

**POL 5602**

**WATER RESOURCES PROGRAM POLICY**

Resource Contact: Dam Safety Office

Effective Date: 06-01-93

References: RCW 86.16.035  
Chapter 173-175 WAC  
Dam Safety Guidelines

Revised: 07-01-1999

**EMERGENCY SPILLWAY REQUIREMENTS AT OFF-CHANNEL STORAGE FACILITIES**

**POLICY STATEMENT:**

Emergency spillways are required at all off-channel storage facilities regulated as dams by the Dam Safety Office.

There are two cases where this policy may be waived. The first case is for projects such as mine tailings facilities, where the reservoir storage capacity and associated freeboard are sufficient to contain several years of reservoir inflow from process waters and natural sources. An emergency spillway would not be needed during the project phase where excess storage capacity would be available.

The second case is for facilities which have all of the following:

- full time operators; and
- sufficient storage capacity to accommodate 3 days of process water inflow at the maximum rate plus the natural inflow from the design storm; and
- have permanent outlet works with discharge capacity in excess of the maximum combined inflow from process water and natural sources.

The primary considerations in determining emergency spillway requirements will be the consequences of a failure of the impounding barrier and the likely reliability of appropriate and timely response by the project operator in recognizing and responding to a high pool condition.

**DISCUSSION:**

The requirement for an emergency spillway at an off-channel storage facility has sometimes caused concern to Ecology Water Quality staff and to facility owners. The principal concern regards the situation where a release could be a violation of water quality standards.

The basic philosophy behind this requirement is that it is better to release a small amount through the spillway, than run the risk of embankment failure from overtopping and releasing the entire reservoir contents.

It should be noted that the Natural Resources Conservation Service, Environmental Protection Agency and Nuclear Regulatory Commission also require emergency spillways at projects where the reservoir contents pose environmental concerns.

PROCEDURES:

The decision on the need for an emergency spillway will be made on a case by case basis by the project leader and the DSO supervisor. Selection of a frequency of operation for the emergency spillway will be made through consultation with Ecology Water Quality staff.

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Keith E. Phillips  
Program Manager  
Water Resources Program

**Special Note:** These policies and procedures are used to guide and ensure consistency among water resources program staff in the administration of laws and regulations. These policies and procedures are not formal administrative regulations that have been adopted through a rule-making process. In some cases, the policies may not reflect subsequent changes in statutory law or judicial findings, but they are indicative of the department's practices and interpretations of laws and regulations at the time they are adopted. If you have any questions regarding a policy or procedure, please contact the department.