

STAFF RESUME: EN020

Career Summary

An environmental scientist with more than 14 years of experience working in the environmental consulting industry and academia as a consultant, chemist and researcher. Lakshmi is also an accredited NATA Technical Assessor. Has successfully applied chemistry, biochemistry and environmental compliance and testing standards knowledge to environmental, sustainability and health & safety projects. Experience includes providing environmental chemistry and toxicological advisory services for environmental site assessments and human health risk assessments plus associated data management, validation and quality reporting.

Key Areas of Expertise

- Environmental chemistry
- Data analysis and management
- Technical report writing (analytical and interpretative)
- Technical advisory services
- Toxicity data research
- Human health risk assessment
- Project management
- NATA Technical Assessor

Professional History

Out-Task Environmental (April 2015 – To date)

Environmental Chemist

- Expert support team member (data validation) for an EPA Appointed Environmental Auditor for biennial Loy Yang landfill 53V environmental audits, AGL Energy Ltd
- Data validation specialist for multi-site water authority biannual groundwater and surface water monitoring program
- Thomas River Fishway Project, desktop review of previous investigations relating to sampling methodology, analytical methodology and results in relation to mercury risk

Independent (2013 – To date)

Consultant

- Preparing documents for physico-chemical characteristics, health hazard and eco-toxicity for submission to APVMA
- Review of a journal article relating to lifetime cancer estimate of tobacco products
- Toxicity characterisation (TCLP) of a waste by-product (sludge) for a paper manufacturer and evaluation of hydrocarbons for biodiesel fuels
- HAZMAT register preparation and identification of asbestos risks
- Coal dust quality assessment and researching information for health impacts and guidelines
- Chemical safety / toxicity evaluations of herbal products. Researched and extracted toxicology information from scientific journal articles.
- Environmental impact assessment and cost benefit analysis of food waste treatment technologies – a review report for research purposes
- Preparation of a study course material on environmental site assessment (ESA phase 1,2 & 3) for academic purposes

Golder Associates, Melbourne (2011 - 2012)

Consultant

- Data manager and coordinator for 15 groundwater and contaminated land site assessment projects (including environmental audits) using environmental data management software (ESdat)
- Identification, interrogation and resolution of complex QA/QC data issues
- Researched and compiled complex information and data for environmental chemicals for risk assessment for a range of client projects
- Provided high level technical input and advice for data interpretation, to resolve issues and establish service efficiency
- Undertook audits of 3 analytical laboratory subcontractors
- Assisted with dangerous goods classification of copper concentrate from a mine site
- Information retrieval from national and international databases (NICNAS, HSDB, UNEP and WHO) for evaluation of toxicity of chemicals and their exposure levels

CETEC Pty Ltd & FORAY Laboratories (2007 – 2010)

Scientific Consultant-Technical & Laboratory Manager

- Conducted indoor environment quality (IEQ) and health risk assessment for various contaminants
- Oversaw and managed material testing operations of a NATA accredited laboratory
- Recommended for NATA Technical Assessor
- Accountable for consulting and project management of investigative projects relating to environmental site contaminants risk analysis
- Client liaison, staff and contractor management, proposal writing and cost estimation

Amdel Pty Ltd (2001 – 2006)

Senior Chemist / Analyst

- Responsible for environmental contaminants data analysis using GCMS and GC-FID
- Performed QC and method validations using US-EPA or ASTM methods and cross checked NATA reports
- Prepared or modified analytical method documents
- Performed method validations and quality issue investigations

Education

- PhD Applied Sciences (Environmental Chemistry), Monash University
- Graduate Diploma in Applied Sciences (Industrial Chemistry), Swinburne University of Technology

Accreditations and Certifications

- Chartered Member Royal Australian Chemical Institute (RACI)
- NATA Technical Assessor for Chemical Testing
- Participation in Health Safety Environment Group, Victorian Branch RACI

Training

- Quality management by NATA (2008)
- MS Project management short course (2011)
- SPSS analysis, Monash University (2013)
- GHS and labelling of chemicals, Safe Work Australia (2013)
- Human Health Risk Assessment Workshop, CRC CARE (2018)

Publications

Available on request