

Judy Weir – B. App. Sc (Chem), B. App. Sc (Biol)**Power Plant Chemistry Consultant****Thermal Chemistry Limited****E: judy.weir@thermalchemistry.com****M: +64 21 2103 204**

Thermal Chemistry Limited (TCL) is a specialist chemistry consulting company providing independent chemistry, materials, environmental and hazard & risk management related services to the thermal, geothermal power and co-generation industries in New Zealand and internationally.

Judy Weir, Power Plant Chemistry Consultant at TCL, specializes in the area of water treatment plants and cooling water systems for power utilities, working to improve Water Treatment Plants and developing training for Chemists and Operators. Judy has advised and technically audited on several Water Treatment Plants technical specifications and contract tenders in New Zealand, Australia and Asia. Recently, she has co-authored papers that has been published by both Power Plant Chemistry Journal (Europe) and Combined Cycle Journal (USA).

Prior to working for TCL, for 20 years, Judy worked in the power plant industry in Queensland, accumulating extensive experience through her involvement in the commissioning, operation, performance setting and performance monitoring of 6x350MW coal fired units, associated water clarification plants, demineralisers, condensate polishers, chemical dosing plants, cooling water systems, and setting up on site laboratories. She also managed multi-disciplined work groups and was involved in setting up the many site management systems for Stanwell Corporation. Before leaving Australia to live in New Zealand in 2005 she was the Project Manager for the delivery of Stanwell Power Station's raw water pretreatment plant project. In New Zealand, work at Huntly Power station prior to joining Thermal Chemistry Limited, has included use of her project management skills to improve the chemical areas there, and focus on the longer term chemical health of the Water Treatment Plant.

Key Clients:

Rio Tinto (Aus), Queensland Alumina Limited (Aus), HRST (USA), Energy Australia (Aus), Hydro Tasmania (Aus), Fonterra (NZ), Contact Energy (NZ), Genesis Energy (NZ), United Group Limited (NZ & Aus), AETV (Aus), Geodynamics (Aus), PB Power (NZ), Aurecon (NZ), Mckay Sugar Limited (Aus), Combined Cycle Journal (USA), Power and Water Corporation (Aus), NewGen (Aus), Aurecon (NZ), Electrical Power Research Institute (USA), Xcell Energy (USA), NSW Sugar (Aus), Swan (Switzerland), Samsung Engineering (Korea), AES (Philippines), Avestronics (Philippines), TeamEnergy (Philippines), AGL (Australia), Malakoff (Malaysia)

Key Skills:

For Water treatment plant: reviews and audits, process improvement studies, troubleshooting and investigations of water treatment issues, project specification development, project design review, development and delivery of customized water treatment plant chemistry training programs, and commissioning support.



For Cooling Water chemistry: review and audits, process improvement studies, trouble shooting and investigation of cooling water chemistry issues, and the development and delivery of customised cooling water chemistry training programs.

Key Publications:

- *The Role of the Chemist/Chemical Engineer for the Trouble Free Operation of Thermal Plants with Heat Recovery Steam Generators*; D. Addison, J Weir; Presented at the 2012 API Power Chemistry Conference in NSW, Australia, May 2012
- *Minding your R's and Q's – Improving Water Treatment Plant Performance*; J. Weir, D. Addison; Presented at the 2012 API Power Chemistry Conference in NSW, May 2012