



**REGISTRATION
AUTHORITY**
FOR CHARTERED PROFESSIONAL ENGINEERS

Recognised Engineer – Dam Safety

19 April 2024

Webinar Overview

- Introduction
- Assessment Process
- Assessment experiences and observations
 - Lead Assessor
 - Practice Area Assessor
 - Registered Recognised Engineer
- Q&A

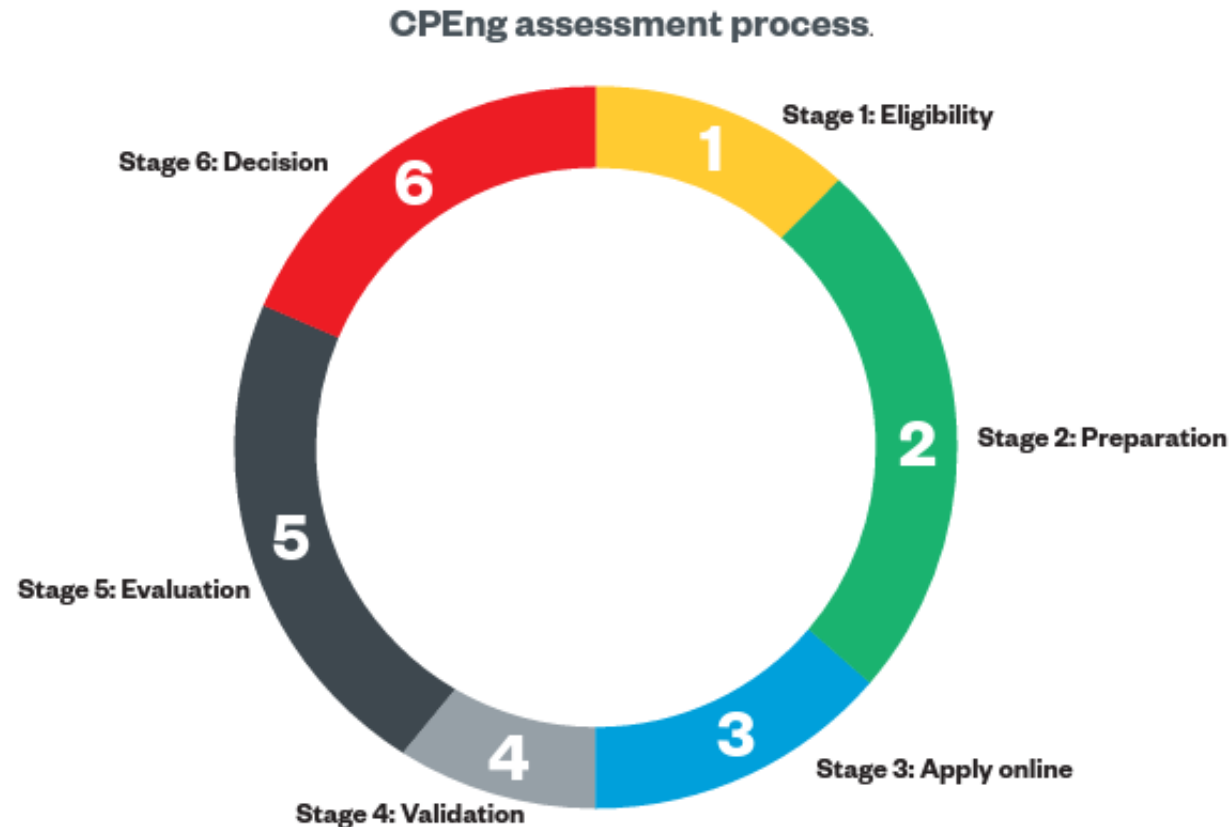
- The webinar will be recorded and posted to the Engineering New Zealand Recognised Engineer (Dam Safety) webpage

Introduction

- The Building (Dam Safety) Regulations 2022 are due to come into force on 13 May 2024.
- The Regulations require that PICs and DSAPs prepared for classifiable dams are audited and certified by Recognised Engineers.
- The assessment and registration of Recognised Engineers is conducted by Engineering New Zealand Te Ao Rangahau through a process based on that used for Chartered Professional Engineers.
- MBIE Building System Performance Branch have provided guidance in an open letter to Recognised Engineers and we understand that they will post an article based on this guidance shortly.
- There are currently 21 registered Recognised Engineers:
 - 18 RecEng PIC & DSAP
 - 1 RecEng PIC
 - 2 RecEng DSAP

Assessment process

Assessment process



1

- ✓ CPEng
- ✓ 4 years' dam safety engineering experience in past 10
- ✓ Dam safety engineering knowledge and experience
- ✓ Knowledge of 1 or more relevant practice fields for PIC and/or DSAP

2

- ✓ 2 work records, CPD and CV
- ✓ Complete self-assessment
- ✓ Referees

3

- ✓ Current CPEngs: Add to reassessment, or MRA

4

- ✓ Validation checklist

5

- ✓ LA and PAA
- ✓ Consistent, fair, robust approach

6

- ✓ CAB

Application pathways

Current CPEngs

- Add RecEng to next reassessment
- Go through a Mutual Recognition Assessment – complete the *Self-Assessment Form* and upload with your application.
- Use dam safety-specific guidance to complete the application (Engineering Knowledge _ Developing Technical Solutions competency groups)
- Demonstrate competence on core skills of PIC/DSAP.

First-time applicants

- Add RecEng to First-Time CPEng assessment
- Provide 2 dam safety-specific work samples
- Use dam safety-specific indicators and writing prompts to complete the application – all 4 competency groups



Assessment experiences and observations

Lead Assessor: Peter Cole

Practice Area Assessor: Nathan Fletcher

Registered Recognised Engineer: Geoffrey Farquhar

Lead Assessor

- The role of the Lead Assessor.
- Management of the assessment process.
- Experience to date.



Practice Area Assessor

1. **CV.** Outline overview of your career in enough detail. Concentrate on making it dam safety specific, not generic. i.e., for RecEng, not CPEng, or a project or employment related CV. At least 4 years' experience. Clearly detail your role on the projects.
2. **CPD**, again needs to be very much dam safety/dam engineering specific. Ideally linking to your PIC/DSAP RecEng application (why is the CPD relevant). 15 hours is the target per year.
3. **Self Assessment** (Engineering Knowledge and Developing Technical Solutions). Make it clear and obvious from PIC/DSAP aspects. Use the resources (RecEng [Guide to Assessments](#) and the [Knowledge Base](#)). This is the key aspect of your application.
4. **Evidence/Examples.** Clearly reference these from your self assessment, and make it obvious your inputs (author, reviewer, manager?).
5. **Referees.** Ideally again ones that can support your work within dam safety. Internal/external, one as CPEng.
6. **Prepare for the discussion.** Needs to be clear to the assessment team your capabilities and experience directly for what you are applying for (PIC/DSAP).
7. **Quality over Quantity.** This is quite a specific/targeted assessment for RecEng, make it concise and easy to follow for the assessors.

Registered Recognised Engineer

- Assessment wasn't straight forward
- My initial application didn't hit the mark
- My work examples and self-assessment were design focused whereas the competencies are focussed on the 'post-construction' safety of the dam and dam system only
- Requested to provide further information

Registered Recognised Engineer

- More targeted CV (>10 years)
- Revised Technical Self Assessment Form with targeted comments on my experience and knowledge of each competencies and performance indicators listed in the regulations for PIC and DSAP (linking answers to my project experience)
- Additional work samples

Registered Recognised Engineer

PIC

- Dam classification system
- Identification of appurtenant structures
- Dam-break flood hazard assessment
- Consequence assessment

Registered Recognised Engineer

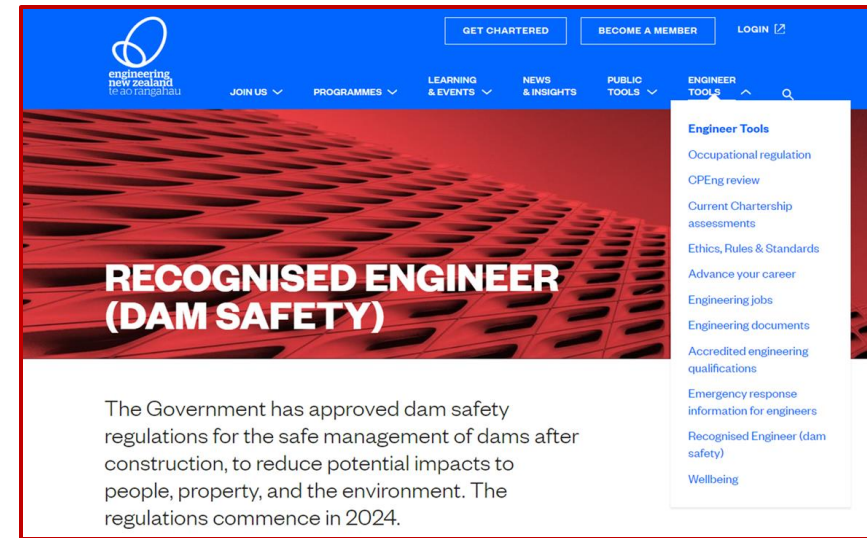
DSAP

- General requirements for dam safety assurance programmes
- Procedures for:
 - Operation and maintenance of dams and reservoirs
 - Surveillance
 - Identification, inspection, and maintenance of appurtenant structures and gate and valve Systems
 - Inspection, maintenance, and testing of gate and valve systems with dam or reservoir safety functions
 - Intermediate dam safety reviews
 - Comprehensive dam safety reviews
 - Emergency planning and response
 - Identifying and managing dam safety issues

Q&A

Conclusion

- Engineering New Zealand Website
 - Recognised Engineer (Dam Safety)
 - Previous webinars on the assessment process and roles & responsibilities
 - The recording of this webinar will be posted there
 - How to find a Recognised Engineer
 - Information on potential liability and potential conflicts of interest
 - Links to MBIE and NZSOLD



<https://www.engineeringnz.org/engineer-tools/recognised-engineer-dam-safety/>



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