

Reliable, efficient and sustainable ASSET MANAGEMENT

Downer
Relationships creating success

ISO 55001
CASE
STUDY



Downer and the Melbourne Cricket Club (MCC) are proud to set a new benchmark, achieving and maintaining Australia's first ISO 55001 (asset management system certification) for the Yarra Park Water Recycling Facility (YPWRF).

The facility incorporates a number of innovative design and construction features, and is now recognised with an international standard for best practice, in the way the WRF is managed as an asset and holds the first ISO 55001 certification in Australia that has been recently renewed.

The MCC-owned plant treats and re-uses sewage from the local sewer network, delivering on Government management goals and continues to set new benchmarks for others to follow.

Through the ISO 55001 certified SECURED Asset Management by Downer™ system, the plant has seen:

- A 47% operational cost saving through improved monitoring and management
- Improved risk management and reliability, with work delivered more efficiently towards higher 'risk to operations' activities, reducing reactive work by about 40%
- More focus delivered to continuous improvement activities, enabling even more benefits to be realised
- The WRF saw a 41% reliability improvement over 36 months

Best practice Asset Management with Australia's first ISO 55001 accreditation

RELIABLE, EFFICIENT AND EFFECTIVE ASSET MANAGEMENT

Downer has designed, built, operates and maintains Victoria's largest underground Water Recycling Facility (WRF), capable of producing 180 ML of Class A recycled water annually. The project was designed to meet the requirements of the Melbourne Cricket Club (MCC) and the various regulators, with the water used to provide secure, long-term sustainable supply to the heritage listed Yarra Park, Punt Road Oval and amenities at the iconic Melbourne Cricket Ground (MCG).

The facility incorporates a number of innovative design and construction features, and has achieved Australia's first ISO 55001 asset management system certification, recognising the WRF with an international best practice asset management standard. This important certification demonstrates the partnership between Downer and the MCC and the integrated decision making to optimise asset outcomes. As a result of our asset management system we are applying co-ordinated and systematic asset management processes, practices and decision rules to ensure we're efficiently and effectively utilising the WRF in meeting objectives and stakeholder expectations.

SECURED has also allowed Downer to provide content to successfully collaborate with the MCC and be awarded the first Infrastructure Sustainability (IS) Operations (Excellent) rating by the Infrastructure Sustainability Council of Australia (ISCA). ISCA is the peak industry body for advancing sustainability outcomes in infrastructure. The IS rating scheme is Australia's only comprehensive rating scheme for evaluating sustainability across design, construction and operation of infrastructure.

Improving efficiency and performance

- High levels of efficiency and performance improvements gained through:
 - Optimised planning and use of consumables
 - Efficient practices such as timing and delivery of maintenance, at the right time, to the right area
 - Optimal operation of the asset to meet delivery expectations as well as overall asset lifecycle outcomes.
- Through the SECURED Asset Management platform, a whole-of-asset integrated approach is taken that addresses the planning, operation, maintenance, support logistics, renewal and disposal (including the business processes utilised to support these activities)
- The YPWRF has seen a 24% reduction of 'low-benefit' tasks in 12 months, allowing focus on more on value adding efforts
- The YPWRF has also seen a 22% power consumption reduction over the last four years since the implementation of the SECURED Asset Management by Downer™ system.

Demonstrable cost savings

- On average, a cost saving of 47% has been achieved on operating costs at the WRF
- Across 12 water treatment plants that utilise the SECURED Asset Management by Downer™ system including the YPWRF, we've seen a reduction of chemical use of 33% equivalent to a cost saving of \$32/L cost over the past three years
- Better understanding, monitoring and maintaining assets see a considered approach taken to targeted maintenance where it is needed (rather than maintaining an asset when it may not be needed)

Find out more about delivering more reliable, efficient and effective asset management, email secured@downergroup.com

Improved engagement outcomes

- Through being able to integrate community and customer engagement processes, SECURED improves the collaboration and responsiveness with key stakeholders in the event of an emergency, outage (planned or unplanned)
- Aligning local procurement principles ensures that local providers are utilised on the asset
- Asset operators experience better engagement through better understanding their effort and alignment with the asset outcomes.

Reliability

- The WRF saw a 41% reliability improvement over 36 months
- Live tracking and reporting ensures continued reliable delivery of critical assets ensuring continuity of service
- SECURED has allowed Downer to better understand the operations of asset and focus maintenance activities to better manage reliability through better forecasting and prioritisation of maintenance work and asset operations.

Understanding and managing risks better

- SECURED Asset Management by Downer™ system allows asset owners and operators to refocus effort on tasks that present greater risks including:
 - Risk interruption or failure to deliver
 - Risk to environment
 - Risk to quality.
- SECURED also allows the asset owner and operator to better understand the risk profile of their assets, and more importantly, align it to their appetite

- Better understanding of asset risk has also allowed Downer to reduce and refocus the preventive maintenance schedules of an asset. On the YPWRF, we've seen a 29% reduction in preventive work without an increase in reactive work.

Continuous learning with a focus on improvement

- With better risk management and control Downer can prioritise procurement to ensure the downtime of the asset is reduced as much as practicable
- The learning mechanisms in the SECURED Asset Management by Downer™ system allows added integration, such as aligning parts of an asset to alerts and notifications to relevant authorities when that part of an asset gets updated or upgraded that need their approvals
- On the YPWRF, Downer has completed 70% of continuous improvement and sustainability activities planned throughout the last four years the asset management system has been in use.

