and correspondence preparation..

COLLEGE GROVE LAND DEVELOPMENT, BUNBURY, WESTERN AUSTRALIA

Auditor's representative for a 1.3 ha former landfill site being developed for residential use. The site was used as a municipal landfill in the late 1970's and had undergone a range of environmental investigations including soil, groundwater and soil gas studies.

MULTIPLE SCHOOL SITES, WESTERN AUSTRALIA

Auditor's representative for three separate residential development sites comprising former primary schools. Role included liaison with Department of Health regarding expectations and changes in the evolving asbestos guidelines, planners, engineers and the City of Belmont.

2.3 ACID SULFATE SOIL ASSESSMENTS

BELGRAVIA CENTRAL LAND DEVELOPMENT, BERTRAM, WESTERN AUSTRALIA

Acid sulfate soil assessment and ongoing management for a large land development in Bertram. Soil and groundwater investigations were required to characterise the nature and extent of acid sulfate soil material across the site and develop management strategies to the satisfaction of the DEC. Dewatering works were also undertaken and dewatering management plan prepared for various regulatory agencies. Post construction monitoring of groundwater has been undertaken to facilitate the development of closure plans for each stage land release.

ROSSMOYNE SENIOR HIGH SCHOOL, ROSSMOYNE, WESTERN AUSTRALIA

An acid sulfate soil investigation was undertaken to facilitate the redevelopment of portions of the site and the realignment of sewerage and water services. Minor dewatering works were also required and an acid sulfate soil and dewatering management plan was developed to manage these works.

BUNBURY HOSPITAL EXTENSION, BUNBURY, WESTERN AUSTRALIA

Soil and groundwater investigations were required to characterise the nature and extent of acid sulfate soil material across the site and develop management strategies to the satisfaction of the DEC. Minor dewatering works were also required and an acid sulfate soil and dewatering management plan was developed to manage these works.

BROWN STREET REDEVELOPMENT, EAST PERTH, WESTERN AUSTRALIA

An acid sulfate soil investigation was undertaken at an inner-city site proposed for medium density residential development. An extensive dewatering program was also required to facilitate the construction of a basement car park. An acid sulfate soil and dewatering management plan was prepared to the satisfaction of the DEC, DoW and local councils to enable discharge water to be disposed in the local stormwater system.

BURTONIA GARDENS LAND DEVELOPMENT, FORRESTDALE, WESTERN AUSTRALIA

Acid sulfate soil assessment and ongoing management for a large land development in Forrestdale. Soil and groundwater investigations were required to characterise the nature and extent of acid sulfate soil material across the site and develop management strategies to the satisfaction of the DEC. Dewatering works were also undertaken and dewatering management plan prepared for various regulatory agencies. Post construction monitoring of groundwater has been undertaken to facilitate the development of closure plans for each stage land release.

3 REFEREES

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