

Guideline Alert

Fire Safety Systems Guideline is now available.

The Guideline provides:

- Guidance on fire compliance including legislative, regulatory and governance expectations;
- Direction on integrating the fire asset life cycle with the water asset life cycle; and
- A framework and principles for fire safety design and risk assessment.

Why has the Guideline been created?

The design and installation of Fire Safety Systems are primarily guided by building classifications under the National Construction Code (NCC), which incorporates the Building Code of Australia (BCA). Many Sydney Water facilities, particularly those within treatment and network sites, do not fit neatly into the NCC classification framework, particularly regarding the need for operational continuity and critical infrastructure asset protection.

In the absence of a dedicated guideline, there was no consistent approach to designing, constructing, commissioning, and handing over fire systems. This lack of standardisation resulted in confusion, scope changes, and challenges in compiling the full set of documentation required for building occupancy compliance, leading to project delays, increased costs, and potential non-compliances.

What are the key requirements / key changes?

Key changes are summarised below:

1. Regulatory

Requirements for Crown Certificates, Building Code of Australia (BCA) Design Compliance Reports, and BCA Completion Certificates are now captured in this Guideline.

2. Maintenance

Additional fire safety system maintenance requirements under AS 1851:2012 are now mandated by the *Environmental Planning and Assessment (Development Certification and Fire*

Safety) Regulation under Clause 81A as of 13 February 2026. This requirement is now captured in this Guideline.

3. Safety In Design (SiD)

The SiD CHAIR 1 and CHAIR 2 templates have been updated to include additional fire guidewords.

What are the key benefits and impacts?

1. Life Cycle Cost

By incorporating fire safety systems early in the planning and design phases, and aligning project delivery with statutory requirements, an overall reduction in asset life cycle costs is expected. This will be achieved through faster project delivery, reduced scope creep, minimised rework, and clearer maintenance and operational procedures throughout the asset's life.

There will, however, be a modest increase in costs associated with the additional fire maintenance requirements mandated under AS 1851. It is important to note that these requirements were not introduced by the Guideline itself; rather, the Guideline formalises and reflects their existing mandatory status.

Despite the increase in maintenance expenditure, these costs are expected to be partially or fully offset by reductions in insurance premiums. Lower insurance costs are anticipated as a result of early engagement with insurers and underwriters, together with improved demonstration of compliance with fire safety requirements. This enhanced compliance framework is expected to reduce the overall risk profile of the assets, leading to more favourable insurance outcomes.

2. Time to Design and Construct

Savings in design and construction time are expected through a clearer definition of roles, responsibilities, and fire safety compliance deliverables. Improved clarity during project development should reduce delays, rework, and approval-related issues.

3. Safety

By ensuring fire safety systems are considered throughout the project and asset life cycle, the risk of fire-related injuries and asset damage is reduced to a negligible level. The Guideline adopts the NCC Performance Requirements, ensuring Sydney Water assets achieve a level of fire protection consistent with comparable building classes across New South Wales.

4. Risk

Risk assessment processes are expected to improve through the formal consideration of enterprise, corporate, and safety risks within project planning and asset management activities. This broader risk perspective will support more informed decision-making and better management of potential fire safety risks.

When do I apply the new Guideline?

When new or updated engineering standards are published, they apply to projects commenced after the publication date. There is no requirement to apply them retrospectively.

Where changes are driven by regulation or other critical risk, they may need to be applied to in-flight projects – that would be a special case with dedicated communication.

Adopting new standards early can be beneficial where they offer streamlined requirements that reduce costs or other benefits. Project managers have the discretion to apply new requirements to in-flight projects where they see benefit. In these circumstances, the Sydney Water Project Manager will issue an instruction.

How do I apply this new Guideline to existing assets?

When upgrading existing assets, full compliance to current standards and guidelines may not be practical or cost-effective. Instead, a value engineering and risk-based approach should be adopted to determine the optimal upgrade scope—balancing performance, cost, and risk.

Standards and guidelines apply to the construction of new assets and do not automatically trigger upgrades to existing assets.

Where can I find the new Guideline?

The Guideline is available on:

- [iConnect](#) (for our staff)
- [SWDelivery Portal](#) (for our delivery partners)
- [Sydney Water website](#) (for public users)

How can I provide feedback?

If you have any feedback on this Guideline, please contact us at standards@sydneywater.com.au.

Please pass this alert onto others that may benefit.