Australian Capital Territory

Utilities (Technical Regulation) (ACT Dam Safety Code) Approval 2018

Disallowable instrument DI2018–202

made under the

Utilities (Technical Regulation) Act 2014, section 73 (Technical codes for listed dams––approval)

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1 Name of instrument

This instrument is the *Utilities (Technical Regulation) (ACT Dam Safety Code) Approval 2018*.

2 Commencement

This instrument commences on the day after its notification day.

3 Approval

I approve the ACT Dam Safety Code 2018 (the Code) as set out in the schedule.

4 Public access

The Code is available for inspection by the public between 8:30 am and 4:30 pm, from Monday to Friday except for public holidays, at Access Canberra at South Building, Dame Pattie Menzies House, 16 Challis Street Dickson ACT. Copies of the Code can be also made at Access Canberra. Electronic copies of the Code are available on the Access Canberra website at https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/2203/~/water-and-energy-utilities-technical-regulation. No charge will apply.

5 Revocation

The *Utilities (Dam Safety Code) Determination 2014* (DI2014-292) is revoked.

Mick Gentleman MLA
Minister for the Environment and Heritage
15 June 2018

Australian Capital Territory

DAM SAFETY CODE

April 2018

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1. INTRODUCTION

1.1 Technical Codes

The Dam Safety Code (the Code) is a technical code for listed dams made under Part 8 of the *Utilities (Technical Regulation) Act 2014* (the Act).

1.2 Approval and compliance with Technical Codes

Under section 73 of the Act, the Minister may approve a technical code for listed dams as recommended by the technical regulator. If the owners of listed dams fail to comply with the requirements of the code, the offence under section 75 of the Act may apply.

1.3 Operating Certificates

Under section 9 of the Act, a regulated utility service includes the owning, leasing, subleasing of a registrable dam. An unlicensed regulated utility must apply to the technical regulator for an operating certificate under section 43(1) of the Act.

2. APPLICATION AND PURPOSE

2.1 Application

This Code applies to owners of listed dams – see sections 8, 57 and 69 of the Act. Section 57 of the Act defines *owner*, in relation to a dam or proposed dam, as meaning a person who owns, leases, subleases or proposes to develop a dam.

Part 8 of the Act provides for the regulation of the safety of dams. The Act requires owners of registrable dams to provide specific information to the technical regulator so that a determination can be made as to whether a dam could have a significant adverse effect on community interests. The technical regulator must then determine under section 69 of the Act whether a dam should be designated as a listed dam based on the risk of significant adverse effects on the community in the event of failure of the dam.

For the purposes of this Code, a person who owns, leases, subleases or proposes to develop a registrable dam is providing a regulated utility service.

2.2 Purpose

The purpose of this Code is to identify and regulate the safety of dams where the potential of a failure could have a significant adverse effect on the community.

In order to achieve this purpose, this Code requires regulated utilities, both licensed and unlicensed to:

(1) design, construct, modify, operate and maintain listed dams in accordance with currently accepted engineering standards.

(2) have appropriate dam safety management programs (DSMP) in place for all listed dams, and fully implement program requirements.

(3) demonstrate to the technical regulator the safety of listed dams at regular intervals.

3. DICTIONARY

The dictionary at the end of this Code is part of this Code.

4. RESPONSIBILITY FOR DAM SAFETY

The regulated utility is fully responsible for the safety of each registrable or listed dam that it owns, leases, subleases and proposes to develop.

The role of the technical regulator is to ensure that the regulated utility properly discharges its responsibility where a registrable dam could have a significant adverse effect on the community in the event of failure of the dam (i.e. where a registrable dam is listed under section 69 of the Act).

5. DETERMINATION IF A REGISTRABLE DAM IS TO BE LISTED

In accordance with section 59 of the Act, the regulated utility for a registrable dam must provide to the technical regulator information as set out in a determination made by the technical regulator. A determination is a notifiable instrument and is published on the ACT Legislation Register (http://www.legislation.act.gov.au/a/2014-60/li.asp).

In accordance with section 62 of the Act, the technical regulator may require a regulated utility to provide further information about a registrable dam so that the risk to the community presented by the dam can be accurately assessed.

In accordance with section 69 of the Act, the technical regulator must consider the risk of significant adverse effects on the community in the event of failure of the dam, and determine if a registrable dam is to be listed. Factors that would lead the technical regulator to determine that a dam is to be listed include:

(1) if dam failure has the potential to cause loss of life; and/or

(2) severity of damage within the community arising from failure of the dam.

The technical regulator will notify the regulated utility of each listed dam that it owns which has been determined to be a listed dam. A determination is also a disallowable instrument that is notified on the ACT Legislation Register.

6. APPLICABLE GUIDELINES

Under section 73(2) of the Act, this Code adopts the current ANCOLD Guidelines (the guidelines***)***, as guidelines for the purpose of this Code.

Section 47(6) of the Legislation Act does not apply in relation to the ANCOLD

Guidelines adopted above (see section 47(7) of the Legislation Act). Therefore, the ANCOLD Guidelines do not need to be notified on the Legislation Register. The ANCOLD Guidelines may be purchased at https://www.ancold.org.au/.

7. DAM SAFETY MANAGEMENT PROGRAM

Over the whole life cycle of each listed dam, the regulated utility must implement and maintain a Dam Safety Management Program (DSMP) to identify, keep under review and control as low as reasonably practicable the risks posed by the listed dam. The DSMP must be consistent with good engineering practice, and comply fully with this Code and the guidelines.

8. DESIGN, CONSTRUCTION, COMMISSIONING, AND DECOMMISSIONING OF DAMS

(1) A regulated utility must design, construct and commission any new listed dam and modify any existing dam which will be listed following its modification in accordance with the guidelines and good engineering practice.

(2) A regulated utility must decommission any listed dam in accordance with the guidelines and good engineering practice.

(3) A regulated utility undertaking work under section 8(1) or 8(2) above must, as a minimum, submit for acceptance by the technical regulator information and reports as required by the Act and Schedules 1 and 2 of this Code.

9. REGULATED UTILITY SUBMISSIONS

The following submissions to the technical regulator required by this Code must include a letter of transmittal issued under the authority of the regulated utility:

(1) Regulated utility report on compliance (see section 22).

(2) Regulated utility submissions requiring acceptance of the technical regulator.

10. PEER REVIEWS

(1) Any design documentation or safety review report submitted by the regulated utility to the technical regulator for listed dams must be accompanied by:

(a) a separate signed report from (an) independent peer reviewer(s); and

(b) the regulated utility's statement of its proposed response to the peer reviewer(s) report.

In giving or withholding acceptance under this Code, the technical regulator must consider any advice or recommendations in the peer reviewer(s) report.

(2) The regulated utility must define the scope of the peer review and select and engage independent peer reviewer(s) whose qualifications and experience are acceptable to the technical regulator.

(3) Peer reviewer(s) must be independent senior practitioners widely recognised for their knowledge and experience of dam engineering and dam safety. To be considered independent, a practitioner must:

(a) not have prepared any part of the document being reviewed, although the citation or inclusion of excerpts from previous work of the practitioner is acceptable; and

(b) not be an employee of the regulated utility; and

(c) not be an employee of the entity which prepared and took responsibility for the document.

(4) The role of peer reviewer(s) is to independently assess and advise on the soundness of inputs, analysis methods and outputs. It is not their role to verify computations.

(5) The peer review does not shift design responsibility to the reviewer.

(6) The regulated utility, through its designers, safety reviewers and peer reviewer(s), must demonstrate compliance of listed dams with the guidelines.

11. OPERATION AND MAINTENANCE OF DAMS

A regulated utility must operate and maintain each of its listed dams in accordance with the guidelines.

12. DAM SURVEILLANCE

(1) A regulated utility must develop and maintain a dam surveillance program for each listed dam. The dam surveillance program must:

(a) be developed by a competent dam safety engineer with relevant knowledge and experience, and maintained in accordance with the guidelines and good engineering practice;

(b) be under the direct supervision of a competent dam safety engineer with relevant knowledge and experience in dam engineering and the day-to-day safety management of dams of a height, type and consequence category similar to the relevant listed dam;

(c) provide for dam safety inspections and their recording and storage of data in a secure, recognised and readily retrievable format;

(d) provide for the monitoring of dam performance by the reading of instruments or by other means, and the recording and storage of the results in a secure, recognised and readily retrievable format;

(e) provide for the evaluation of surveillance records by the dam safety engineer;

(f) provide for preparation of a comprehensive surveillance report one year after dam construction, or on first filling if earlier; and

(g) provide for preparation of a comprehensive surveillance report at five yearly intervals following completion of construction of the dam.

Copies of first filling reports, comprehensive and special surveillance reports (e.g. following a significant flood, a major earthquake, or after detection of a major defect) must be submitted to the technical regulator within 1 month of their completion.

(2) Details of the dam surveillance program and the documented results of listed dam surveillance must be made available, on request, to the technical regulator and in a format agreed with the technical regulator.

13. SAFETY REVIEWS

(1) A regulated utility must undertake safety reviews for listed dams in accordance with the guidelines.

(2) Safety reviews, and accompanying peer reviews, must be submitted for acceptance by the technical regulator within 1 month of their completion.

14. SAFETY IMPROVEMENTS

(1) If a regulated utility identifies a dam safety deficiency or need for remedial action to ensure that a listed dam can be regarded as safe in accordance with the guidelines the regulated utility must within one month submit to the technical regulator a proposal for risk reduction. The proposal must include a program for completion of dam deficiency assessment and remedial action studies and identification of a firm scope of required safety improvements. The proposal must also include a preliminary program for completion of required safety improvements.

(2) If the technical regulator considers that the proposal does not sufficiently reduce risk as required by the guidelines or that there would be unreasonable delay in the reduction of risk, then the technical regulator may require the regulated utility to amend the proposal.

(3) The technical regulator must inform the regulated utility when its proposal, or an amended proposal, is accepted.

(4) The regulated utility must undertake the risk reduction work in accordance with the guidelines and the proposal accepted by the technical regulator.

(5) The regulated utility must report annually to the technical regulator on progress in completing risk reduction measures proposed until it demonstrates that the dam meets requirements of the guidelines.

(6) Nothing in this Code prevents the regulated utility from undertaking risk reduction work prior to acceptance of any safety improvement proposal by the technical regulator.

15. DAM SAFETY EMERGENCY PLANS

15.1 Dam Safety Emergency Plans

A regulated utility must have a current dam safety emergency plan for each listed dam.

In order to meet this requirement a regulated utility must:

(1) Prepare a dam safety emergency plan for each listed dam in accordance with the guidelines.

(2) Obtain approval of the plan from the emergency response agencies including as relevant ACT Policing, the ACT State Emergency Service, NSW State Emergency Service and NSW Police.

(3) Following receipt of approval for a plan at section 15.1(2) above, submit the plan to the technical regulator along with evidence of plan approval by emergency service agencies.

(4) Obtain technical regulator acceptance for the plan.

15.2 Dam Safety Emergency Plans testing, review and updates

(1) The regulated utility must, by 30th April each year, update dam safety emergency plans to reflect changes to particulars in that plan and inform the technical regulator that the updates have occurred and been agreed with the emergency response agencies including as relevant ACT Policing, the ACT State Emergency Service, NSW State Emergency Service and NSW Police.

(2) The regulated utility must test and review each dam safety emergency plan in accordance with the guidelines. If the test or review of a dam safety emergency plan identifies a shortcoming or deficiency in the plan the regulated utility must within three months revise the dam safety emergency plan, obtain emergency response agency approval to the plan and submit the revised plan to the technical regulator for acceptance along with evidence of plan approval by emergency service agencies.

(3) Upon becoming aware of any shortcoming in a dam safety emergency plan which is not identified during test and review, the regulated utility must within three months revise the dam safety emergency plan, obtain emergency response agency approval to the plan and submit the revised plan to the technical regulator for acceptance along with evidence of plan approval by emergency service agencies.

(4) The dam safety emergency plan previously accepted by the technical regulator remains valid until acceptance of the revised plan.

15.3 Contents of Dam Safety Emergency Plans

(1) The contents of a dam safety emergency plan must conform to the content requirements set out in the guidelines.

(2) Inundation mapping and flood wave travel time under dam failure conditions must cover all areas where dam failure would pose a significant threat to public safety or other interests of the community and early warning could mitigate the consequences of flooding.

(3) Inundation maps must be prepared in the format required for the ACT Flood Plan if the ACT Emergency Services Agency specifies requirements.

(4) When identifying persons, organisations and agencies with responsibilities relevant to the dam safety emergency plan, the regulated utility must include:

(a) all relevant management officers and staff employed by the regulated utility; and

(b) all relevant emergency service organisations, including those listed at 15.2(1) above.

(5) The notification flowchart must include position titles, but need not identify the names of position holders.

(6) The dam safety emergency plan must include a contact list showing the names of position holders and contact details for each position title in the notification flowchart.

(7) The dam safety emergency plan must include a distribution list made up of the contact list specified at section 15.2(1) above, the technical regulator and each organisation, agency or individual having responsibilities under the plan.

15.4 Acceptance of Dam Safety Emergency Plans

(1) As soon as practicable after the regulated utility submits a dam safety emergency plan to the technical regulator for acceptance, the technical regulator must either:

(a) Accept the dam safety emergency plan; or

(b) If the dam safety emergency plan does not adequately address a matter referred to in the guidelines, require the regulated utility to amend the plan.

(2) If the technical regulator requires a regulated utility to amend a dam safety emergency plan, the regulated utility must within one month of receipt of the technical regulator's requirement submit an amended plan addressing the shortcomings noted.

15.5 Distribution of Dam Safety Emergency Plans

(1) As soon as practicable after a dam safety emergency plan is accepted by the technical regulator and after each update, the regulated utility must distribute electronic copies of the accepted dam safety emergency plan to each party included in the distribution list for the plan.

When requested by the technical regulator or other party listed in the plan, the regulated utility must also provide a printed copy of the dam safety emergency plan.

(2) The regulated utility must make its electronic inundation mapping data available to the technical regulator in a format agreed with the technical regulator.

15.6 Multiple Dams on Major Water Courses

A single dam safety emergency plan may be submitted for all the listed dams on the one major water course provided the plan also meets other requirements of this Code.

16. NSW DAMS

16.1 Dam Surveillance Reports

A dam surveillance report for a listed dam that is located in NSW:

(1) which meets requirements of NSW legislation and regulations; and

(2) for which the regulated utility provides evidence to the technical regulator that NSW requirements have been met,

satisfies the requirements of this Code for a dam surveillance report.

16.2 Dam Safety Emergency Plans

A dam safety emergency plan for a listed dam that is located in NSW:

(1) which meets requirements of NSW legislation and regulations; and

(2) for which the regulated utility provides evidence to the technical regulator that NSW requirements have been met need not undergo the consultation and acceptance requirements processes specified in Section 15 of this Code except in relation to:

(a) the roles and responsibilities, including arrangements for notification, of ACT agencies; and

(b) whether the inundation mapping of land within the ACT complies with sections 15.3 (2) and 15.3 (3).

17. REPORTING OF NOTIFIABLE INCIDENTS AND EMERGENCY EVENTS

(1) A regulated utility must make contact by phone with the technical regulator confirming the occurrence of an emergency event at a listed dam within 2 hours after becoming aware of the event;

(2) A regulated utility must email the technical regulator confirming the occurrence of the following within 24 hours after becoming aware of the occurrence at a listed dam:

(a) A notifiable incident (as required by section 28 of the Act); or

(b) An emergency event as defined in this Code and in the regulated utility's dam safety emergency plan.

(3) A regulated utility must send a written report to the technical regulator as soon as practicable but not later than five business days after the occurrence of a notifiable incident or an emergency event impacting a listed dam;

(4) Written reports must be in the form required by the technical regulator.

(5) Emergency event reports must contain the following:

(a) details of the event and the dam at which the event took place;

(b) the time and date at which the event took place;

(c) the safety status of the dam;

(d) maintenance or repair and other actions to be taken by the regulated utility to ensure the long term safety of the dam, and the schedule for their completion;

(e) the causes of the event so far as they are understood at the time, lessons learned and details of any improvements to documents, procedures or practices which are considered necessary and which the regulated utility intends to make; and

(f) any other details requested by the technical regulator.

(6) In submitting a report a regulated utility may seek leave of the technical regulator to submit a more comprehensive report at a later time. If the technical regulator grants leave, the second report must be submitted to the technical regulator within six calendar weeks of the end of the notifiable incident or emergency event.

(7) The technical regulator may require the regulated utility to submit a more comprehensive report within six calendar weeks of the end of a notifiable incident or emergency event.

18. TECHNICAL REGULATOR MAY REQUIRE A SUBMISSION

The technical regulator may require a regulated utility to submit improved

documentation or procedures, if the technical regulator is not satisfied with:

(1) the regulated utility's compliance with the guidelines and this Code;

(2) the effectiveness of the regulated utility's emergency response; or

(3) the regulated utility's adherence to its respective dam safety emergency plan.

19. TRAINING

A regulated utility must ensure that its employees and officers understand and have had training in their duties, responsibilities and authorisations as required by the guidelines.

20. RECORDS AND INFORMATION RELEVANT TO DAM SAFETY

(1) A regulated utility must keep, or cause to be kept, comprehensive and accurate records of:

(a) compliance with the requirements of the guidelines;

(b) compliance with the requirements of this Code; and

(c) any other matters reasonably required by the technical regulator.

(2) The records must at least satisfy the requirements of the guidelines and must be made available for inspection as requested by the technical regulator.

(3) If the technical regulator requests documents or other information relevant to the safety of a listed dam, the regulated utility must:

(a) provide the requested document or information as soon as practicable; or

(b) obtain the requested document or information and provide it to the technical regulator as soon as possible.

Requested documents and information must be provided in a format acceptable to the technical regulator.

21. TRANSITION PROVISIONS

(1) Dams listed under a determination made by the technical regulator under the Act must comply with the requirements of this Code immediately upon commencement of the Code. The determination is available at http://www.legislation.act.gov.au/a/2014-60/li.asp.

(2) Where dams exist as operational dams at the commencement of this Code, but are listed after the commencement of the Code, the requirements of this

Code will become mandatory over a transitional period as specified in Schedule 3.

(3) The requirements of this Code are mandatory from the date that design commences for new dams that due to their risk of significant adverse effects on the community in the event of failure will become listed dams under the Act.

(4) The requirements of this code are mandatory from the date design commences on modification of an existing dam, where following modification the dam will be become a listed dam under the Act.

22. REGULATED UTILITY TO REPORT ON COMPLIANCE

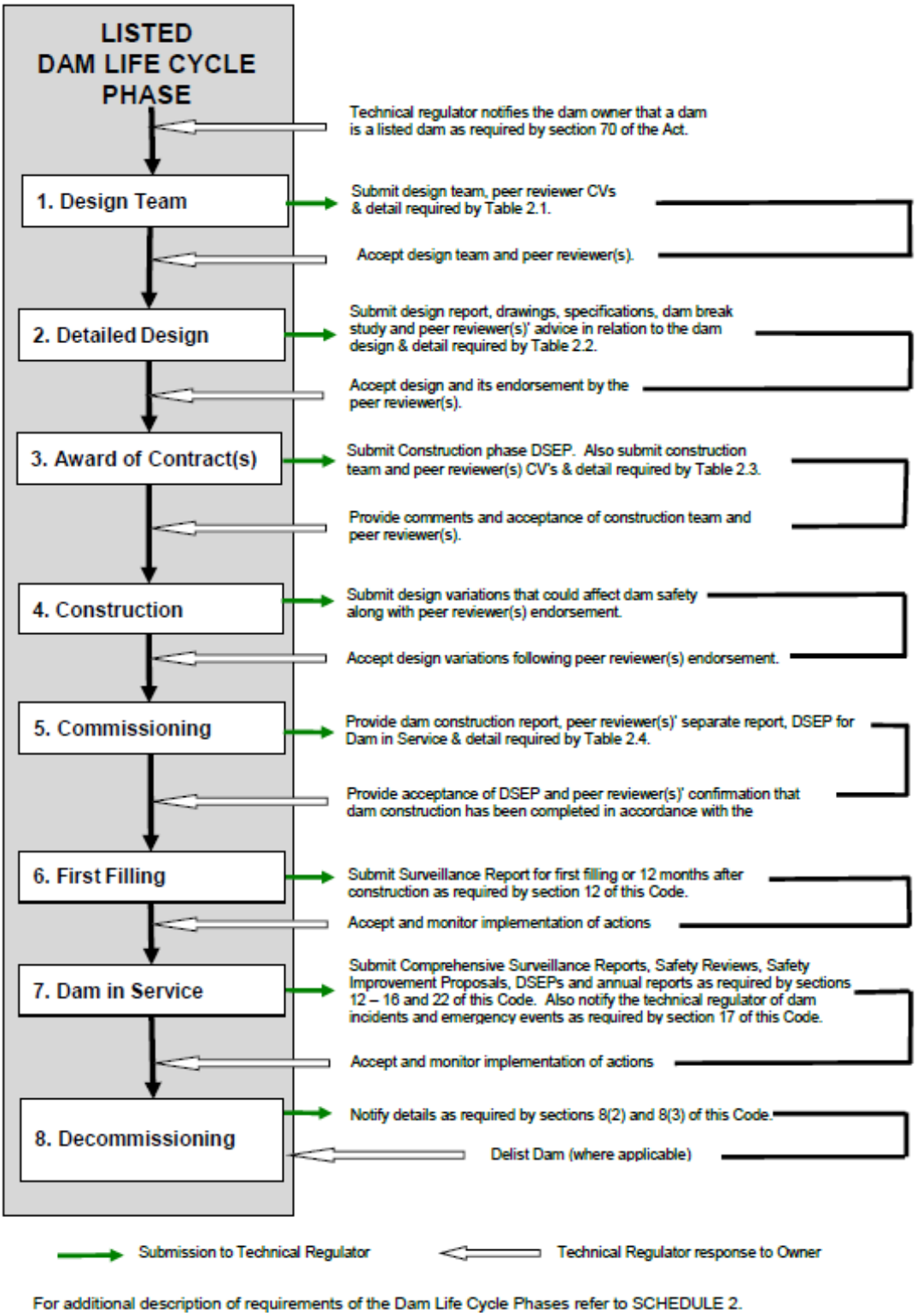
A regulated utility must provide a written report annually to the technical regulator for each listed dam. The content and format of each annual report shall be as required by the technical regulator and advised to each regulated utility by 30 June each year. Completed annual reports must be received by the technical regulator by 30 September of that year.

23. DAM WORKING GROUP

(1) A regulated utility may invite representatives of the technical regulator, other regulated utilities and representatives of entities planning, designing, constructing, operating and maintaining dam structures to participate in an ACT Dam Working Group.

(2) The aim of this section of the Code is to promote a forum within the ACT to consider issues relating to achieving compliance with this Code and the guidelines as well as to consider the continued appropriateness of Code regulations.

SCHEDULE 1: REQUIREMENTS FOR SUBMISSION OF INFORMATION



This diagram has been adopted from Diagram 1 in NSWDSC2B (June 2010) with permission of NSWDSC.

SCHEDULE 2: INFORMATION FLOW OVER DAM LIFE CYCLE

During the various life cycle phases of a listed dam as included in Schedule 1, a regulated utility must submit information to the technical regulator as required in this Schedule 2 and elsewhere in this Code.

Phase 1. Design Team

Prior to commencing detailed design of a listed dam the owner must provide to the technical regulator details required by Table 2.1 below, and obtain acceptance from the technical regulator to the nominated design team and peer reviewer(s).

Table 2.1

Dam Information	Details required
1. Name of dam	Provide the name of the dam.
2. Name of dam owner	Provide the name of the owner.
3. Owner's contact details	Include postal address, telephone number and email address
4. Name of contact person	Provide the name and title of the contact person.
5. Contact person's details	Include postal address, telephone number and email address
6. Purpose of dam	Advise the purpose of the dam.
7. Dam Height	Advise the dam height
8. Catchment Area	Provide the catchment area of the dam (km^2), and a contour plan showing the catchment area.
9. Design flood	Design Flood Assessment: (a) Inflow flood peak in m^3/s (b) Annual Exceedance Probability (AEP) (c) Method and date of analysis Spillway type and capacity (m3/sec)
10. Sunny Day Consequence Category	Advise Sunny Day Consequence Category - Extreme/High/Significant/Low/Very Low); Also provide reasons for the assessment (including PLL or PAR). Refer ANCOLD Guidelines.
11. Flood Consequence Category	Advise Flood Consequence Category - Extreme/High/Significant/ Low/Very Low); Also provide reasons for the assessment (including PLL or PAR). Refer ANCOLD Guidelines.
12. Names of consultants	Name and CV's of consultants / organisations to be engaged in various aspects of the design: (a) Main Design (b) Geological/geotechnical (c) Hydrological (d) Other
13. Name of peer reviewer(s)	Provide the name and CV of the peer reviewer(s)
14. Key dates	Provide a list of key dates including the following: (a) Completion of plans and specifications (b) Commencement of construction (c) Completion of construction

Following receipt of the advice requested in Table 2.1 above, the technical regulator will either seek additional information from the regulated utility, advise acceptance of the proposed design team and peer reviewer(s) or request changes to these teams. Subsequent changes to accepted personnel in key team roles shall also be submitted for acceptance by the technical regulator.

Phase 2. Detailed Design

At the completion of detailed design the regulated utility must submit relevant design details and also a dam break study for acceptance by the technical regulator. In particular, the regulated utility shall submit general layout drawings, specifications and a design report outlining the hydrologic data for the project. All important design decisions are to be recorded in the design report. A copy of the signed peer reviewer(s)' report endorsing the design shall also be submitted to the technical regulator. The following information, signed under authority of the regulated utility, must also be provided to technical regulator:

Table 2.2

Item	Details required
1	Update of all information previously provided in relation to the listed dam
2	Required Acceptable Flood Capacity based on ANCOLD Guidelines
3	Method of rainfall derivation
4	Method of inflow hydrograph derivation
5	Peak PMF Inflow in m^3/s
6	Peak Design Inflow Flood in m^3/s
7	Peak Design Outflow Flood in m^3/s
8	Spillway Capacity (or Dam Crest Outflow Flood) in m^3/s
9	Estimate of AEP of the Spillway Capacity (or Dam Crest Flood)
10	Hydrologist's assessment of Flood Capacity provided. (Compare 7. And 8. above)
11	Confirmation that safety and functionality of the design has been reviewed from an operations & maintenance perspective (i.e. HAZOP study or equivalent has been conducted, with operations and maintenance personnel present, and all issues raised have been resolved).

Following receipt of the detailed design, design report, the signed peer reviewer(s)' report endorsing the design, and advice required in Table 2.2, the technical regulator will seek additional information from the regulated utility, request particular clarification in relation to aspects of the design or advise acceptance of the detailed design.

Technical regulator acceptance of the detailed design must be received by the regulated utility prior to commencement of dam construction or modification.

Phase 3. Award of contract

Prior to commencing construction, or modification, of a listed dam the regulated utility must provide to the technical regulator details required by Table 2.3 below, and obtain acceptance from the technical regulator to the nominated construction team, peer reviewer(s) and construction phase Dam Safety Emergency Plan.

Table 2.3

Item	Details required
1	Update of information initially provided at Table 2.1 and Table 2.2 where changes are proposed
2	Name and CV of proposed construction contractor
3	Name and CV of construction review consultant
4	Name and CV of the peer reviewer(s) for the construction works
5	Construction phase Dam Safety Emergency Plan (DSEP) including a risk assessment in accordance with Section 15 of this Code
6	Program for completion of dam construction, including key dates as follows: (a) Commencement of construction (b) Key milestones during construction (c) Completion of construction

Following receipt of information requested at Table 2.3, the technical regulator will either seek additional information from the regulated utility, advise acceptance of the dam owner's proposed construction contractor and peer reviewer(s) for the construction phase or request changes. Any subsequent changes to personnel in key roles must also be submitted for acceptance by the technical regulator.

Phase 4. Construction

Any significant changes made to the design during the construction phase shall be endorsed by the peer reviewer(s). The designer is to prepare a design variation report, recording the change and the reasons in support of it. Any proposed changes that could have a significant effect on the safety of the dam (beneficial or otherwise) are to be immediately notified to the technical regulator along with the signed endorsement of the peer reviewer(s).

Following receipt of the signed peer reviewer(s) report endorsing significant design changes, the technical regulator will either, seek additional information from the regulated utility, advise acceptance of design changes or seek amendment to the proposed design changes.

Phase 5. Commissioning

Prior to commissioning of a listed dam the regulated utility shall prepare a Dam Safety Emergency Plan (DSEP) for the completed dam and obtain acceptance for the plan all in accordance with requirements of Section 15 of this Code.

At the completion of construction, or modification, of a listed dam the regulated utility must submit information required by Table 2.4 to the technical regulator.

Table 2.4

Item	Details required
1	Updated details of information initially provided at Tables 2.1 to 2.3.
2	Dam construction report demonstrating that the dam has been constructed in accordance with the accepted design
3	'Works as Executed' drawings
4	Peer reviewer(s) statement that the design and construction of the dam have been completed in accordance with the guidelines and accepted design drawings, and that there are no residual safety concerns in relation to the completed dam construction
5	Confirmation that the operation & maintenance manual for the dam has been completed and is available for use by operations and maintenance personnel. (yes/no). If no, state the date when the completed manual will be available.)
6	Details of performance monitoring, survey data and surveillance to date
7	Has dam performance been in accordance with predictions? (yes/no). If no, give explanation and advise what action is proposed)
8	Details of the future monitoring and surveillance program to meet requirements of the guidelines
9	Name of person to be contacted in matters relating to dam surveillance
10	When will first surveillance report be available? (date)

Phase 6. First Filling

The regulated utility must submit a Comprehensive Surveillance Report upon first filling of the dam or one year after construction is completed, whichever occurs first, as required by Section 12 of this Code.

Phase 7. Dam in Service

The regulated utility must prepare and submit Comprehensive Surveillance Reports for listed dams at five yearly intervals as required by Section 12 of this Code.

Safety Reviews (along with Peer Review) must be completed in accordance with Section 13 of this Code.

Safety Improvements must be completed in accordance with Section 14 of this Code.

The regulated utility must notify the technical regulator of emergency events and notifiable incidents as required by Section 17 of this Code.

Phase 8. Decommissioning

The regulated utility must submit details of any proposed decommissioning of a listed dam for consideration and acceptance by the technical regulator prior to commencing any works to decommission a listed dam.

The regulated utility must include in information provided to the technical regulator details of significant adverse risks to the community during the dam decommissioning and method that the regulated utility will adopt to ensure that these risks are mitigated so as to be acceptable. This may include preparation of a DSEP for decommissioning of the dam.

Following regulated utility advice that decommissioning of a listed dam is complete, the technical regulator will delist the dam and remove the dam from the ACT Dams Register.

SCHEDULE 3: TRANSITION PERIODS

A regulated utility must comply with all sections of this Code from the day after the Code is notified except where a transition period is permitted under Section 21(2) of this Code and noted in Table 3.1 below.

Within four (4) months of the date on which this Code commences, a regulated utility must provide to the technical regulator a detailed program of tasks it plans to complete for each existing listed dam that it owns in order to transition to full compliance with this code. The program must include separately identify project planning tasks and the relationship between all tasks.

Table 3.1

DAM CONSEQUENCE CATEGORY	**COMPLIANCE REQUIREMENT**	**PERMITTED TRANSITION PERIOD** (from notification of this code)
All	Full compliance with Section 12: Dam Surveillance except for Section 12(1)(g)	1 year
All	Full compliance with Section 14: Safety Improvements	6 months
Extreme	Full compliance with Section 15: Dam Safety Emergency Plans	1 year
	Full compliance with Section 12(1)(g): Dam Surveillance	2 years
	Full compliance with Section 13: Safety Reviews	3 years
High	Full compliance with Section 15: Dam Safety Emergency Plans and Section 12(1)(g): Dam Surveillance	2 years
	Full compliance with Section 13: Safety Reviews	4 years
Significant	Full compliance with Section 15: Dam Safety Emergency Plans	4 years
	Full compliance with Section 12(1)(g): Dam Surveillance and Section 13: Safety Reviews	5 years

DICTIONARY

(1) "acceptance" Where the words "accept", "acceptable", "acceptance" or "accepted" are used in this Code, this means that the Technical Regulator is satisfied based on the evidence provided by the regulated utility that a submission meets the requirements for compliance with the Code. Acceptance does not imply that the Technical Regulator is approving or endorsing the details of a submission as being fit for purpose. Responsibility for dam safety, including to ensure that management plans, actions and implementation are fit for purpose always remains with the regulated utility.

(2) "Act" means the *Utilities (Technical Regulation) Act 2014*;

(3) "ANCOLD" means the Australian National Committee on Large Dams;

(4) "ANCOLD Guidelines" means the most recent version of any current guideline document published by ANCOLD and relevant to the safety of a listed dam (available at https://www.ancold.org.au/);

(5) "business day" means a day, other than a Saturday, Sunday or public holiday in the Territory;

(6) "Consequence Category" means one of a number of states under a dam classification system, based on the scale of adverse consequences subsequent to a dam failure, assigned in accordance with the guidelines;

(7) "dam height" means the difference in level between the natural bed of the watercourse at the downstream toe of the dam and the crest of the dam

(8) "Dam Safety Code" means the Dam Safety Code approved as a technical code by the Minister under the Act;

(9) "dam safety emergency plan" (DSEP) means a dam safety emergency plan meeting the requirements of the guidelines.

(10) "dam safety deficiency" means a situation, or condition, which suggests that dam failure scenarios is possible under certain conditions as outlined in the guidelines.

(11) "emergency event" means an emergency as defined under the ANCOLD Guidelines on Dam Safety Management 2003 or as updated and these may include seismic, flood, landslides, or other unusual events such as sabotage;

(12) "guidelines" means guidelines as defined in section 6 of this Code.

(13) "HAZOP" means a hazard and operability study. A HAZOP is a structured and systematic examination of all operations and maintenance activities required at a dam in order to identify and evaluate problems that may represent risks to personnel or equipment.

(14) "listed dam" means a dam determined under section 69 (c) of the Act.

(15) "notifiable incident" means an incident, as described at section 28 of the Act;

(16) "Minister" means the Minister responsible for administering the Act;

(17) "NSW Dams Safety Committee" means the Dams Safety Committee constituted under the *Dams Safety Act 1978 (NSW)*;

(18) "operating certificate" means a certificate under part 6 of the Act;

(19) "owner" in relation to a dam or proposed dam, means a person who owns, leases, subleases or proposes to develop a dam as defined at section 57 of the Act;

(20) "registrable dam' means a dam as described in section 57 of the Act.

(21) "regulated utility" means a person who owns, leases or subleases a registrable dam as described in sections 8 and 9 of the Act;

(22) "surveillance report" means a report prepared to summarise and surveillance program activities as required by the guidelines.

(23) "technical code" means a code approved or determined by the Minister under Part 8 of the Act;

(24) "technical regulator" has the same meaning and functions as defined under the Act;

(25) "Territory" means the Australian Capital Territory;

(26) "licenced utility" is a utility licenced by ICRC under Part 3 of the *Utilities Act 2000*.