

Assessment of Implementation Report

Alberta Environment and Parks Alberta Energy Regulator (AER)

Systems to Regulate Dam Safety

(March 2015)

Summary of Recommendations

We assessed the two outstanding recommendations from March 2015 for the *Dam Safety Program*. We found both of these recommendations have been implemented:

IMPLEMENTED Recommendation:

Develop a plan to regulate dams and report on the results of regulatory activities

IMPLEMENTED Recommendation:

Improve regulatory activities by:

- maintaining a reliable registry of dams
- obtaining sufficient information to assess the risk and consequences of dam failure
- retaining evidence of regulatory activities performed
- following up to ensure that owners correct deficiencies or manage them until they are corrected

Introduction

In our assessment of implementation, completed in July 2020, we found Alberta Environment and Parks (AEP) and the Alberta Energy Regulator (AER) implemented our recommendations to:

- develop a plan to regulate dams and report on the results of regulatory activities
- improve regulatory activities

We made our original recommendations to AEP because it regulated all 1,500 dams in Alberta at that time. In 2014, AER became the regulator for over 200 energy related dams and tailings ponds and developed the Dam Safety Program to meet our recommendations.

Since 2015, AER and AEP:

- developed strategic and operational plans to guide the Dam Safety Program
- reported to executive management with key information needed for oversight
- improved public reporting on the program's activities and results, including maps of dams and tailings ponds in Alberta
- implemented processes to ensure the registry of dams is complete

Dam safety regulatory requirements were updated in December 2018 and clearly describe dam owner responsibilities. AER has validated that dam owners meet the updated requirements or informed dam owners what they need to do to comply and by when. AEP validation is underway and expected to be completed by March 2021 for all but 50 per cent of low risk dams. AEP expects to complete the remaining low risk dams by 2023.

Our testing found that both entities' inspections and other regulatory activities were prioritized based on risk, carried out as planned in 2018–2019 and 2019–2020, and known dam safety deficiencies were monitored to ensure dam owners take appropriate action.

Recommendation:

Develop a plan to regulate dams and report on the results of regulatory activities

IMPLEMENTED

Context

Our original audit found that AEP did not have a plan to regulate dams that described the Dam Safety Program's goals, priorities and risks, and activities planned to assess if dam owners meet requirements and dams are operated safely. We found that executive management did not have the information to properly oversee the program. Public information on dams and their safety was also lacking.

Current findings

AEP and AER implemented our recommendation to develop a plan to regulate dams and report on the results of regulatory activities.

AEP conveyed to us that the previous legislation did not clearly describe the responsibilities of dam owners. As a result, dam owners did not always provide the required information to demonstrate that dams are safe, and AEP was unable to enforce compliance. In 2018, the updated regulation⁴³ and the Alberta Dam and Canal Safety Directive⁴⁴ took effect, which clearly describe dam owner responsibilities and reporting requirements.

AEP and AER's strategic and operational plans describe the program's goals, priorities and risks, and what the regulator plans to do to ensure dam owners comply with requirements.

⁴³ Water Ministerial Regulation AR 205/1998.

⁴⁴ <https://open.alberta.ca/dataset/93b2bded-f107-48e3-9eda-28acf2951822/resource/d01922c3-9464-4a6f-b2ca-4fbcfa510864/download/directivedamcanalsafety-dec11-2018.pdf>.

Both regulators' websites contain the necessary information for the public, dam owners and other stakeholders, including information on the Dam Safety Program and a map with location and consequence classification of dams and tailings ponds. Internal reports were provided to executive management with key information on activities and performance results.

Recommendation:

Improve dam regulatory activities

IMPLEMENTED

Context

In 2015, we found that AEP's registry of dams was missing information. Further, consequence classification for some dams was outdated. We also found that coal mining tailings ponds were not appropriately monitored and records of regulatory activities were lacking.

Current findings

AEP and AER implemented our recommendation to improve regulatory activities.

AER validated that dam owners meet the updated regulatory requirements or informed dam owners what they need to do to comply and by when. AEP expects to complete this validation by March 2021 for all but 50 per cent of low risk dams. It plans to complete the remaining low risk dams by 2023.

AEP and AER's inspections and monitoring activities were prioritized based on the risk that dams pose to safety, and carried out as planned in 2018–2019 and 2019–2020. Starting in 2020, AER will annually inspect all tailings ponds.⁴⁵

For the dams we tested, we found that owners complied with regulatory requirements and submitted required information. AEP and AER documented inspection results and other regulatory activities. They also tracked deficiencies to ensure dam owners take appropriate action. Our testing found that AER's database has complete, accurate and current data on dams. AEP's database is also complete, accurate and current for dams for which AEP has completed the validation.

⁴⁵ Ministerial Order 10/2019 directs AER to inspect annually all tailings ponds, starting January 1, 2020, and to make inspections results available to the public.