

Draft Regulations

Draft Regulation

Dam Safety Act
(R.S.Q., c. S-3.1.01)

Dam Safety — Amendments

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), that the Regulation to amend the Dam Safety Regulation, the text of which appears below, may be made by the Government on the expiry of 45 days following this publication.

The main purpose of the draft Regulation is to revise various measures provided for in the transitional provisions or that concern applications for authorization.

Amendments to the transitional provisions are proposed to introduce distinctions to apply to the types of structural alterations made to a dam. More precisely, work that affects only part of a dam is distinguished from work that totally or substantially alters the dam. The carrying out of short-term work of a preventive or remedial nature to improve the safety of a dam poses certain problems under the current requirements, as is the case where remedial work is required for part of a dam only.

In other respects, some regulatory measures have proven inadequate in specific circumstances, for example for owners of smaller dams having low failure consequences. Additional distinctions and details are therefore proposed for certain standards, in particular as regards the documents and information to be filed with applications for authorization. The frequency of some inspections has also been revised. The proposed amendments will update the Regulation in the light of facts observed in recent years, and will ease the burden and costs arising from its application while maintaining all safety objectives. They should have no unfavourable economic impact on businesses concerned. Rather, the standards that are to apply to the factual situation will more adequately reflect the risks observed.

Further information may be obtained by contacting Michel Dolbec, Head, Service de la sécurité des barrages, Centre d'expertise hydrique du Québec, Ministère de l'Environnement, 1685, boulevard Wilfrid-Hamel, local 1.03, Québec (Québec) G1H 3Y7; telephone: (418) 643-6666, extension 222; fax: (418) 643-4609; e-mail: michel.dolbec@menv.gouv.qc.ca

Any person wishing to comment on the draft Regulation may do so by submitting written comments before the expiry of the 45-day period to the Minister of the Environment, édifice Marie-Guyart, 675, boulevard René-Lévesque Est, 30^e étage, Québec (Québec) G1R 5V7.

THOMAS J. MULCAIR,
Minister of the Environment

Regulation to amend the Dam Safety Regulation*

Dam Safety Act
(R.S.Q., c. S-3.1.01, ss. 6, 14, 15, 16, 17, 19, 20 and 37)

1. The Dam Safety Regulation is amended in section 5 by replacing “the discharge capacity, reservoir surface area” in subparagraph 6 of the first paragraph by “discharge capacity, in the case of a high-capacity dam, reservoir surface area”.

2. Section 13 is amended by deleting the second paragraph.

3. Section 19 is amended

(1) by inserting “, such as results on full seasonal opening of the dam’s discharge facilities” before “; and” at the end of subparagraph 2 of the second paragraph;

(2) by inserting “including changes involving putting a dam back into operation or partially stopping its operation,” after “safety,” in subparagraph 3 of the second paragraph.

4. Section 23 is amended

(1) by replacing the first sentence of the second paragraph by the following:

“The incremental damages to be assessed under this section are damages likely to occur downstream of the dam. No increase in damages is attributable to a given flood, pursuant to this section, if the rise in the water level caused by the dam failure does not exceed 60 centimetres.”;

* The Dam Safety Regulation was made by Order in Council 300-2002 dated 20 March 2002 (2002, *G.O.* 2, 1647) and has not been amended since.

(2) by replacing “Very Low Consequence category in Schedule V” at the end of the second paragraph by “Low Consequence category in Schedule V”.

5. Section 32 is amended

(1) by deleting paragraph 2;

(2) by inserting “, including changes involving putting a dam back into operation or partially stopping its operation,” after “safety” in paragraph 3.

6. The table of types of inspections in the third paragraph of section 42 is amended

(1) by adding “1/5Y” in the “Regular” line in column E-II of “Dam Classification and Dam Behaviour”;

(2) by replacing “1/3Y”, “1/5Y” and “1/5Y” in the “Formal” line in columns C-II, D-II and E-II of “Dam Classification and Dam Behaviour” by “1/5Y”, “1/8Y” and “1/10Y”, respectively.

7. Section 43 is amended by adding the following sentence at the end:

“Where the operation of a dam has been temporarily stopped, subject to the conditions of the authorization issued by the Minister, the site inspections and regular monthly inspections may also be omitted for the months during which the stopping of the operation of the dam has been authorized.”.

8. Section 45 is amended by adding the following paragraph at the end:

“For the purposes of this section, “civil-engineering technician” means a person who holds a diploma in Civil Engineering Technology, or a person who has completed equivalent training. The persons who, on 11 April 2002, were already performing the duties of such a technician may also carry out site inspections under the authority of a civil-engineering technician.”.

9. Sections 50 and 51 are replaced by the following:

“**50.** A dam safety review must be conducted, and the attendant report sent to the Minister, every ten years. That frequency is increased to 15 years and 20 years for dams in the Low and Very Low Consequence category, respectively.

Where a dam undergoes a structural alteration that affects all parts of the structure or that, because of the scope of the work, is equivalent to reconstructing the dam, the schedule of reviews and reports is moved forward, the period for the next review and report being computed from the year of completion of the work.

51. Subject to the provisions of sections 78 to 80 respecting an existing dam, the first dam safety review must be conducted no later than in the tenth year following the year of dam commissioning. That deadline is postponed to the 15th year and the 20th year for dams in the Low and Very Low Consequence category, respectively.

For the purposes of section 50 and this section, the year of dam commissioning and the year of completion of the work are the years during which the Minister must be advised of the completion of the work as provided in section 10 of the Act.”.

10. Section 57 is amended by adding “or for a structural alteration that affects all parts of the structure or that, because of the scope of the work, is equivalent to reconstructing the dam” after “a dam” in the part preceding subparagraph 1 of the first paragraph.

11. Section 58 is amended by replacing the part preceding subparagraph 1 of the first paragraph by the following:

“**58.** In addition to the information and documents required by the Act, the following information and documents adapted and prepared specifically in relation to the proposed alteration must be submitted with an application for authorization for the structural alteration of a dam that is not an alteration under section 57:”.

12. Section 60 is amended

(1) by inserting “, including changes involving putting a dam back into operation or partially stopping its operation,” after “safety of the dam” in the part preceding subparagraph 1 of the first paragraph;

(2) by replacing “respecting the structural and foundation stability of the dam” in paragraph 2 of the first paragraph by “respecting the structural and foundation stability of the dam and the functionality and reliability of the discharge facilities”;

(3) by inserting the following after subparagraph 3 of the first paragraph:

“(4) the impounded water management plan summary, as revised for the purpose of the application for authorization if such a plan is required for the dam under Subdivision 1 of Division III.”;

(4) by deleting the second paragraph.

13. Section 61 is amended by replacing paragraphs 1 to 5 by the following:

“(1) if the application is for a permanent stopping :

(a) a description of the measures that will be taken to terminate the operation of the dam ;

(b) the project engineer’s recommendation respecting the dam failure consequence category under sections 17 and 18, to which is appended the dam failure analysis, rough maps or characterization required under section 18 for the consequence category the engineer considers to be appropriate for the dam once the operation has stopped; and

(c) if the dam condition is “poor or unknown” or if the dam failure consequence category reviewed under section 19 is “Moderate”, “High”, “Very High” or “Severe”, the project engineer’s certification respecting the structural and foundation stability of the dam ; and

(2) if the application is for a temporary stopping, such as results on full seasonal opening of the dam’s discharge facilities,

(a) the year or, where the stopping of the dam’s operation is recurrent, the years for which the authorization is applied for and details on the time and duration of each anticipated period of temporary stopping ; and

(b) a description of the measures that will be taken to temporarily stop the operation of the dam.”.

14. Section 65 is amended by replacing “its safety or for the permanent or temporary stopping of the operation” by “the safety”.

15. Section 75 is replaced by the following :

“**75.** Every existing high-capacity dam with characteristics that do not comply with the minimum safety standards under Division II of Chapter III on the date of coming into force of the Act must be brought into conformity with those standards

(1) when the dam undergoes a structural alteration that affects all parts of the structure or that, because of the scope of the work, is equivalent to reconstructing the dam ; or

(2) no later than by the completion date stated in the outline of remedial measures and implementation schedule approved by the Minister under section 17 of the Act.

In addition, if structural alterations other than those referred to in subparagraph 1 are made to a dam before either of those times, the dam must be brought into conformity with the various safety standards respecting the work, the parts of the dam or the characteristics of the dam being altered or affected by the alterations to the structure of the dam.”.

16. Section 76 is amended by replacing subparagraph 2 of the first paragraph by the following :

“(2) prior to authorization for

(a) a structural alteration to the dam if it affects all parts of the structure or, because of the scope of the work, the structural alteration is equivalent to reconstructing the dam ; or

(b) any change in use likely to affect dam safety, in particular a change involving putting the dam back into operation or partially stopping its operation.”.

17. Section 77 is amended by replacing subparagraph 2 of the first paragraph by the following :

“(2) prior to authorization for

(a) a structural alteration to the dam if it affects all the parts of the structure or, because of the scope of the work, the structural alteration is equivalent to reconstructing the dam ; or

(b) any change in use likely to affect dam safety, in particular a change involving putting the dam back into operation or partially stopping its operation.”.

18. The Table in Schedule III showing the points corresponding to the seismic zones is replaced by the following :

“**Seismicity**

Seismic zone	Points
1	1
2	1
3	2
4	6
5	8

”.

19. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.