

WRC Agenda Item B  
November 19, 2009

*Department Modifications to Public Hearing Draft (in Division 20 rule order)*

**690-020-00 [21] 00**

**Purpose and Applicability**

- 690-020-00 [21] 00 (3): Added the following clause to make sure metal and concrete tanks used in water treatment processes are exempt in response to public comments: **“These rules do not apply to metal or reinforced concrete water storage tanks or various types of tanks that are part of water treatment facilities.”**

**690-020-0022**

**[Statutory Authority and] Definitions**

- 690-020-0022 (**1-18**): Changed small letters to numbers for consistency in response to public comment.
- 690-020-0022 (4): Term **“low permeability”** replaces **“impermeable”** because material is not impermeable as per public comment.
- 690-020-0022 (5): Clause **“store and treat wastewater”** replaced with **“wastewater lagoon”** in response to concern by public comment that this may cause jurisdictional encroachment into new areas.
- 690-020-0022 (8): Added the following phrase: **“Often, dams have two spillways. The lower elevation spillway that spills first is referred to as the principle spillway. The higher elevation spillway is referred to as the emergency spillway;”** This was done in response to public comment asking for more clarity in defining spillways.
- 690-020-0022 (15): Added the phrase **“or more”** after “gallons” to ensure that it is understood that Large applies to all dams over that size not just ones that equal that size.
- 690-020-0022 (16): Added the following definition: **”Significant dam work” means an activity to repair, rehabilitate, enlarge or otherwise alter a dam in which: 1) at least 30% of the fill material is impacted by the activity, 2) a spillway is being enlarged or repaired that affects the height or hydraulics of the spillway, 3) dam height and/or reservoir size is being increased, 4) a low level outlet conduit or inlet gate is being reworked with excavation or 5) any**

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- other activity that could affect the integrity of the dam or its auxiliary works.**” This was done in response to public comments that we need to better define what constitutes dam work that requires engineering. The 30% criteria is consistent with ODFW rules.
- 690-020-0022 (17): Capitalized word “**D**am” for consistency in this context.
  - 690-020-0022 (18): Added the following definition: **“Tank” means a fully enclosed (bottom and sides) hydraulic structure made from metal or reinforced concrete or rigid fiberglass or plastics that provides its own water sealing and structural stability.**” This was part of response to concern in public comments that water treatment tanks be exempt.

## 690-020-0025

### General Requirements for all Dams

- 690-020-0025 (2) replaced phrase **“a new, enlarged, or rehabilitated structure”** with **“significant dam work on existing dams”** to better clarify what constitutes dam alteration work that requires engineering oversight.
- 690-020-0025 (6) deleted phrase **“zinc coated, fiber treated, bituminous-coated corrugated steel; coal tar enamel welded steel;”** and replaced with **“concrete encased corrugated metal pipe or plastic pipe”** because the former is not commonly available anymore according to public comment.
- 690-020-0025 (7) added phrase: **“This measurement is to be taken at the maximum section along the dam’s longitudinal axis.”** This is to clarify where measurement is to be taken in response to public comment.
- 690-020-0025 (8) (a) Added clarifying language at end of sentence **“For dams with multiple spillways this is to the principle or lower elevation spillway crest.”** This done to clarify in response to public comment.
- OAR-020-0025 (8) (b) replace term **“sewage”** with **“wastewater”** to be consistent with other sections.
- 690-020-0025 (8) (c) Added the phrase: **“emergency (highest elevation) spillway”** to clarify volume calculation for flood control dams in response to public comment.

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## 690-020-0029

### Small Dams, Recommended Minimum Standards

- 690-020-0029 (1-6): The term **“should”** was deleted and the clause **“It is recommended”** replaced it where appropriate to clarify the fact the department claims no statutory authority to enforce standards on small dams. Clarification requested in public comments.
- 690-020-0029 (4) : replaced term **“fill”** with **“dam’s embankment”** for clarification in response to public comment.
- 690-020-0029 (8): Added the following in response to two public comments that stated with significant justification that small dams should be engineered if they pose any hazard to the public: **“It is recommended that prior to construction the dam owner has the dams potential hazard to downstream properties studied using methods listed in 690-020-0100 . It is recommended that any dam with a potential significant or high hazard rating be designed by a registered engineer familiar with dam engineering. It is also advisable for any dam nearing or surpassing the dam height or storage thresholds for a “large dam” to be designed by a registered engineer.**

## 690-020-0035

### [Dams Over the Statutory Limits] Large Dams; Minimum Engineering Design Requirements

- 690-020-0035 : Replaced “enlargement, repair, or alteration” with phrase **“of new large dams or significant dam work for existing”** as part of response to public comment that we needed to better define what alterations to existing dams require engineering.
- 690-020-0035 (4) (a) (B) (ii) added phrase: **Extraneous information can also be included in specifications or a separate hydrology report as to not clutter up the map;** to clarify that information can be included elsewhere if it clutters the drawing too much as per public comment.
- 690-020-0035 (4) (a) (B) (ii) added term **“reservoir”** in front of term *“water level”* to help clarify in response to public comment.
- 690-020-0035 (4) (b): Added term: **“and material”** for clarification in response to public comment.

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- 690-020-0035 (4) (b) (A): Added clause: “**and/or performance criteria**” after the word methods to respond to concern in public comments that simply using “method” constrains the engineer in creating specifications for the contractor.
- 690-020-0035 (6): Deleted phrase “*enlarged or rehabilitated dam*” with “**dams or for significant dam work to existing dams that involves potentially changing the volume or rate of water released during failure.**” To better clarify when work requires this extra effort in reply to public comments.

### **690-020-0100**

#### **Hazard Rating**

- 690-020-0100 (2) (d): Replaced “**floorboard**” with “**finished floors of buildings**” for clarification in response to comments.
- 690-020-0100 (6) (b): Deleted “**are part of a network of dams**” in response to public comment that this was unnecessarily narrowing the criteria for exemption.

### **690-020-0200**

#### **Fees for Dams**

- 690-020-0200 (6) (b) (c) : term “**coerce**” replaced by “**require**” for clarity in response to public comment.