



Engineering

Technical Guideline

TG 0103 – Approach to Technical Governance

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Only the current revision of this Guideline should be used which is available for download from the SA Water website.

Significant/Major Changes Incorporated in This Edition

This is the first issue of this Technical Guideline.


Document Controls

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Approvers

Role	Signature and Date
Manager Engineering Quality and Innovation Matthew Davis	28/11/2023
	 X <hr/> Signer's Name Signed by: DA003681
Senior Manager Engineering Services (Acting) Mark Papadimitriou	29/11/2023
	X Mark Papadimitriou <hr/> Signer's Name Signed by: PA004117

Reviewers

Role	Name	Revision	Review Date
Manager Engineering Quality and Innovation	Matthew Davis	1.0	29/09/2023
Safety in Design Specialist	Lana Haigh	1.0	03/11/2023

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1 Introduction

SA Water is responsible for the construction and commissioning of an extensive amount of engineering infrastructure, to ensure that it is safe and fit for purpose.

To support these activities, SA Water uses a suite of technical governance documents, which this guideline has been developed to assist in the design, development, maintenance and management of its infrastructure.

This guideline provides details on SA Water's approach to the technical governance, and any deviations from those requirements.

1.1 Purpose

This Technical Guideline aims to:

- Provide an overview of how SA Water establishes the need for technical governance
- Describe the various forms of Technical Governance used by SA Water
- Detail how Technical Governance is developed, reviewed internally within SA Water and by the industry experts, finalised and published.
- Provide details regarding the ongoing management, update or change (revisions) of Technical Governance
- Provide details of how changes to SA Water's Technical Governance are communicated

1.2 Glossary

The following glossary items are used in this document:

Term	Description
DS	SA Water Datasheet
IP&S	Infrastructure Planning and Strategy
MEQ&I	Manager, Engineering Quality and Innovation
RIVER	SA Water's document management system (internal access only)
SiD	Safety in Design
TDRF	Technical Dispensation Request Form. This form is part of SA Water's Technical Dispensation Request Procedure which details the process by which those required to comply, or ensure compliance, with SA Water's technical requirements may seek dispensation from those requirements.
TG	SA Water Technical Guideline
TS	SA Water Technical Standard
SA Water	South Australian Water Corporation
SCADA	Supervisory Control And Data Acquisition

1.3 References

1.3.1 Use of Standards and Codes

Unless otherwise specified in the contract, the most current published edition (at the closing date for tenders) of Standards and Codes applicable to the Works applies, with materials and workmanship to be in accordance with the relevant Standard or Code (where applicable).

Designers and Constructors shall use Standards and Codes consistently throughout the design, supply and installation process without interchanging between different versions.

Overseas standards and other standard documents named in the Technical Standard are applicable in the same manner as Australian Standards to relevant requirements, materials and workmanship.

1.3.2 Precedence of Standards

When developing the design and specification, should any discrepancy exist among the referred standards and references, following hierarchy of standards shall be observed (unless specified otherwise):

- Regulations
- Contract
- SA Water Technical Governance
- SA Water Appendix B Technical Specification (or equivalent)
- Tender and Tender Addenda
- Australian Standards and Other Standards and
- Design Codes

1.4 Definitions

The following definitions are applicable to this document:

Term	Description
Contract Documents	A set of documents supplied to serve as the basis for construction; these documents contain contract forms, contract conditions, specifications, drawings, addenda, and contract changes
Constructor	The organisation responsible for constructing and installing infrastructure for SA Water whether it be a third party under contract to SA Water or an in-house entity
Designer	The organisation responsible for designing infrastructure for SA Water whether it be a third party under contract to SA Water, a Constructor, or an in-house entity. A Designer is a person who effects design, produces designs or undertakes design activities as defined in the <i>Work Health and Safety Act 2012 (SA)</i> .
Meridian	SA Water's drawing management system, used to store, manage and disseminate drawings.
Responsible Discipline Lead	The discipline expert responsible for TG 0103 defined on page 3
Revision	A document that is approved for use (i.e., includes signatures of all approvers).
SA Water's Representative	The SA Water representative with delegated authority under a Contract or engagement, including (as applicable): <ul style="list-style-type: none"> • Superintendent's Representative (e.g. AS 4300 & AS 2124 etc.) • SA Water Project Manager • SA Water nominated contact person

Term	Description
Technical Governance	SA Water's method for directing and controlling technical outcomes, through the use of Standards, Specifications, Guidelines, Datasheets and Drawings.

1.4.1 SA Water Documents

The following table identifies the referenced SA Water standards and templates:

Number	Title
TS 0100	Requirements for Technical Drawings
TS 0101	Safety in Design
TS 0104	Design Quality Management (when published)
SAWT-ENG-0004*	Safety in Design Hazard Register Template
SAWT-ENG-0012*	Template for Technical Standard
SAWT-ENG-0013*	Template for Technical Guideline
SAWT-ENG-0014*	QA Checklist for Technical Standards/Guidelines
SAWT-ENG-0015*	Dispensation Procedure
SAWT-ENG-0016*	Technical Governance Release Notification Template
SAWT-ENG-0017*	Technical Governance Withdrawal Notification Template
SAWT-ENG-0018*	QA Checklist for Standard/Typical Drawings
SAWT-ENG-0019*	New Standard/Typical Drawing Number Creation Procedure

*Documents available for internal SA Water use only.

2 Scope

This Standard is applicable to the establishment and maintenance of all SA Water Technical Governance documents and includes:

- Technical Standards
- Technical Guidelines
- Standard Drawings
- Typical Drawings
- Technical Specifications
- Technical Bulletins
- Datasheets
- Release Notifications

The scope also includes the following for in-scope documents above:

- Format of documents
- Controls for each document type (including numbering, approving, issuing etc.)
- Location for filing and access to documents internal and external to SA Water.

2.1 Excluded Scope

This Standard does not cover the following items:

- Contract specific technical specifications
- Contract templates
- SA Water internal policy, procedure or process documentation

3 Technical Governance

3.1 Definition

Technical Governance is SA Water's primary method for articulating required technical outcomes to stakeholders.

Technical Governance documents are prepared by competent professional engineers to establish uniform engineering/technical criteria, methods, processes, and practices that ensure SA Water infrastructure, services and systems are safe, reliable and consistent for SA Water's application, while also representing value for money.

SA Water's Technical Governance apply to the creation of all SA Water owned infrastructure, regardless of delivery model, unless deviations are authorised via an approved TDRF.

3.2 Included Documents

A list of Technical Governance documents used by SA Water, and where they can be found, is provided in Table 1.

Table 1 - Technical Governance Documents

Document	Description	Location
Technical Standard	Defines SA Water's requirements for the design, maintenance, construction, and management of its infrastructure	Website
Technical Guideline	Provides best practice, principles, and guidance to be applied in the design, maintenance, construction, and management of SA Water infrastructure.	Website
Standard Drawing	<p>Defines SA Water's requirements for the design, maintenance, construction, and management of its infrastructure.</p> <p>Standard drawings must be checked for suitability to a given project, and SiD Hazard Register actions fully resolved. This may require the Designer to finalise design information based on site or project specific circumstances and create documentation accordingly.</p> <p>Standard drawings are provided with a SiD hazard register corresponding to the level of design development.</p>	Website
Typical Drawing	<p>Informs the Designer of SA Water's requirements for the design, maintenance, construction, and management of its infrastructure.</p> <p>These drawings are not to be used as construction documents, as the design development of Typical Drawings is not as advanced as that of Standard Drawings. Typical Drawings are to be used by the Designer as the basis of design, with project specific documentation (including calculations, drawings, SiD hazard register etc.) to be produced and reviewed before commencing construction.</p> <p>Are provided with a SiD hazard register corresponding to the level of design development.</p>	Website
Technical Specification	<p>Defines SA Water's requirements for the design, maintenance, construction, and management of its infrastructure in bespoke or infrequently used applications.</p> <p>Technical Specifications may also be used in a temporary capacity to define requirements while a Technical Standard, Standard Drawing etc. is being developed.</p> <p>Where applicable, Technical Specifications are to be included in Contract documentation supplied to a Designer and/or Constructor.</p>	RIVER
Technical Datasheet	<p>provide detailed technical and performance information about equipment being procured for use in SA Water infrastructure.</p> <p>SA Water provides templates detailing specific requirements applicable to all equipment of a particular type, and Technical Datasheets require project specific inputs to be provided by the Designer before being issued to suppliers and/or manufacturers to form part of their tender response.</p>	Website

Document	Description	Location
Technical Bulletin	Communication distributed to stakeholders via email regarding Technical Governance updates/changes/temporary arrangements.	Website
Standard Release or Withdrawal Notification	Notification from SA Water on new, updated or withdrawn Technical Governance which is distributed to stakeholders via email upon changes being published.	Email

3.2.1 Standards versus Guidelines

Technical Standards and Technical Guidelines differ in both the type of information conveyed for use by Designers and Constructors, and their application under SA Water contracts, as follows:

a) Technical Standards

- 1) Define SA Water's:
 - o Specific requirements for the design, construction, modification and/or performance of infrastructure to ensure it is safe and fit for purpose
 - o Expectations of Designers and Constructors, and obligations with which they shall comply
- 2) Provide clarifications with respect to the application of industry guidance or Australian Standards for SA Water's unique context.
- 3) Are compulsory and binding under all SA Water Contracts

b) Technical Guidelines

- 1) Are intended to provide information on best practices and/or principles that should be applied with respect to given subject matter.
- 2) Outline practices/details where SA Water has knowledge or experience to guide the approach to work.
- 3) While not binding under SA Water Contracts, deviations from these documents should only occur where better practice than that described is applicable and available. Such deviations will not be considered for variations and/or project non-conformances where outcomes are below the standard outlined in the Technical Guideline.

3.2.2 Standard versus Typical Drawings

SA Water has created Standard and Typical Drawings, in accordance with TS 0100 and TS 0101, to support the design, construction, operation, maintenance and end of life of commonly installed infrastructure.

Both Standard and Typical Drawings are contractually binding, however, each represents a different level of design development requiring different inputs from Designers as follows:

- a) **Standard drawings** define requirements and represent a level of design development consistent with detailed design. Standard Drawings must be reviewed for suitability to a given project. Per Table 1, this may require the Designer to create additional documentation to ensure project specific requirements and/or hazards are suitably addressed.
- b) **Typical drawings** provide a basis of design to be used in the development of project specific design documentation. The level of design development of these drawings (and SID hazard register) is broadly consistent with a concept design and are not to be used as construction documents.

3.3 Requirement and Development/Update

3.3.1 Requirement

The requirement for Technical Governance at SA Water arises from a variety of situations but stem from the common theme of supporting the efficient and effective delivery, maintenance, operation of SA Water infrastructure.

Drivers for establishing/changing Technical Governance at SA Water include:

- Improving safety, health, environmental and sustainability outcomes for SA Water and the South Australian community
- Creating efficiencies by documenting repeatedly used technical requirements
- Providing clarity and or guidance in areas where industry standards do not exist or are not well suited to SA Water's unique circumstances
- Fostering consistency, improved performance and efficiency of infrastructure outcomes by providing improved definition of SA Water requirements based on experience
- Improving clarity in areas where SA Water requirements are regularly misunderstood
- Codifying lessons learned (whether from projects or ongoing operation/maintenance) for future use by SA Water and its partners to improve future performance
- Requests/Feedback from stakeholders
- Changes to Australian/International standards, legislative/regulatory requirements or SA Water business processes/policies
- Actions resulting from audits or investigations (whether at SA Water or peer utilities)

3.3.2 Development/Update

Once the requirement for Technical Governance has been established, development follows the process map provided in Appendix A. This process map includes how updates to Technical Governance are managed once documents are published and in use.

3.3.2.1 Co-creation of Technical Governance

SA Water recognises the value of co-creation in developing its Technical Governance, and the benefits realised through a diverse range of experiences, perspectives and knowledge. This occurs via one of two avenues:

1) Development of new Technical Governance

In developing new Technical Governance, SA Water engages with industry and internal business partners via an industry review process, which comprises of two stages aimed at gathering feedback and understanding implications of the proposed Technical Governance.

Stage 1

The Responsible Discipline Lead circulates the draft document with internal sponsor/s of the work being undertaken as well as other subject matter experts within SA Water for feedback and review. Often these teams have specific knowledge and/or experience relevant to the document being developed.

Stage 2

Following document update from feedback received as part of Stage 1, internal and external business partners and stakeholders are engaged to review and provide comment by the MEQ&I.

This is represented in Step E, "Issue for Industry Review" shown in Appendix A.

2) Technical Governance in use

Co-creation of documentation in this space is centred on SA Water’s Dispensation Process, in collecting feedback and knowledge from industry and internal business partners to identify where change may be required.

- **Note:** Updates (major or minor revisions) are not typically run through the process shown in item 1, except where document content is changing by more than 50%.

Upon conclusion of Stage 2, the Technical Governance is finalised, before release and publication on the SA Water website for use.

This is represented in Step I, “Document in Use” shown in Appendix A.

3.3.2.1.1 Mechanics of Industry Review

SA Water uses a Teams collaboration site for gathering feedback from both internal and external agencies, which allows all stakeholders to view the same document (inclusive of the feedback and/or comments provided by others).

The steps below are followed to issue Technical Governance document(s) for Industry Review:

- 1) A dedicated Teams site is created (via myPortal)
- 2) Guest accounts are created via myPortal for all external stakeholders contributing to the industry review. This will require a multi-factor authentication of links sent to their registered email and mobile phones via SMS.
- 3) Access to the Teams site is provided for the external guest accounts using “Manage Access” feature on Teams. SA Water employees having a SA Water email ID will have access by default.
- 4) At the end of the review period, access to the Teams site will be closed.

3.3.2.1.2 Response to Feedback

It should be noted that SA Water does not respond to individual feedback submissions provided as part of the industry review. However, SA Water does hold technical forums, which aim to:

- Introduce and share high-level content of Technical Governance
- Providing an opportunity for attendees to ask questions about both the content of the document and how their feedback was incorporated into the final document.

3.3.2.2 Approach to Safety in Design

Safety in Design requirements (per TS 0101) apply to all SA Water Technical Governance. However, the specific requirements to be applied varies based on the scope, complexity and intended application of the Technical Governance being created. Further detail is provided in Table 2, with support available from SA Water’s Safety in Design team.

Note: For Standard/Typical Drawings, SA Water publishes only the hazard list and title page as a .pdf and does not grant access to the softcopy of the file.

Table 2 - SiD in SA Water Technical Governance

Document	SiD activity guidance	Responsibility
Technical Standard	Identification and inclusion of typical hazards, safety considerations and/or features known to SA Water.	Responsible Discipline Lead
Technical Guideline	Identification and inclusion of typical hazards, safety considerations and/or features known to SA Water.	Responsible Discipline Lead

Document	SiD activity guidance	Responsibility
Standard Drawings	SiD1 hazard review workshop, which demonstrates consultation and co-operation for hazard identification and control. The resulting SiD Hazard Register is to be referenced in the notes section of the design and issued with the design.	Responsible Discipline Lead
Typical Drawings	SiD1 and SiD2 hazard review workshops, which demonstrate consultation and co-operation for hazard identification and control. The resulting SiD Hazard Register is to be referenced in the notes section of the design and issued with the design.	Responsible Discipline Lead
Other Technical Governance	Consult with SiD Specialist	Responsible Discipline Lead

3.4 Accountability

While SA Water Engineering is responsible for most of SA Water's Technical Governance, other SA Water Business Units (including Asset Management, Maintenance Security, Treatment Expertise, Environment and Water Quality) may also own documents pertaining to their area of accountability within SA Water.

A given Business Unit is solely accountable for the Technical Governance needed to articulate its requirements and nominating a suitable individual to be the Responsible Discipline Lead. This Responsible Discipline Lead has responsibility for:

- Production of the document in accordance with this Technical Guideline, including circulation of draft documentation per Section 3.3.2.1.
- Liaising with the officer responsible for Technical Governance (Manager Engineering Quality and Innovation) for document number issue, facilitation of industry reviews (refer Section 3.3.2.1) and publication to the SA Water website
- Regularly reviewing and updating the document.
- Responding to TDRF submissions lodged relating to the document

Responsible Discipline Leads are typically subject matter experts in SA Water for the subject to which the document relates.

3.5 Document Templates

SA Water templates are used for all Technical Governance documents. These templates are stored either in the SA Water Engineering's [RIVER site](#) or Meridian (drawings only), and are available for download and use by SA Water staff.

3.6 Document Naming and Identification

3.6.1 Conventions

A summary of Technical Governance document naming and identification conventions is provided in Table 3, with further detail provided as required.

Note: Citing of Technical Governance in other documentation should also follow the naming convention provided in Table 3.

Table 3 - Document Naming & Identification Convention

Document Type	Document Naming Convention	Document ID Convention
Technical Standard	TS AA??	SAWS-BBB-AA??
Technical Guideline	TG AA??	SAWG-BBB-AA??
Standard Drawing	As for document ID	STD-AA-?????_??
Standard Drawing (Statutory Documentation)	As for document ID	STD-23-????
Typical Drawing	As for document ID	TYP-AA-?????_??
Technical Specification	TSB - Title	SAW-ENG-CCC-DDD-EEE-???
Datasheet	DS AA??	SAWD-ENG-AA??

Legend:

Value	Reference	Options	Notes
?	Various	N/A	Represents a system generated or assigned number.
AA	Discipline Number	01 – General 02 – Mechanical & Hydraulics 03 – Electrical 04 – Material Science 05 – Reticulation Networks 06 – Civil, Geotechnical, Dams 07 – Structural 08 – Expertise	Two-digit discipline number used to group SA Water Standards, Guidelines and Drawings by Engineering Discipline.
BBB	Business Unit Code	ENG – Engineering ENV – Environment TE – Treatment Expertise AM – Asset Management SEC – Security WQ – Water Quality	Business unit code of between two and three letters that denotes the business unit responsible for a given Standard or Guideline.
CCC	Discipline Code	STR – Structural CVL – Civil MAT – Material Science ELC – Electrical MEC – Mechanical HYD – Hydraulics GEO – Geotechnical DAM – Dams RET – Reticulation Networks MUL – Multi-Disciplinary	Three-digit discipline code use to identify Engineering Discipline responsible for a particular Technical Specification.
DDD	Specification Status	Not present = Permanent TEM = Temporary	The presence of "TEM" in the document number indicates that the technical specification is for temporary use and will be converted to a Technical Standard in the future.
EEE	Technical Specification Type	TSB = For use in AS4300 Contracts TS = For use in any SA Water Contract	A two or three letter code indicating what SA Water contract type the Technical Specification was written for. This may impact inclusions in the specifications and should be checked prior to use.

3.6.2 Document Numbering

The numbers for Technical Standards, Technical Specifications, Technical Guidelines and Datasheets are maintained in a “Standards and Guidelines Register” (stored on RIVER), which is managed and controlled by the MEQ&I, who will allocate document numbers as requested.

3.6.3 Drawing Numbering

Drawing numbers are managed automatically by SA Water's Drawing Management System (Meridian) in accordance with TS 0100, and controlled by the MEQ&I.

Upon receipt of request for a Standard or Typical drawing number, the MEQ&I will generate and allocate the drawing number from Meridian and inform the requestor (per SAWT-ENG-0019):

The requestor prepares the final drawing set, that includes the SiD hazard register and Standard/Typical drawing set (in .dwg file format and signed .pdf renditions). These documents are then published to Masters in Meridian and the SA Water internet website by the MEQ&I.

3.6.4 Statutory Documentation Numbering

The document number for statutory documentation is generated outside of Meridian, before the final documents are loaded into the system, for future updates etc. as may be required.

The 5-digit running number will be allocated manually by the MEQ&I. Allocated numbers are maintained in the “Standards and Guidelines Register” (stored on RIVER), which is managed and controlled by the MEQ&I.

Table 4 – Types of Statutory Documentation

Discipline Code	Sub Discipline	Document Title	Document Type	File Type	Template Type
23	SiD Hazard Register	SiD Hazard Register	Live	.xlsm	Safety in Design-Hazard-Register Template.xlsm
23	SiD safety Report	SiD Safety Report	Live	.docx	Safety in Design Report Template.docx
23	Hazardous Areas Dossier	Hazardous Areas Dossier	Live	.zip	Hazardous Areas Dossier Template.zip
23	Asbestos Register	Asbestos Register	Live	.zip	Asbestos Register Template.zip

3.7 Issue and Revision Identification

3.7.1 Revision Number

Revision numbers for all issued Technical Governance documents are numerical. For Technical Standards/Guidelines, Datasheets and Technical Specifications, revisions of documents may be:

- Major (e.g., 2.0), used where documents are newly created, or substantially updated from the previous version (i.e., 20% or more of the content is updated).
- Minor (e.g., 1.2), used for minor corrections/content changes (i.e., less than 20%).
 - Documents in the development phase have minor version numbers below 1 (i.e., 0.1, 0.2 etc.), indicating documents have not been published/issued.

The revision history, with a revision number, is recorded in the document control panel of the document, noting that draft revisions are not recorded.

For Standard and Typical Drawings, revisions are managed by Meridian, as described in TS 0100.

3.7.2 Issue Date

The date of issue for all documents shall be included on the document, applied in a fashion consistent with the format of the template on which a given document is based.

3.7.3 Draft Status

DRAFT is to be used on documents during the development or revision phase (including in the Document Name and ID), and documents are to be provided with watermarks to clearly convey the document's draft status. DRAFT identification shall be removed prior to issue of documents and replaced by FINAL status.

3.8 Document Control Page

3.8.1 General

A document control panel is to be included in all documents to provide records of the revision history of the document, including details of the revision history, approvers and reviewers (as provided in the document template).

3.8.2 Revision History Section

The revision history section shall be used to identify when the document is issued for use. All previous revisions of the document shall be shown in this section.

Only formally issued revision details shall be included (i.e., draft or review versions used during the development are not included) but this section may be used on a temporary basis during development or revision of the document to indicate stages of development.

3.8.3 Approval Section

Electronic signatures are used to authorise documents. Electronic signatures shall be inserted into the MS Word® file prior to issue of the document.

Table 5 provides the guidance on the approval signatures for Technical Standards and Guidelines.

Table 5 - Approval Signatures for Technical Standards and Guidelines

Accountable Business Unit	Signature 1	Signature 2	Signature 3
Engineering	Principal Engineer/s or Responsible Person	MEQ&I	Senior Manager Engineering
Infrastructure Planning & Strategy	Author	Responsible Manager	N/A*
Expertise	Author	Responsible Manager	N/A*
Environment/Water Quality	Author	Responsible Manager	N/A*
Security	Deputy Agency Security Advisor	Agency Security Advisor	Manager Transport & Workplace Services

*Delete signature 3 row from the document, when used.

Approval signatures for Technical Specifications and Datasheets are shown in Table 6.

Table 6 - Approval Signatures for Technical Specification

Accountable Business Unit	Authorised
Engineering	Principal Engineer
Infrastructure Planning & Strategy	Responsible Manager
Expertise	Expertise Author
Security	Deputy Agency Security Advisor

Approval Signatures for Typical/Standard Drawings follow the requirements of TS 0100 and TS 0104.

Technical Bulletins are approved and released by the MEQ&I, with inputs from the Responsible Discipline Lead/s as required.

3.8.4 Review Section

The review section shall be used during the document production or revision stages as a record of the relative parties that have been part of the review process.

This section is provided to represent internal SA Water reviewers or companies who have been engaged directly by SA Water to develop its Technical Governance. Industry Reviewers are not typically referenced in this section unless their contribution has been substantial and their permission is obtained and granted prior to document issue.

The dates used indicate when the review comments were actioned by the document author

3.9 Management of Technical Governance

3.9.1 General

Signed and issued versions of Technical Standards, Technical Guidelines, Technical Specifications, Data Sheets and Release Notifications / Withdrawal documents shall be controlled and managed using the standard version control features of RIVER by the MEQ&I.

Development of new, and revision of existing standards and guidelines shall be undertaken by users in a development area allocated in RIVER for that purpose.

Note: Standard and Typical Drawings are controlled and managed in Meridian by the MEQ&I, per SAWT-ENG-0019.

3.9.2 Signed Documents

MS Word® and PDF files for all final and issued documents shall be stored on SA Water Engineering's – Quality and Innovation RIVER site in a designated folder. This is generally a numbered folder for individual TS, TG and DS documents, or a single folder containing all Technical Specifications.

3.9.3 New Document Development

The Responsible Discipline Lead is responsible for control of the document during the development phase.

Development versions of documents are to be stored in RIVER in the manner specified in Section 3.9.2, along with any related SiD documentation (as appropriate). Such documents are to be labelled as "DRAFT" per the requirements of Section 3.7.3.

The signed, finalised document is also stored in the same folder, with any superseded documents to be moved into a subfolder named "Superseded".

The folders where the development versions of documents and the finalised documents are stored are restricted to a group of users within SA Water to access. Other SA Water users who support creating the document require permission to access these documents from the MEQ&I.

Industry reviews of document shall be carried out only through Teams collaboration site as described in Section 3.3.2.2.1.

3.9.4 Existing Document Revision

The Responsible Discipline Lead is responsible for control of the document (and associated documentation (e.g., SiD and Appendices)) during the revision phase.

The process for management of files during the update/revision process is as follows:

- The Responsible Discipline Lead downloads the current issued MS Word® file from RIVER
- The Responsible Discipline Lead makes/co-ordinates all changes to the document.
- Updates to the document control requirements, including:
 - o issue date
 - o revision number
 - o information on the document control page
 - o electronic signatures
- The Responsible Discipline Lead completes the Document Quality Checklist (refer Appendix B) and co-ordinates the publication of the document with the MEQ&I.
- Superseded documents as .pdf copies are moved by the Responsible Discipline Lead into a superseded folder with the revision number provided in the filename. The original Word document is to be overridden with a new published version (and noted as such in RIVER version control) by the Responsible Discipline Lead, when completed.

3.9.5 Release of Documents

The MEQ&I oversees the management of files and documents and is responsible for the release of new or revised Technical Governance, including publication on SA Water Website, per the process outlined in Tables 7 and 8.

- Datasheets (usually published as an Excel file), follow a streamlined version of what is presented in Table 7 due to their application and content.

The Responsible Discipline Lead shall coordinate this process with the MEQ&I when Technical Governance is ready for issue.

Table 7 - Document Release Process – Technical Standards/Guidelines

Step*	Step Description	Responsibility
1	Complete QA checklist (SAWT-ENG-0014) and ensure native file satisfies quality requirements of this Technical Guideline.	Responsible Discipline Lead
2	Co-ordinate electronic approval signatures with MEQ&I	Responsible Discipline Lead
3	Create a PDF copy of the signed document	Responsible Discipline Lead
4	Ensure that electronic signatures, links and correct formatting have been preserved in the PDF document.	Responsible Discipline Lead
5	Transfer Word and PDF file to appropriate RIVER site (if not already there), superseding any previous versions as described in this Technical Guideline	Responsible Discipline Lead
6	Update the Standards and Guidelines Register with details of the document version and issue status	MEQ&I
7	Prepare a Standard Release/Withdrawal Notification, per SAWT-ENG-0016 and Section 3.9.6.	Responsible Discipline Lead
8	Upload PDF document to SA Water website, removing any previous version/s (where applicable) and update internet cover page.	MEQ&I
9	Confirm correct operation of website and availability of document.	MEQ&I
10	Issue Standard Release/Withdrawal Notification.	MEQ&I

Notes:

- 1) For Technical Datasheets, omit Steps 2,3 and 8
- 2) For Technical Specifications, process concludes at Step 6

Table 8 - Document Release Process – Standard and Typical Drawings

Step	Step Description	Responsibility
1	Complete QA Document for Standard and Typical Drawings (SAWT-ENG-0018) to ensure the drawings satisfy quality requirements of this Technical Guideline for all the drawings.	Responsible Discipline Lead
2	SiD Hazard Register is complete and corresponds to the level of design.	Responsible Discipline Lead
3	Electronic approval signatures of the concerned Principal Engineer in the Design Panel section of the drawing title block.	Responsible Discipline Lead
4	Create a PDF copy of the signed document	Responsible Discipline Lead
5	Ensure that electronic signatures have been preserved in the PDF document.	Responsible Discipline Lead
6	Transfer .dwg file on to Meridian superseding any previous versions as described in this Technical Guideline.	Responsible Discipline Lead
7	Finalise SiD Hazard Register: <ul style="list-style-type: none"> • Information accurate in each sheet • Hazards are linked to drawings sheet/s • Pre-release actions are closed out • Post-release actions are clearly identified and assigned • Register consolidated (refer Section 3.3.2.2) 	Responsible Discipline Lead

Step	Step Description	Responsibility
8	Transfer associated SiD hazard register into Meridian	MEQ&I
9	Prepare a Standard Release/Withdrawal Notification, per Section 3.9.6.	Responsible Discipline Lead
10	Upload PDF documents to SA Water website, removing any previous version/s (where applicable) and update internet cover page.	MEQ&I
11	Confirm correct operation of website and availability of document.	MEQ&I
12	Issue Standard Release/Withdrawal Notification.	MEQ&I

3.9.6 Standard Release/Withdrawal Notification

The Standard Release/Withdrawal Notification is designed to ensure that major document users (e.g., SA Water staff, Industry Partners and/or other Third Parties) are made aware of document creation/revision when they are published to the SA Water website.

This process incorporates a formal Release/Withdrawal notification, which is communicated via email by the MEQ&I to SA Water business units (e.g., Capital Delivery, IP&S, Engineering, Maintenance, Operations, Technical Services, Supply Chain etc.) via email.

Release/Withdrawal notifications are issued to non-SA Water entities via one of the following channels:

- 1) SA Water's Major/Minor Framework Partners, Engineering Panel Consultants and Automation Panel Consultants
 - Communications issued via email by SA Water's Capital Procurement team
- 2) Land Development Consultants and Accredited Contractors
 - Communications are issued via email by SA Water's Contract Management team
- 3) Peak Industry Bodies, Suppliers and/or Fabricators etc.
 - Communications are issued via email by the Responsible Discipline Lead (supported by the MEQ&I) as required

Note: Communications to the external partners in points 1) to 3) above are directed to a single contact within each organisation. This contact is responsible for disseminating the information throughout their respective organisations, and SA Water accepts no responsibility or liability should this fail to occur.

3.10 Document Review Process

3.10.1 Responsible Roles

The MEQ&I is responsible for coordination of the Technical Governance review process, including publication and issue of these documents.

The accountable Business Unit (and their corresponding "Responsible Discipline Lead") is responsible and accountable for review and management of their Technical Governance documents, with review triggers per Section 3.3.

3.11 Dispensation

Technical Governance is intended to cover an enormous range of infrastructure projects and operational applications across the entirety of SA Water. Coupled with variations in local geography, industry capability, project and/or operational needs/circumstances, it is inevitable that deviations from these requirements will be needed from time to time.

To manage these deviations, and thereby provide flexibility to adapt Technical Governance on a case by case basis (where the need arises), SA Water uses a dispensation procedure to:

- Monitor and record where deviations from Technical Governance occur
- Ensure technical due diligence is undertaken when deviations occur, to manage hazards/risks and
- Support continuous improvement of SA Water Technical Governance, through engagement with and feedback from the market (as shown in Appendix A).

SA Water's Dispensation Procedure (available on the [SA Water website](#) under "Engineering Standards") provides an overview of the dispensation process, along with the Technical Dispensation Request Form (TDRF) and other information for applicants.

The submission of a TDRF is undertaken via an online form available on the SA Water website, which follows the process outlined Figure 1.

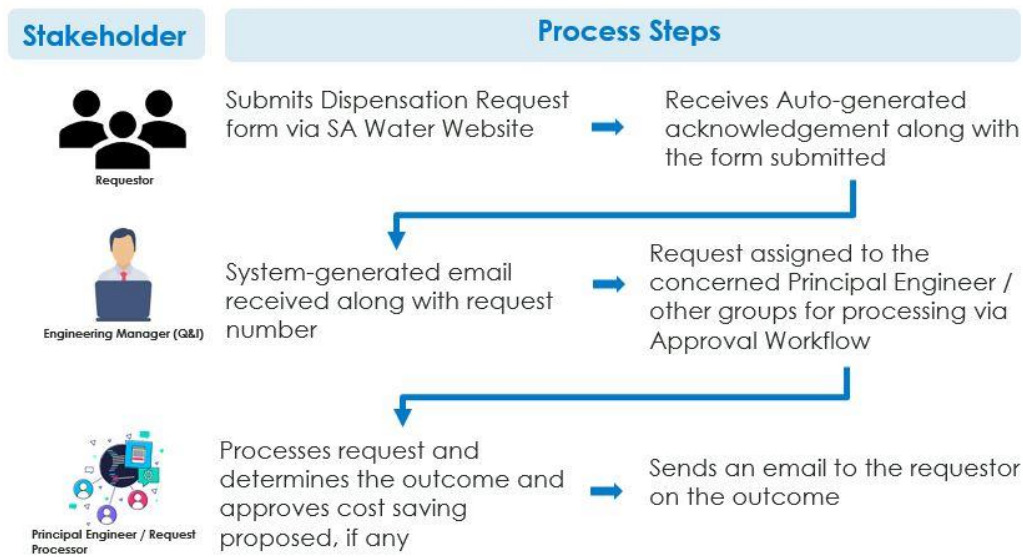


Figure 1 - Dispensation Process Flowchart

All requests and supporting documentation are saved in the "[Dispensations](#)" folder on RIVER for audit and analysis purposes.

4 Access to Standard Documents

4.1 General

Access to SA Water's publicly available Technical Governance documents is provided via the SA Water website at the following URL: <https://www.sawater.com.au/building,-developing-and-plumbing/developments/engineering-standards>

4.2 Management of Internet Download Pages

SA Water's webpages providing access to Technical Governance, are controlled and managed by the MEQ&I.

4.2.1 Documents Not Available for Download

Some SA Water Technical Governance contains sensitive information regarding SA Water systems or infrastructure that are not made available on the SA Water website (e.g., SCADA). These documents can be requested from SA Water via the contact email address provided on the website, with the decision on document view/download availability made by the Responsible Discipline Lead and/or their manager.

5 Document Contractual Status

SA Water contracts specify that the Technical Governance published on the SA Water website at the time of tender are contractually binding under that contract. Thus, newly published or revised Technical Governance is not applied retrospectively in contracts, unless agreed with the SA Water Representative.

SA Water aims to ensure that its Technical Governance is well managed, to allow the contractual status of each standard document to be readily determined at any point in time. This includes retention of previous document versions, so that the historical documents are available for review if required. These documents are available upon request via the SA Water website.

5.1 Inclusion of Documents in Contracts

For SA Water Technical Governance published on the SA Water website, there is no need for documents to be included in contract documents, as Designers and Constructors are expected to source these documents and keep apprised of any updates to them (communicated as shown in Section 3.9.6).

Where documents are not publicly available, these must be included in the contract documentation.

It is recognised that Technical Governance under development can be of substantial use to projects, despite it not being finalised and formally published. Due to the potential for creating confusion, Technical Governance that is under development may only be used in SA Water contracts when all the following requirements are satisfied:

- 1) Documentation has been issued for Industry Review (and a .pdf copy created)
- 2) Approval is granted by the Manager Engineering Quality and Innovation
- 3) A .pdf copy of the Industry Review document is included in the contract

Appendix A: Development/Update Process Map

