

Water Treatment Solutions

CATALOGUE



WATER MANAGEMENT EXPERTS

aquaenergygroup.com.au

Tailings Treatment



A tailings treatment plant can help your mine separate solid tailings from water so they can be safely disposed of.

Aqua Energy group can design a turnkey tailings treatment package suited to your mine site and all governing regulations. Our innovative designs ensure maximum recovery of minerals and metals, while simultaneously reducing water usage. We understand that every mining operation is unique, which is why we offer tailored tailings treatment solutions to meet your specific requirements. Whether you are treating high-volume tailings in open-pit mining or complex tailings from underground operations, we have the expertise to deliver results.

Aqua Energy Group will provide all associated pipework, pumps, electrical switchboards, sensors, etc. by staying at the forefront of research and development, we bring the latest advancements in process efficiency, environmental sustainability, and resource recovery, helping you stay competitive in a rapidly evolving industry.

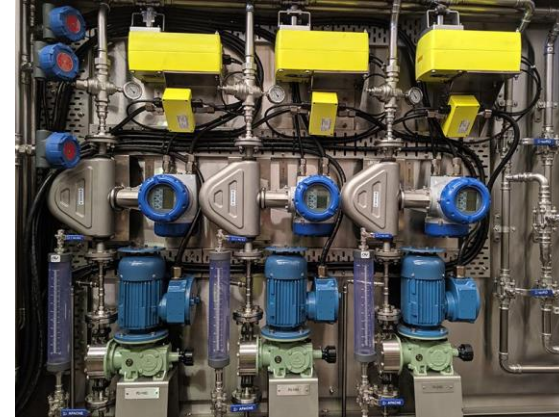
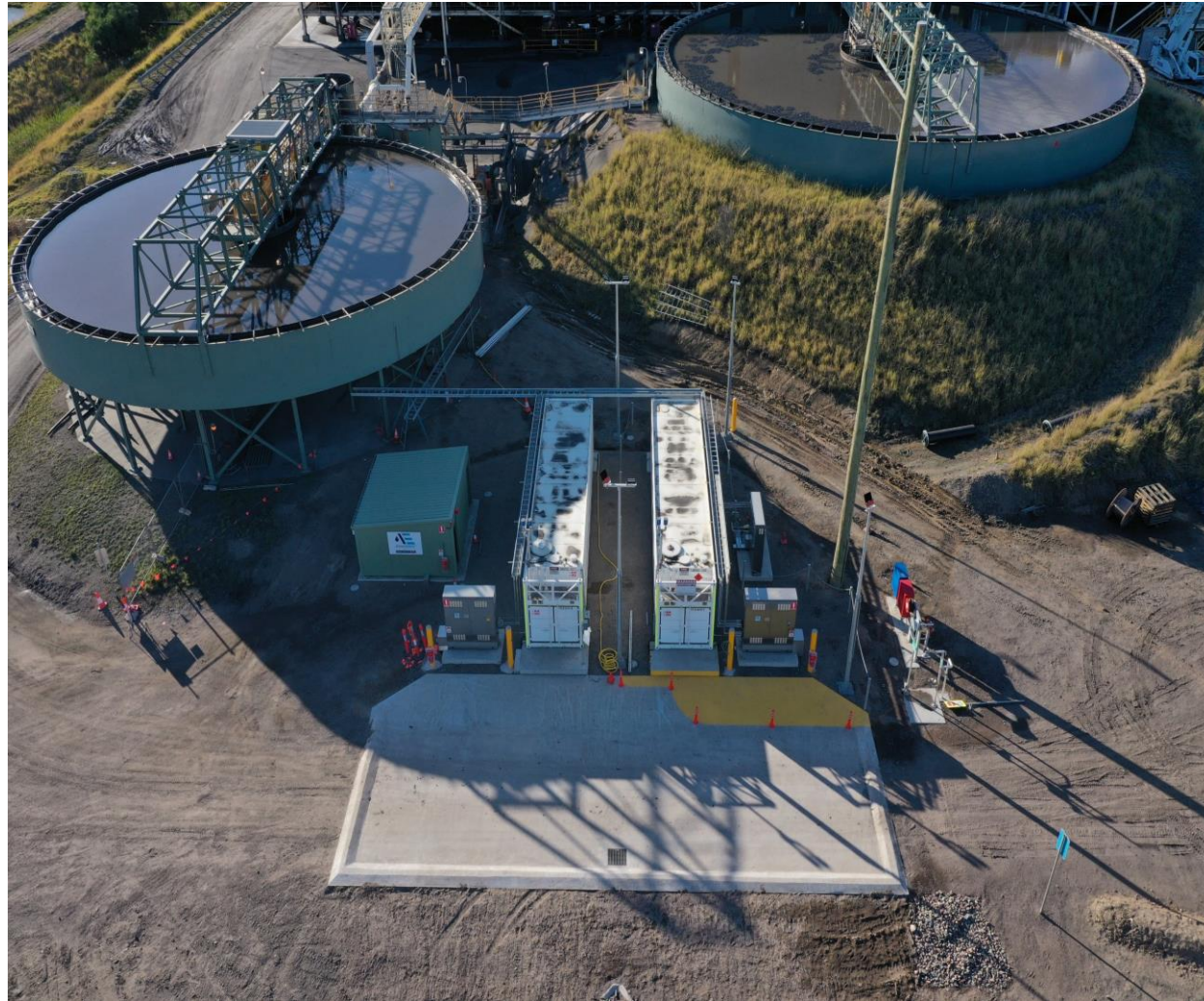
Benefits

- Fully automated
- Increased water recycling
- In-house engineering and fabrication with trial pre-installation
- High quality paint specification for maximum life expectancy of equipment
- Prevents environmental contamination.
- Can be designed for remote areas

Features

- Designed according to governing regulations
- Thickening and settling tanks for further treatment
- Tailings storage facilities
- Filtration and chemical treatment systems
- Dewatering components

Reagent Dosing Plant



A dosing pump system allows you to perform mining operations without relying on a tailings dam. A dosing and reagent plant modernises your processes, allowing for a smoother, safer and cost-effective operation. The dosing and reagent plant is an extension of your pre-existing prep plant and thickener tank system. Rather than moving to a tailings dam, fines are redirected into the thickener tank and are treated with the reagent solution.

Fines are collected and returned for reuse which:

- Reduces cost
- Maximises soluble metal recovery
- Increases efficiency

Maintaining recovery, ensuring availability and sustainability while keeping costs low is challenging. Our customised solution maximises your return on investment by enabling gains in throughput, grade and recovery with minimised environmental impact.

Every dosing operation is unique, but AEG is committed to understanding the precise needs of your processing plant to ensure it functions smoothly.

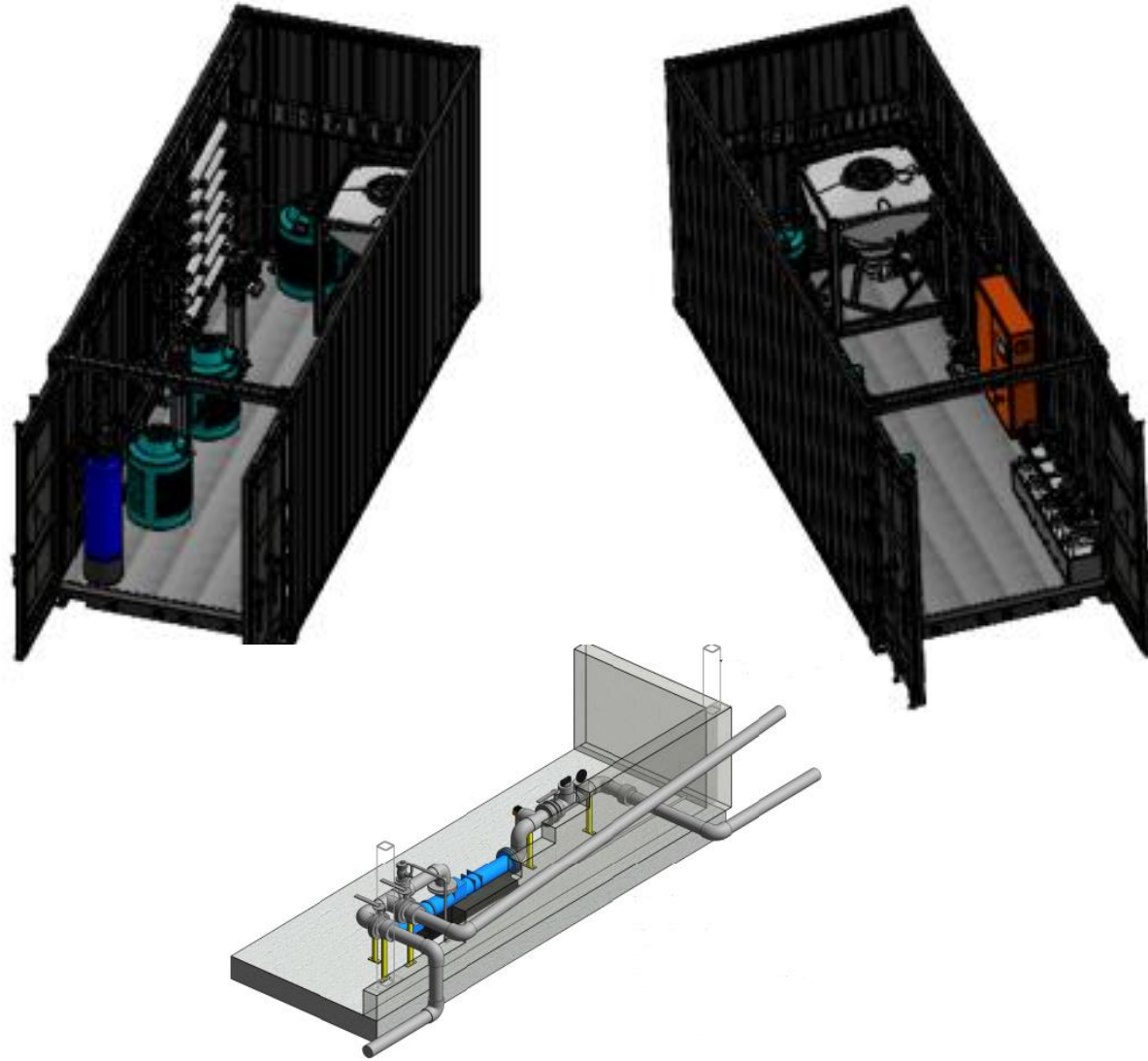
Benefits

- Reduces production cost of mine
- Fully automated
- Limited maintenance required
- In-house engineering and fabrication with trial pre-installation
- High quality paint specification for maximum life expectancy of equipment

Features

- Compact layout minimises total footprint
- Operational availability with no loss of production
- Liquid and powder processes available
- Available in stainless steel construction for hostile environments
- Interlock protection for all critical components

Leachate



Leachate is formed when waste is mixed with rainwater or other liquids. Pollutants such as heavy metals and organic compounds can be picked up by the passing water and deposited into adjacent groundwater or surface water. Mining operations can have a similar issue, whereby water mixes with minerals and ores, subsequently damaging the environment.

Aqua Energy Group can provide a system to treat leachate problems. Our team of experienced engineers ensures the most cost-effective and innovative design is provided, while adhering to governing regulations.

Aqua Energy Group can accommodate a range of leachate processes including:

- Dewatering
- Disinfection
- Monitoring and control systems
- Sludge management

Benefits

- Fully automated
- Increased water recycling
- In-house engineering and fabrication with trial pre-installation
- High quality paint specification for maximum life expectancy of equipment
- Prevents environmental contamination.
- Can be designed for remote areas

Features

- Compact design
- Designed according to governing regulations.
- Containerized for protection.

Sewage Treatment



Sewage treatment is the process of removing contaminants from wastewater created by domestic, industrial, commercial and agricultural activities.

Aqua Energy Group focuses on packaged pump stations which are suitable for:

- Raw sewage
- Stormwater
- Trade waste
- Effluent

Packaged pump stations are an innovative solution to situations where it is preferable or essential to keep civil work and installation time to a minimum. They are a time saving and environmentally friendly solution to any situation where sewage or wastewater needs pumping to a mains connection.

Benefits

- Environmental protection
- Resource recovery
- Regulation compliance
- Conservation of water
- Prevention of water pollution
- Protection of public health

Features

- Easily transportable
- Complete packaged system including all in-tank fittings
- Available in 70L to 3000L capacities
- Choice of single or dual pumps
- Polyethylene or fiberglass construction
- 240 or 415 volt power supply

Water Treatment



AQUAENERGYGROUP



Water treatment involves improving the quality of water for drinking, irrigation, or industrial processes. Aqua Energy Group is an industry innovator offering fully engineered water management and treatment systems.

AEG will find the most innovative and cost-effective solution for any water treatment application using traditional techniques and in-house engineering. Our extensive range of vendor partners allows for a modular approach to workshop construction and assembly, ensuring each component is tested prior to installation.

Aqua Energy Group designs equipment with the product's full life cycle in mind. This minimises operational costs and simplifies ongoing maintenance requirements.

Typical solutions of water treatment offered include:

- Treating surface water for use on site
- Treating wastewater for compliant disposal to the environment
- Selective removal or recovery of contaminants and minerals
- Vehicle and plant wash bay systems

Benefits

- Modular components reduce installation time
- Proven components ensure system compliance
- Vast range of vendor partners ensure delivery expectations
- Available in stainless steel for harsh environments
- Minimum of IP55 protection on all outdoor equipment

Features

- Reduced construction time provides quicker ROI
- In-house engineering provides innovative and modern designs
- Very low operational costs and limited maintenance items
- Systems are tested in a controlled environment with customer present