



JOB DESCRIPTION

Job Title: Director of Dam Safety Position Number: 95-32
Incumbent: Vacant Effective Date: April 2026
Employment Status: Permanent Bargaining Unit: Yes No
Supervisor's Title: VP, Engineering & Capital Projects Department: Engineering & Capital Projects
Subordinate Positions: Manager, Civil Engineering and Projects

SUMMARY

The Director of Dam Safety is accountable for the leadership, development, implementation, and continuous improvement of the organization's Dam Safety Program, implemented through a formal Dam Safety Management System (DSMS). This role ensures the safe design, construction, operation, maintenance, and monitoring of all dam assets in compliance with regulatory requirements and industry best practices.

As both a technical and organizational leader, the incumbent provides strategic direction, risk-based decision-making, and governance oversight for dam safety across the asset lifecycle. The Director ensures alignment with Canadian Dam Association (CDA) guidelines and applicable regulatory frameworks, while supporting long-term asset management, capital planning, and public safety.

The position acts as the primary authority on dam safety matters, advising executive leadership and serving as the key liaison with regulators and external stakeholders.

DESCRIPTION

1. Dam Safety Program Leadership

- Lead the development, implementation, and continuous improvement of the corporate Dam Safety Program.
- Establish dam safety policies, standards, and procedures aligned with CDA guidelines and regulatory requirements.
- Ensure all dams are operated, maintained, and monitored in accordance with approved safety practices.
- Establish and maintain a formal Dam Safety Management System (DSMS) framework, including governance structure, roles, responsibilities, record management, risk register, recommendation tracking system, audit readiness, and continuous improvement processes.

2. Surveillance, Monitoring, and Inspections

- Oversee dam surveillance and monitoring programs, including instrumentation, inspections, and performance assessments.
- Ensure completion of routine, periodic, and comprehensive dam safety reviews.
- Direct analysis of monitoring data to identify risks, trends, and required mitigation actions.
- Ensure monitoring, inspection, and surveillance activities are integrated into the broader dam safety risk management and decision-making framework.
- Ensure deficiencies are tracked, prioritized, and addressed in a timely manner.

3. Regulatory Compliance and External Relations

- Ensure compliance with all applicable dam safety regulations, permits, and approvals.
- Lead regulatory submissions, audits, and inspections.
- Serve as the primary liaison with regulatory agencies and external reviewers.
- Maintain awareness of evolving regulatory and industry requirements.
- Define and manage the role of Engineer of Record (EOR) and independent reviewers, ensuring appropriate independence, scope, and integration into dam safety governance and regulatory engagement.

4. Risk Management and Emergency Preparedness

- Lead risk assessments and dam safety risk management processes.
- Oversee the development and implementation of the dam safety emergency management framework, including prevention & mitigation, preparedness, response (EPP), and recovery processes, aligned with CDA guidance.
- Ensure training, exercises, and readiness for emergency and flood events.
- Provide leadership and decision support during emergency or high-risk situations.
- Lead and maintain dam safety risk frameworks, including PFMA, risk registers, consequence classification, and risk-informed decision-making processes.
- Ensure all dam safety recommendations (DSRs, inspections, audits, PFMA, etc.) are formally tracked, prioritized, and addressed through a structured recommendation tracking system.

5. Capital Projects and Dam Safety Upgrades

- Provide dam safety oversight for capital projects, including design, construction, commissioning, and rehabilitation.
- Ensure dam safety requirements are integrated into project planning and execution.
- Oversee interim risk management during construction and modification activities.
- Collaborate with engineering, operations, and project teams to ensure safe outcomes.

6. Asset Management and Strategic Planning

- Ensure dam safety risks and regulatory commitments are systematically incorporated into asset management plans and long-term capital programs. Support prioritization of investments based on risk, condition, and regulatory requirements.

- Contribute to corporate planning, budgeting, and forecasting processes.

7. Leadership and Team Development

- Provide leadership, mentorship, and direction to technical staff and cross-functional teams.
- Manage consultants and contractors supporting dam safety activities.
- Foster a culture of safety, accountability, and continuous improvement.
- Build organizational capability and succession planning within dam safety functions.

8. Executive and Stakeholder Communication

- Prepare and present technical reports, risk assessments, and recommendations to executive leadership and the Board.
- Provide independent, risk-informed assurance to executive leadership and the Board on the condition and safety of dam assets.
- Communicate complex dam safety issues in a clear, defensible, and risk-informed manner.
- Support corporate communications related to dam safety and public assurance.

9. Dam Safety Governance and Assurances

- Establish and maintain dam safety governance frameworks aligned with the DSMS.
- Ensure clarity of roles and responsibilities across Engineering, Operations, and external parties.
- Oversee independent reviews, audits, and assurance processes.
- Ensure continuous improvement through lessons learned, incident reviews, and industry best practices.

10. Other Related Duties

QUALIFICATIONS, SKILLS, AND EXPERIENCE

1. Education and Registration

- Bachelor's degree in civil engineering or a closely related discipline.
- Master's degree in a relevant field is considered an asset.
- Registered as a Professional Engineer (P.Eng.) in Canada, with the ability to obtain registration in Yukon.

2. Experience

- Minimum 10–15 years of progressive engineering experience.
- At least 5–7 years of direct experience in dam engineering and/or dam safety.
- Experience in a hydroelectric utility or owner-operator environment is preferred.
- Demonstrated responsibility for a Dam Safety Program or equivalent portfolio.

3. Technical Expertise

- Broad, multidisciplinary dam engineering knowledge, including:
 - Structural and geotechnical engineering
 - Hydrology and hydraulics
 - Dam safety instrumentation and monitoring
 - Seismic considerations
 - Mechanical systems related to dam operations
 - Risk assessment methodologies
- Expert knowledge of CDA Dam Safety Guidelines and technical bulletins.
- Strong familiarity with comparable frameworks (e.g., FERC guidelines).
- Strong understanding of Dam Safety Management Systems (DSMS) and risk-based dam safety governance frameworks.

4. Program and Regulatory Leadership

- Proven experience with dam safety compliance, regulatory engagement, and audit processes.
- Experience leading dam safety inspections, reviews, and surveillance programs.
- Strong understanding of documentation control, record retention, and audit requirements.

5. Capital Projects and Asset Management

- Experience overseeing dam-related capital projects, including upgrades and rehabilitation.
- Demonstrated ability to integrate risk-informed decision-making into capital planning and asset management.

6. Emergency Management and Public Safety

- Experience developing and implementing Emergency Preparedness Plans and Public Safety Plans.
- Proven ability to support operational decision-making during emergency or high-risk conditions.

7. Leadership and Interpersonal Skills

- Demonstrated experience leading technical teams and managing consultants and contractors.
- Strong collaboration skills across engineering, operations, environmental, legal, and executive teams.
- Ability to influence and drive organizational alignment on safety-critical decisions.

8. Communication Skills

- Excellent written and verbal communication skills.
- Experience preparing reports and presenting to executives, boards, and regulators is considered an asset.



JOB DESCRIPTION

9. Other Requirements

- Valid Class 5 driver's license.
- Ability to travel to remote sites (10–25%).

10. Equivalency

Candidates with a combination of education and significant, directly related experience equivalent to the above qualifications will be considered.

WORKING CONDITIONS

- Work is primarily performed in an office environment with regular field visits to dam sites and related infrastructure.
- Fieldwork may involve exposure to remote locations and extreme weather conditions.
- Participation in emergency response activities may be required.
- Must adhere to all corporate safety, environmental, and administrative policies, procedures, and guidelines.
- Travel within Yukon (10–25%) is required to support project, maintenance, and commissioning activities in remote locations.