



# Salt Industry

CQG Consulting (CQG) is able to offer the services of professionals with hands-on experience in the industry including:

Andrew Brown a senior engineer with CQG who has over 12 years' experience in the salt industry across a range of sites in both Australia and Indonesia. As a national production manager Andrew was responsible for salt fields in tropical Queensland, Victoria, South Australia and New South Wales ranging in capacity from 15,000 tonnes per annum to over 640,000 tonnes per annum. The salt sources used by these sites varied from sea water, bores, saline industrial waste, salt interception and inland salt lakes.

Andrew led the technical due diligence during the acquisition bid process for a 2.2 million tonne per annum export salt field in Western Australia and the successful purchase, integration and optimisation of the Dry Creek field in South Australia. As R&D manager Andrew was responsible for the design and development of novel magnesium chloride brine production facilities in South Australia and Victoria.

Business development roles have included work on saline waste disposal in the Murray Darling Basin, Victorian skins industry and metal recycling. In addition he has undertaken reviews of coastal and inland brine disposal from desalination plants.

## Services to the Solar Salt Industry include:

- Solar salt field technology with experience in salt field site selection, design, impact assessment, field optimisation, bitterns processing, loss analysis, problem solving, efficiency analysis and brine management;
- Salt refinery and wash plant design and optimisation;
- Technical training for senior management through to brine operators;
- Solar salt field operations, acquisition due diligence, assessment and financial analysis;
- Solar salt field experience in a variety of climates including tropical, arid and temperate in most states in Australia, Madura (Indonesia) and West Timor (Indonesia);
- Solar salt field experience in a variety of salt sources including sea water, coastal bore water, inland groundwater, industrial saline waste and inland lake brine systems;
- International experience includes salt field design, construction and commissioning in Madura, Indonesia, solar salt field site assessment West Timor, Indonesia;
- Environmental audits and acid sulfate soil investigations; and
- Brine storage, reuse and disposal.



CQG's team has hands on mine management experience of solar salt production, refining and export operations. The operations span a variety of climatic zones and brine sources.



This industry specific experience has enabled our team to provide informed assistance to the salt industry including:

- Undertaking due diligence on salt field operations as part of purchasing processes. This has included Dry Creek and Onslow salt fields and involved capacity assessments, capital works reviews and upside modelling for valuation;
- Undertaking salt field concept design and design review in Australia and Indonesia;
- Site assessments for potential solar salt facilities - constraints and output potential analysis;
- Design of bitterns processing facilities to produce magnesium chloride brine products;
- Impact assessment of major road/ rail development on Dry Creek salt field;
- Hands on mine management of solar salt production, refining and export operations. The operations span a variety of climatic zones and brine sources;
- Working with Murray Darling Basin Commission and providing assessment of saline waste reuse and disposal strategies;
- Supply chain assessment including market requirements (quality/ tonnage), shipping, stockyard design, washing design and harvesting systems;
- Conducting facility condition audits – sea pump jetties, stockpiles, bank conditions and salt loss analysis;
- Conducting environmental compliance audits and ongoing environmental licensing advice;
- Expert witness (salt field technologist) for Office of State Solicitor – Western Australia;
- Technical training for senior management through to brine operators; and
- Providing advice as owner’s engineers and environmental managers for coal and minerals export terminal developments.

Clients include –  
Cheetham Salt, Office  
of WA State Solicitor,  
Aus Pac Capital,  
Mitchell Ports, Ridley  
Corporation.

