



# AERISON CASE STUDY

## DUST COLLECTION - WET SCRUBBERS

The collection of dust using wet scrubbers has some distinct advantages, such as lower capital cost and generally a smaller foot print than a baghouse system. However, what you make up for in these areas you lose in efficiency, operating costs and have the need for secondary processing of the dust laden slurry water.

There are a number of options for the types of wet scrubbers, with the most common type being, Venturi or Dynamic scrubbers. Aerison is capable of supplying either type of scrubber and have many and varied applications and experience to draw upon. The scrubber system is limited by the required emission levels required to be achieved by the system. The listing of case studies below is a representative sample of the works completed since the company inception in 1988.



**Project** Rapid Growth Project Number 1  
**Location** Port Hedland, Western Australia  
**Client** BHP Billiton Iron Ore

**Key Feature:** Dynamic wet scrubber for the Lump Rescreening Plant located on Finucane Island. Full system supply, including scrubber; fan; slurry systems; structural steel and all ductwork.



**Project** Rapid Growth Project Numbers 3 to 5  
**Location** Port Hedland and Newman  
Western Australia  
**Client** BHP Billiton Iron Ore

**Key Feature:** Total of over 25 dust collectors for use on rotary ore car unloader systems, screening plants and transfer stations. Scope of works also include ventilation pressurisation systems.

**AERISON** Pty Ltd

Address: 17-19 Ballantyne Road Kewdale WA 6105 Australia

Main: +61 8 9352 5900 | Fax: +61 8 9352 5566

Email: [info@aerison.com](mailto:info@aerison.com) | [www.aerison.com](http://www.aerison.com)



# AERISON CASE STUDY



**Project** QER - Pilot Plant  
**Location** Gladstone, Queensland  
**Client** Queensland Energy Resources

**Key Feature:** Fully operational plant for the extraction of Shale Oil, required a venturi scrubber in part of the process to collect dust from the dryer. The scrubber design included an integral sump contained within the main body of the scrubber.



**Project** Pilot Testing - Emissions Reduction Project  
**Location** Kalgoorlie, Western Australia  
**Client** Kalgoorlie Consolidated Gold Mines

**Key Feature:** System designed to test the effectiveness of cooling, then condensing a hot emission source to remove heavy metals from the air stream. Design utilised a stainless steel venturi scrubber with various storage tanks to isolate the condensed liquor at various stages, all contained on a skid frame for ease of transportation.

**AERISON** Pty Ltd

Address: 17-19 Ballantyne Road Kewdale WA 6105 Australia

Main: +61 8 9352 5900 | Fax: +61 8 9352 5566

Email: [info@aerison.com](mailto:info@aerison.com) | [www.aerison.com](http://www.aerison.com)