

aeciworld.com



BETTER WATER

TECHNOLOGIES

MINING



WE ARE ONE AECI, FOR A BETTER WORLD



INTRODUCTION

AECI WATER understand that water is the lifeblood of any mining operation. It is essential not only for the efficient operation of mining activities but also for the well-being of the communities and the environment surrounding them.

Our mission is to provide tailored water-treatment solutions that ensure optimum water quality for every facet of mining, from surface and underground operations to tailings storage facilities, mineral processing, and refining. We are committed to enhancing operational efficiency and securing equipment integrity without imposing an additional burden on the already limited municipal infrastructure. By partnering with the mining industry, we aim to significantly improve key performance indicators related to the reduction of total water use and water use intensity.

Our approach is holistic; we look at every mining project through a lens of environmental and societal stewardship. This means not only protecting water resources but also maximising the reuse of existing water sources to address the water challenges faced by mines. Leveraging the latest and most advanced technology, along with our specialised chemical programs and solutions, AECI WATER stands at the forefront of water management and supply in the mining industry. Our expertise allows us to focus exclusively on performance, delivering value-added solutions that drive down the total cost of operation for our mining customers. We offer the mining industry a comprehensive package of solutions that includes:

- Customized water treatment programs: designed to meet the specific needs of each mining application.
- Advanced technology integration: utilising cutting-edge technology for optimal water management.
- Community and environmental stewardship: ensuring that every project contributes positively to the environment and local communities.
- Performance-driven expertise: our team's in-depth understanding of the mining sector translates into solutions that enhance efficiency and sustainability.



MINE WATER INFLUENT

Mining operations receive their incoming water from dams, rivers, boreholes and well-fields which contain suspended sediments and impurities. These require removal using customised engineered solutions and advanced chemical programs to make the quality suitable for down-stream mining processes.



Coagulants | Flocculants | Dewatering Aids | Disinfectants | Foam Control | pH Control | Pipeline Cleaning & Passivation | Bio-augmentation Products | Heavy Metals Removal | SABS and NSF (NSF/ANSI/CAN 60) Approved Chemistries for Potable Water | One-line Monitoring & Control

AECI WATER adds value to mine water influent through their unique value offerings including Solid/ Liquid Separation, Desalination and Disinfection. The value offering includes: custom-engineered filtration solutions, Veolia Hytrex™ & Z-Plex™ polypropylene depth filters, custom-engineered clarification solutions and solid/liquid separation chemical technologies.

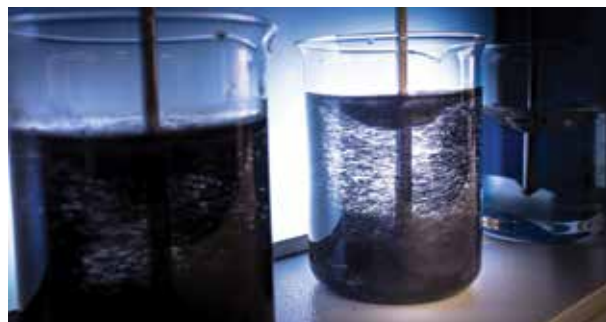
Desalination value offerings include ion exchange technologies as well as UF, NF, RO, ED membrane technologies.

Mine influent water from dams, rivers, boreholes and well fields contains microbiological and organic elements which require disinfection to ensure that they are safe for human consumption and to mitigate the risk of microbiological fouling. The Spectrus® chemical range of biocides includes various oxidising and non-oxidising biocides for superior microbiological control. These chemical technologies contribute to the health and safety of employees interacting with water systems, removing potential process bottle-necks, meeting quality requirements for down-stream processes and optimising water resource utilisation.

Custom-engineered solutions for on-site chlorine dioxide generation, treatment and performance monitoring form part of the AECI WATER Disinfection offering.

New innovations and disruptive technologies include the new Sectional Panel Clarifier and the Fibre Disk Filter™ (FDF™) designed as a novel approach to the challenges of modern mining filtration.

Through the application of these technologies mining operations meet the quality requirements for down-stream processes, reduce maintenance cost of water pumping and distribution infrastructure, prolong asset life and optimise resource utilisation.



CASE STUDY

MECHANICAL FILTRATION SAVING OVER 33 MILLION LITRES OF MUNICIPAL WATER PER ANNUM

There are several commercially available filter types within the 1-10 micron range, however, they carry high maintenance and filter media replacement costs. It is not easy to find a low-micron filtration solution that is both cost effective (CAPEX and OPEX) and environmentally friendly.

FDF™ automatic water filtration systems offer a cost-competitive filtration solution in the <5 micron range with additional benefits of robust design, smaller footprint, modular deployment and lower water and energy consumption compared to conventional media, bag and cartridge solutions.

PROBLEM

A key AECI WATER customer changed 14 x 5 micron bag filters daily and still had manganese accumulation on the moulds affecting their process. They changed fibre wound cartridges on a monthly basis.

OUR ENGINEERING-DRIVEN SOLUTION

AECI WATER installed an FDF-30 automatic water filtration system offering filtration solutions in the 1-10 micron range with many advantages over media, bag and cartridge filters.

The new innovative FDF™ technology offers greater filtration area than other fibre filters, resulting in a better environmental footprint with lower initial and disposal cost. The minimum initial pressure loss also results in lower energy consumption.



Saving 100m³ of municipal water per day



>R30 million annual saving in water costs



Saving >R1 million per month, excluding mould integrity and downtime



Zero waste to landfill



SURFACE MINING OPERATIONS

AECI WATER solutions for surface mining operations can be classified as dust control, supply of engine coolants and pit water treatment solutions.

DUST CONTROL

AECI WATER provides comprehensive solutions for material-handling dust control in the mining industry, ensuring compliance, safety and environmental protection.

AECI WATER offers customised mine-dust control solutions to address the negative impact of dust on employee health and safety and enable an environmentally friendly and cost-effective means of containing dust from mine roads. This includes chemical treatment programs, on-site dust control chemical manufacture and custom-engineered solutions to control dust from tipping, crushing, screening, ore conveyance and stockpiling.

Through our unique on-site solutions we are

- promoting health and safety of employees
- reducing precious material lost as dust in material handling
- reducing equipment wear, downtime and maintenance costs
- reducing cost of water, fuel and labour required for spraying of haul roads to contain dust





ENGINE COOLANT TECHNOLOGIES

AECI WATER provides essential support for mine vehicle fleet cooling systems, ensuring efficient operation and prolonged lifespan of heavy-duty vehicles. Here's how we make a difference:

- Heat dissipation: Our coolants efficiently dissipate heat generated by powerful engines, preventing overheating, performance degradation and costly engine damage.
- Corrosion protection: We offer corrosion inhibitors that safeguard cooling system components from rust and corrosion, vital for withstanding harsh mining environments.
- Freeze protection: Our formulations prevent coolant freezing in cold climates, safeguarding engine components and ensuring continuous operation even in sub-zero temperatures.
- Boil-over prevention: AECI WATER's coolants raise the boiling point, preventing coolant evaporation
- Lubrication: Our coolant additives provide lubrication to water pumps and moving parts, reducing friction and wear and extending component lifespan.
- Compatibility: Our coolants are carefully formulated to be compatible with cooling system materials, minimising the risk of leaks, seal failures and other issues.
- Environmental considerations: We offer environmentally friendly formulations, reducing ecological impact and ensuring responsible coolant use and disposal.

The manufacture (including on-site manufacture) and supply of specialised engine coolants for haul trucks and mine fleet vehicles conform to latest stringent OEM engine designs and requirements. The AECI WATER engine coolant offering includes traditional engine coolant technology incorporating glycol base coolants and corrosion inhibitor concentrates, "hybrid" engine coolant technologies and "OAT" (Organic Acid Technology) based products. We offer:

- analytical test methods and instrumentation for on-site coolant degeneration analysis
- coolants that are suitable for automotive, heavy-duty diesel and extended life applications.

Value-added outcome is measured through reduced wear and fouling of engine cooling system components as well as reduced fleet maintenance cost.

CASE STUDY

ON-SITE MANUFACTURE OF RECO-COOL® ENGINE COOLANT TECHNOLOGY REDUCES MINE VEHICLE MAINTENANCE AND ENSURES SUSTAINABILITY OF SUPPLY

At one of the largest open-pit mines in the world AECI WATER established the on-site manufacture of OEM-spec mine vehicle engine coolants backed by a robust quality-control program , thereby reducing vehicle downtime and maintenance cost and ensuring uninterrupted coolant supply.

PROBLEM

The mine used conventional nitrite and glycol coolant technology in its mine vehicle fleet. Due to changes in metal alloys, it saw increased wear and silica deposits in haul-truck thermostat-housings leading to increased maintenance costs , downtime and ultimately loss of production.

OUR VALUE-DRIVEN SOLUTION

After extensive trials AECI WATER replaced conventional nitrite technology with Reco-Cool® HD Premium-N Hybrid coolant technology and validated reduction in pitting and silica deposits.

A custom on-site manufacturing plant was designed and built incorporating desalination technology, bulk storage capacity, workshop coolant distribution with a robust quality-control program which enabled continuous product supply and coolant quality assurance.



Meeting OEM (CAT and Komatsu) specifications



Improved equipment integrity



Reduced maintenance cost and down-time



Improved product availability on-site



On-site product analysis and quality assurance

PIT WATER TREATMENT SOLUTIONS

Customised chemical and engineered solutions for treatment of excess water in open-cast facilities to address contamination from surface- or ground-water ingress manifesting as dissolved salts, metals, acidic water and suspended solids

AECI WATER offers customised chemical solutions for neutralising acid water and addressing pit-water-related corrosion, including

- mechanical filtration and clarification to remove physical impurities
- membrane technologies for extraction of organic compounds, salts and metals
- pit-water reuse for ore processing or drinking water purposes.

These interventions ensure integrity of mine infrastructure, reducing mining equipment maintenance costs and prolonging equipment life. By increasing water use intensity, they provide an alternative water source in dry mining regions.



CASE STUDY

WATER CHEMISTRY CONDITIONING TO ENABLE CORROSION REDUCTION

One of the main challenges in mining is the preservation of carbon steel piping conveying water with high chlorides, sulphates, micro-organisms and suspended solids. The conventional approach of increasing the alkalinity to counter high corrosivity due to the mentioned anions tends to have a negligible impact on reducing the rate of corrosion and fouling. An alternative approach employs the formation of a mixed metal passivating film to provide adequate corrosion control coupled with a dispersant and micro-organism treatment.

PROBLEM

With the limited availability of adequate quality water, re-use and repurposing of process water is often seen as a means of supply in mines. This water unfortunately contains high levels of anions e.g. chlorides, sulphates, micro-organics, suspended solids etc. These factors inhibit the formation of magnetite passivating films that create unplanned downtime, frequent pipe failures and production losses with environmental liability.

OUR TECHNOLOGY SOLUTION

The application of mixed metal galvanic corrosion protection coupled with dispersant and micro-biological control assists in reducing corrosion rates due to high anion levels, suspended solids creating under deposit corrosion and microbiological induced corrosion. A baseline is first obtained by water chemistry analysis followed by site pilot undertaking to determine the appropriate treatment regime.



Reduced pipeline corrosion rates



Improved pumping efficiency by reduced pipeline deposits



Improved plant availability



UNDERGROUND MINING SOLUTIONS

Water treatment on underground mines typically includes cooling water treatment, mine water treatment and dust control. AECI WATER offers advanced chemical and engineered solutions for mine water reuse .



Feedwater Pre-treatment | Corrosion Control | Scale Control | Microbial Control | Fouling Control | pH Control | Foam Control | Side-stream Filtration & Desalination | Cleaning & Passivation | Closed-loop System Treatment | Once-through System Treatment | Open-recirculating System Treatment | Cycle Optimisation | Blowdown Treatment & Recovery | Heavy Duty Diesel Engine Coolants | Real-time Monitoring & Control

Customised cooling water (pre-cooling, compressor, fridge plant, ice plant) treatment and management solutions to ensure critical cooling system asset protection and to address the threats of scale/deposition, corrosion and microbiological fouling of towers and heat exchangers.

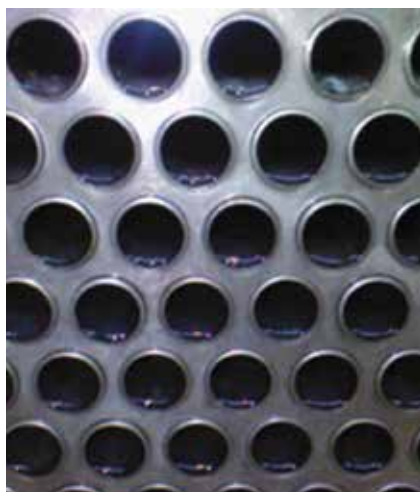
Proprietary Gengard™, Scaletrol™ and Spectrus™ chemical treatment technologies address the risk of scale, deposition, corrosion and microbiological attack. The IM-PROSERV™ web-based data management and Veolia TrueSense™ communication platforms secure real-time monitoring and in some cases on-line, real-time control instrumentation.

The benefits derived from proper cooling water treatment include:

- Improving heat transfer efficiency
- Improving asset utilisation, reliability and life expectancy
- Reducing asset maintenance costs
- Optimising water and energy consumption
- Creating opportunities for water reuse
- Improving health and safety of employees who interact with water systems

With the focus on using alternative water sources, AECI WATER recommends the use of its proprietary ScaleTrol® PDC chemical technology which is specifically designed for use in high-stress water. ScaleTrol® PDC is a deposit control agent, specifically designed to reduce the deposition of calcium carbonate and associated species in industrial applications.

ScaleTrol® PDC is a blend of dispersants and crystal modifiers, designed to function in ‘stressed’ environments. The product controls fouling resulting from the precipitation of carbonate and sulfate solids. It is known to provide superior performance in high suspended solids systems, to be effective at high pH and temperature ranges and to reduce scaling potential in high hardness streams. It carries the NSF-registered category code G5 (Cooling and Retort Water Treatment Chemicals Description and Use).



The AECI WATER team continues to work closely with various key mining customers to safely replace costly potable water being used as make-up to cooling systems, fridge plants and other applications, with lower quality (but inexpensive and abundant) mine service water, which is a readily available and cost-effective alternative.

CASE STUDY

MINE WATER REUSE

Utilising proprietary SCALETROL™ chemical technology to enable mine water reuse for cooling systems. With the rapid increases in potable water cost and a growing impact on regional water resources this underground gold mine urgently required solutions for using alternative water sources to feed its various large cooling systems. AECI WATER designed and implemented an effective chemical solution and robust monitoring plan to enable mine water reuse, thereby reducing the mine's potable water consumption by more than 60%.

PROBLEM

A large underground mine experienced continuous and rapid potable water cost increases by the local municipality. A large percentage of its potable water consumption was mandated for make-up to its various large cooling systems. A sufficient volume of mine service water was available, but could not be utilised due to its poor quality and the related risk of deposition, scaling and microbiological fouling in the cooling systems which outweighed the potential saving in potable water cost.

OUR VALUE-DRIVEN SOLUTION

After extensive feasibility testing, AECI WATER implemented an advanced chemical treatment program using its proprietary Scaletrol™ PDC technology specifically designed for use in "stressed" water conditions, which enabled the safe reuse of mine service water in the cooling systems. The treatment program was supported by a comprehensive monitoring and control program to continually track performance and ensure positive outcomes.



60% reduction in potable water consumption



1325 ml fresh water saved annually



R32.7m net annual water cost saving



Reduced environmental impact on regional water resources



Significant positive contribution to sustainability of operations

AECI WATER offers mine water treatment and management solutions comprising world-class chemical programs, custom-engineered solutions and servicing programs to ensure asset protection against the threats of scale, deposition, corrosion and microbiological fouling throughout the mine water reticulation:

- Underground acid water stabilisation
- Underground settler solid/liquid separation and settler operation
- Mine water reuse solutions for cooling system make-up
- Mine water reuse solutions for drinking water
- Specialised chemical solutions for mine water corrosion control
- Mine water disinfection solutions
- Improved health and safety of employees interacting with water systems
- Ensuring asset protection and integrity of mine infrastructure
- Reducing pumping and maintenance costs
- Reducing potable water consumption and cost

In order to address the negative impacts of dust on employee health and safety and contribute to improved mechanical integrity of ore conveyance equipment AECI WATER provides chemical treatment programs for underground haulage and travelling-way dust control and custom-engineered solutions for underground tipping, crushing, conveyance and stockpiling material-handling dust. These dust-control programs contribute to improved employee health and safety (respiratory health and visibility), reduce the time and resources spent on water-spraying of haulages and travelling-ways to contain dust and reduce equipment wear, down time and maintenance costs.

CASE STUDY

ENGINEERED SOLUTIONS FOR MINE WATER REUSE

This underground platinum mine experienced frequent instances of potable water supply disruptions threatening the sustainability of its operations. AECI WATER partnered with the mine to design, build and operate a customised engineered solution enabling the reuse of excess underground fissure water, thereby replacing 85% of the mine's potable water consumption.

PROBLEM

A large underground platinum mine experienced significant challenges with municipal supply of potable water threatening sustainability of mining operations through the risk of mine stoppage and production losses. The mine was also experiencing rapid increase in potable water cost from the local municipality. Excess underground fissure water was available but could not be used to replace potable water due to quality concerns around nitrates and microbiological activity.

OUR VALUE-DRIVEN SOLUTION

AECI WATER partnered with the mine to design, build and operate a custom-engineered solution to upgrade the underground fissure water to potable water quality and replace the need for continuous potable water intake. The engineered solution includes clarification, dual media & cartridge filtration, reverse osmosis and ion exchange technologies and is operated and maintained by the AECI WATER operations team on a 24/7 basis.



3.3MLD reduction in
municipal water consumption



Significant potable water
cost savings



Reduced dependence on
municipal water



Improved environmental
compliance



Improved sustainability of
operations



TAILINGS STORAGE FACILITIES

AECI WATER offers customised engineered and chemical treatment solutions for the treatment of TSF water to enable its reuse in other mining processes and lowering of the facility's environmental impact.

These unique solutions include TSF reclamation water corrosion control, TSF return water deposition and scale control, filtration and clarification solutions to remove suspended impurities, membrane solutions for extraction of organic compounds, salts and metals and customised solutions for TSF water reuse.

These solutions allow the mine to improve water use intensity, creating opportunities for safe and responsible water reuse, reduced environmental impact of TSF facility, reducing maintenance cost on water infrastructure and prolonging asset life.

CASE STUDY

INNOVATIVE SOLUTIONS INCREASE MINE PRODUCTION WHILE REDUCING COSTS.

ECOVAP evaporative technology improves TSF and evaporation pond freeboard and enables increased production. ECOVAP complements technologies used in the extraction of targeted or residual elements in the water. ECOVAP can inexpensively increase total dissolved solids (TDS) to 250kppm. This reduces transportation of wastewater for processing, as well as the energy and chemicals needed to restore water. ECOVAP facilitates permanent disposal by dramatically reducing the volume of wastewater through zero liquid discharge (ZLD) by 80-95%, with a similar reduction in related transportation and disposal costs.

PROBLEM

A large mine sought to increase production capabilities with a ZLD requirement. The operation had previously built four large evaporation ponds that occupied all of its permitted land, this capping production. As is typical of many mining operations, this mine is remotely located, with limited electricity and no nearby disposal sites.

OUR ENGINEERING-DRIVEN SOLUTION

Without increasing its land footprint, multiple Evaporative Matrix™ towers were installed on the existing ponds. The ECOVAP solution consumes a small fraction of the electricity of atomising sprayers. In four months from groundbreaking to completion, the installed ECOVAP towers evaporated water at over 59 times the normal rate per square foot of surface space. This was done without any increase in the site's land footprint. As a result, the operation increased mine production and eliminated water disposal as a limiting factor for future growth.



Increased mine production



85% Reduction in operating costs



Ensure legal compliance - no "freeboard" concern

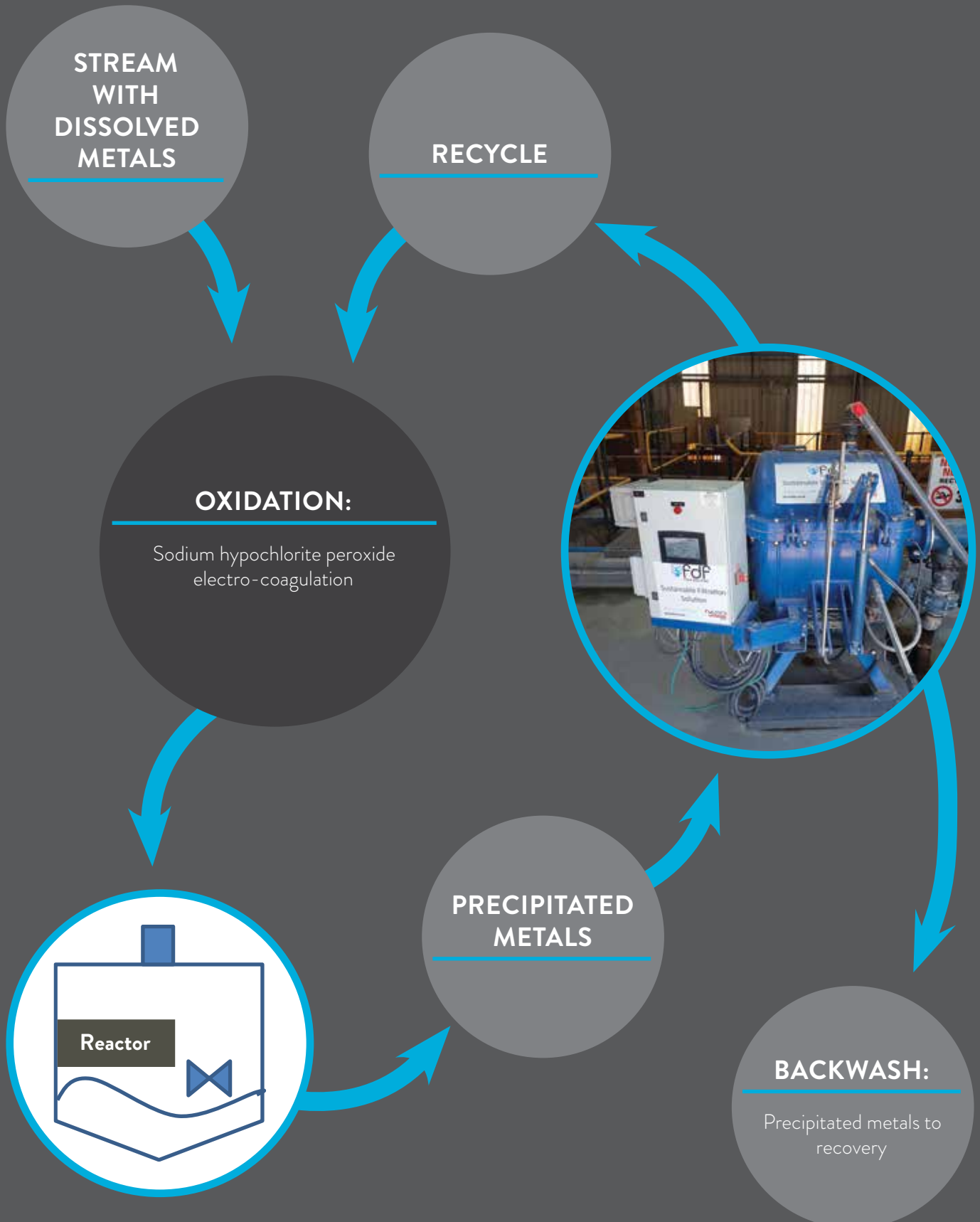


50% lower cost than conventional water disposal technologies

CASE STUDY

RECOVERY OF DISSOLVED METALS FROM TAILINGS AND MINE EFFLUENT STREAMS

The process below describes the removal and recovery of valuable metals from tailings dams and mine effluent streams.



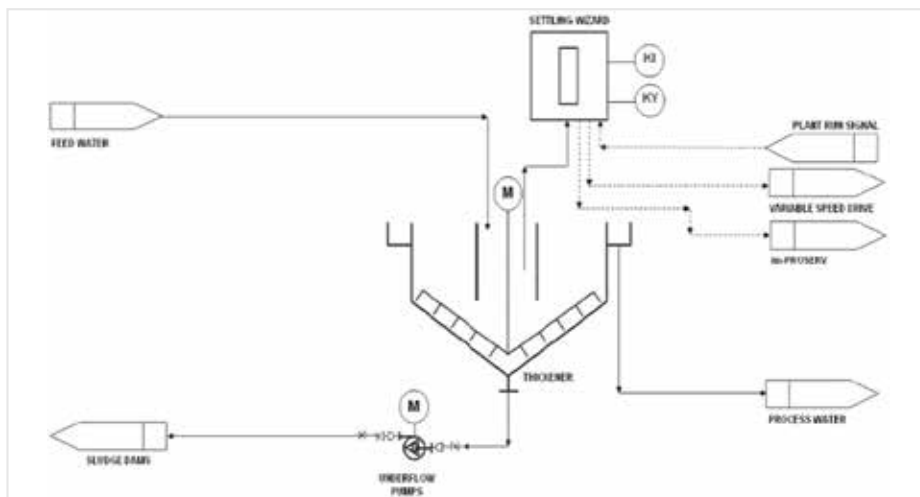
MINERAL PROCESSING OPERATIONS

Highly acidic waste streams containing metals can be recovered using our technology solutions approach which enables beneficiation of value products. AECI WATER provides novel customised engineered solutions for:

- Recovery of acids and metals from leach streams
- Recovery of acids and metals from EW electrolyte streams
- Separation of acids from IX eluate streams
- Purification of acids from SX raffinate streams
- Waste pond reprocessing and valuable metal recovery
- Reducing cost of neutralisation of acidic mine effluent streams
- Reducing mine effluent disposal and associated costs
- Reducing operational cost by the reuse of recovered acid
- Environmental stewardship through regulatory compliance and “greener” operations
- Recovery of valuable metals from mine process effluent stream

Innovative and Disruptive Technologies also include Beneficiation of Acid and Metals from Acidic Waste Streams. The SETTLING WIZARD® is part of AECI WATER’s value adding offering and can be used very successfully to optimise thickener operations. The SETTLING WIZARD® is used to adjust the amount of polymer added into a solid-liquid separation process. This is achieved by continuously sampling and measuring the settling rate. The measured settling rate is compared to the desired settling rate, referred to as the Set Point.

In a situation where the measured settling rate is too low, a signal is sent to the dosing pump to increase the dose rate of flocculants. When the measured settling rate is too fast, a signal is sent to the dosing pump to reduce the flocculant dosing rate. By controlling the dosing pump accurately, better performance and dry ton output can be achieved. A built-in communicator converts the settling rate input to a 4-20mA signal. This signal is sent to either a cellphone or our im-PROSERV web-based system, to ensure that the AECI WATER sales technologist and plant operators receive instant updates on the thickener performance.





REFINING OPERATIONS

COOLING WATER TREATMENT

AECI WATER offers customised treatment and management solutions for cooling water (furnace open and closed cooling, acid plant cooling systems) to ensure critical cooling system asset protection against the threat of scale/deposition, corrosion and microbiological fouling:

- World-class scale, corrosion and microbiological chemical treatment technologies
- IM-PROSERV® - web-based data management and communication platform
- TrueSense® - on-line, real-time monitoring & control instrumentation
- Total system management programs that offer comprehensive cooling water treatment support and monitoring programs
- Improved heat transfer efficiency
- Improved asset utilisation/reliability and life expectancy
- Reduced asset maintenance cost
- Optimising water and energy consumption
- Creating opportunities for water reuse
- Improving health and safety of employees interacting with water systems



CASE STUDY

EFFECTIVE REUSE OF PROCESSED SEWAGE EFFLUENT (PSE) WATER SECURED THROUGH THE USE OF INNOVATIVE TECHNOLOGIES

Effective reuse of PSE water was secured through the use of GENGARD® and TRUESENSE® technologies. AECI WATER skillfully combined the benefits of patented chemical treatment technology with advanced monitoring and control instrumentation to enable the sustainable reuse of treated sewage effluent in the smelter cooling systems, thereby replacing potable water consumption by 100%.

PROBLEM

A South African mineral-processing facility experienced significant pressure to reduce potable water usage due to water cost and environmental impact considerations. Adequate processed sewage effluent (PSE) water was available but unusable due to the inherently poor water quality and related risk of chemical and microbiological fouling which outweighed the potential saving.

OUR ENGINEERING-DRIVEN SOLUTION

AECI WATER implemented its patented GENGARD® chemical treatment technology incorporating stress tolerant polymer (STP) to effectively control phosphate deposition in the cooling system. This program was managed by TrueSense® advanced online monitoring and control technology to ensure accurate polymer feed to prevent deposition by adjusting dosing to real-time phosphate variances.



100% reduction in potable water consumption



Prevention of phosphate deposition



Microbiological control of PSE water



Uninterrupted cooling system operation



BOILER WATER MANAGEMENT



Feedwater Pre-treatment & Conditioning | Internal Treatment for Scale and Deposit Control | Oxygen Scavengers | Condensate Treatment | pH Control | Fire-side Treatment | Acid Cleaning | Wet Lay-up | Cycle Optimisation | Blowdown Treatment & Recovery | On-line Monitoring & Control.

AECI WATER deploys custom-engineered solutions for boiler water pre-treatment as well as the patented Solus™ chemical treatment product range for boiler water pre-treatment – low- to mid-pressure as well as specialised high-pressure chemical treatment programs.

AECI WATER also offers total system management programs with a comprehensive range of boiler treatment support and monitoring programs. This enables superior control of boiler contaminants and deposits compared to conventional chemical treatment technology, reducing scale leading to cleaner heat transfer surfaces within boilers, optimised water and energy consumption, reduced asset maintenance costs, improved asset utilisation and life expectancy.

GAS SCRUBBER SCALE CONTROL

Gas-scrubbing systems are used to neutralise harmful components in industrial air or waste gas streams. During scrubbing, mineral compounds are added as slurry to the scrubber liquid, and this can result in the formation of mineral scale which leads to plant down-times due to the need to open lines and de-scale.

AECI WATER offers world-class chemical treatment technologies for scale control:

- Control of fouling resulting from the precipitation of mineral solids
- Providing superior performance in high suspended solids systems
- Effective over a broad pH and temperature range
- Total system management programs offering comprehensive support and monitoring

Value outcomes include:

- Improving gas scrubber operational efficiency
- Improving asset utilisation/reliability and life expectancy
- Reducing asset maintenance cost
- Optimising water and energy consumption
- Reducing unplanned plant stoppages and shutdowns



MINE EFFLUENT WATER MANAGEMENT

EFFLUENT WATER TREATMENT SOLUTIONS

AECI WATER offers customised chemical treatment and engineered solutions to ensure discharge compliance to water use license requirements, to create opportunities for effluent water reuse and to extract economic value from effluent streams where viable.

Value offerings:

- Effluent volume reduction solutions
- Effluent quality improvement solutions
- Solutions for effluent reuse in cooling water systems
- Recovery of metals from effluent streams
- Zero liquid effluent discharge technologies
- Effluent quality monitoring programs

Value outcomes:

- Lowers environmental impact of mining
- Lowers the need to receive new water into the system
- Reduces the amount of discharge
- Presents opportunities for extracting economic value from effluent

WASTE WATER TREATMENT WORKS MANAGEMENT

The effective operation of WWTW's, including treatment of its waste streams, ensures ongoing compliance to health and environmental requirements while providing further opportunities for water reuse in more quality-tolerant processes.

Value offerings:

- WWTW operation and servicing programs
- MBR technology developed to address customers' challenges of productivity, lower footprint, simplicity and energy savings
- ED/EDR Membrane technologies for effluent reuse
- Microbiological control of effluent streams using the Spectrus™ range of biocides

Value outcomes:

- Improving asset utilisation
- Creating opportunities for safe and responsible water reuse
- Meeting health and quality standards for responsible environmental discharge
- Reducing maintenance cost on infrastructure
- Prolonging asset life

WE ARE ONE AECI, FOR A BETTER WORLD

AECI WATER HEAD OFFICE

Tel. +27 11 971 0400 | 200 Bergrivier Drive | Chloorkop | Kempton Park
Gauteng

aeciworld.com | aeciwater.co.za

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