

Introduction

Andre is a GHD Technical Director and the Contamination Assessment and Remediation Service Line Leader for GHD Australia in addition to being a NSW Accredited Site Auditor.

Anyone who has worked with him will attest that Andre's technical rigor is without question; but it is his outstanding contribution on an individual and industry-wide scale that this nomination is attempting to capture.

Demonstrated involvement in advancing the knowledge of peers in the industry:

Andre is a former ACLCA NSW branch president as well as being connected to many other industry groups, including ALGA. Andre has his finger on the pulse of the industry, and eschews company rivalry in favour of collaboration. As such, he has partnered with industry leaders and peers, including lawyers and local council representatives, to explore changes to regulations and guidelines and their impact to industry. He regularly presents at industry events, and has organised a number of training workshops – including facilitating experts from around the globe to present in Australia.

Recent examples include:

- Presentation at ACLCA on the topic of *Developing and Maintaining Technical Competence*, where he discussed, amongst other topics, whether more guidelines necessarily mean better science and/or increased competence within the industry. He reasoned that scientific rigor was a function of time, and that management of client expectations could lead to improved scientific and management outcomes.
- Presentation at the ALGA 2018 Ecoforum Conference where Andre collaborated with Environmental Lawyers working in contaminated land, highlighting when consultants and lawyers need to collaborate, and how to get the best out of each other when they do.
- Following on from this co-presentation at Ecoforum, Andre organised an internal workshop, presented by Norton Rose Fulbright, that sought to upskill and inform technical leads within GHD on how to be an expert witness.
- Cross- Pacific collaboration with technical experts in the United States in order to develop training in Natural Source Zone Depletion of NAPL to deliver to NSW regulators, having previously presented this training to the ACLCA Sydney Branch during their regular technical seminars. The purpose of the regulator training was to enable characterisation and management of LNAPL sites, as well as providing the regulator with practical performance metrics to enable effective regulation of this as a remedial or management technique.

As you'd expect any technical director and site auditor to be, Andre is constantly in high-demand. He is generous with time and knowledge, however, and treats people respectfully and is never condescending towards those seeking help or advice. Andre is also humble, and is just as likely to seek advice from other technical experts, suggesting he values integrity and knowledge highly.

Demonstrated success in their role on a project involving remediation

Andre led a GHD team in addressing data gaps in the work of a previous consultant, as identified by the appointed Site Auditor, on a former refrigeration manufacturing plant in western Sydney. The site historically used chlorinated solvents such as trichloroethene (TCE) and trichloroethane (TCA) in

de-greasing units, which had resulted in impacts to groundwater to a depth of at least 14 m below ground level.

Andre designed a soil vapour and supporting groundwater assessment program, which included the use of BIOCHLOR fate and transport models to assess the potential for downward migration of solvent dense non-aqueous phase liquids (DNAPLs) through shale, and into the underlying Hawkesbury Sandstone. Off-site groundwater abstraction from within the Hawkesbury Sandstone was also assessed, and natural attenuation through reductive dechlorination was able to be demonstrated through the assessment of degradation products such as cis-dichloroethene and vinyl chloride. Andre was able to demonstrate to the Site Auditor that sufficient characterisation of the site had been carried out to prepare a Site Audit Report and Site Audit Statement for site suitability, which included a detailed assessment of available remedial options for bedrock groundwater impacts, and concluded that further remediation would be impractical. Andre also designed an interception trench at the site to mitigate potential off-site migration of solvents and their associated impacts to human and environmental health.

In Andre's capacity as the auditor's assistant to Mr Andrew Kohlrusch on the award-winning Macdonaldtown Gasworks Remediation, Andre undertook reviews of all deliverables, including multiple phases of the remediation works plans, groundwater monitoring progress reports, as well as validation reports. As an integral part of the audit team, Andre was responsive to the remediation contractor and client, undertaking collaborative and rapid decision making with regards to the remedial extent, to facilitate fast turnaround of technical reviews during this time.

Demonstrated success in advancing improvements to the regulations, practices and technologies, research, sampling, testing, assessment or remediation

Andre is a leader in the field of contamination assessment and remediation in NSW and beyond, and has been closely involved in educating the regulatory authorities, presenting to the industry and advancing the guidelines and practices in this field.

As mentioned above, Andre organised and co-presented a training session on petroleum non-aqueous phase liquid (NAPL) natural source-zone depletion (NSZD) and its quantification, for approximately 30 state regulators from NSW EPA. To support this work, he is currently involved in creating industry guidance on petroleum NAPL site management and NSZD for the Cooperative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), this will provide and will present his work to date in a keynote presentation at the upcoming 2019 CleanUp Conference.

Andre is one of the lead collaborating authors for the revision of the existing NSW EPA (2011) *Guidelines for Consultants Reporting on Contaminated Sites*. As an auditor who reviews and relies upon the content of consultants' reports, his insight into improving the rigor, consistency and readability of delivery reports in the industry will be invaluable. Andre has specialist experience with hydrocarbon impacted sites, both as consultant and auditor, and has managed the remediation of numerous petroleum hydrocarbon impacted sites. These expertise and experience resulted in Andre co-authoring the NSW EPA (2014) Technical Note: Investigation of Service Station Sites.

Continual improvement, rigor, and integrity are a characteristics of Andre's work and he always goes the extra mile, whether this is through personal research, or reaching out to his broader network across the industry, to ensure his work and the work of our team is not simply 'good enough' but is

the best it can be. Andre is a role model to many and we are lucky to have him as a colleague, collaborator and industry leader.