



Ohio Department of Natural Resources  
**Division of Soil and Water Resources**  
**Fact Sheet**

Fact Sheet 94-34

## **Dam Safety: Construction Permits for Dams**

**D**ams provide the citizens of Ohio with such essential benefits as water supply, flood control, recreation and irrigation. They are an integral part of our infrastructure. A properly designed and well constructed dam will provide its owner and the public with many years of service. Section 1521.06 of the Ohio Revised Code requires that any person or government agency desiring to construct a dam first obtains a construction permit issued by the chief of the Division of Soil and Water Resources. The purpose of this law is to protect life, health and property from damages due to failure of dams because of improper design or construction. Supplementing the law are the administrative rules. The Division of Soil and Water Resources Administrative Rules make up Sections 1501:21-1-01 through 1501:21-23-01 of the Ohio Administrative Code.

### **Is a Permit Required For This Dam?**

Not all dams require a permit. Those dams exempt from the permit requirements of the law are listed in section 1521.06 of the Revised Code and include:

- dams which are or will be less than ten feet in height and which have or will have a storage capacity of not more than fifty acre-feet at the elevation of the top of the dam, as determined by the chief;
- dams, regardless of height, which have or will have a storage capacity of not more than fifteen acre-feet at the elevation of the top of the dam, as determined by the chief;
- dams, regardless of storage capacity, which are or will be six or less feet in height, as determined by the chief;
- dams which belong to a class exempted by the chief;
- the repair, maintenance, improvement, alteration, or removal of a dam which is subject to section 1521.062 of the Revised Code, unless the construction constitutes an enlargement of the structure as determined by the chief;
- dams constructed under Chapter 1513. of the Revised Code.

If a dam is not exempt, the owner is required to apply for a construction permit.

### **Applying For a Permit**

The permit application is a two-step procedure. Step one is the submittal of the preliminary design report. The preliminary design report is used to determine if the site is suitable for a dam and for the classification of the proposed dam. The contents of the preliminary design report are outlined in rule 1501:21-5-02 of the Administrative Code and include a location map, a site map, typical cross-sections showing proposed elevations, hydrologic design calculations, a statement of the purpose of the structure and its impact as it relates to endangering life, health and property and a written report on field conditions. Within thirty days of receipt of the preliminary design report, the applicant will be notified in writing of approval or disapproval of the report and the designated classification of the structure.

Upon notification that the preliminary design report has been approved and that the proposed dam will require a permit, an application should be submitted. The permit application must be accompanied by the statutory filing fee and surety bond, plus three copies each of the final design report, the plans, and the specifications and a detailed cost estimate. Also required are a proposed construction schedule and any other supporting documents.

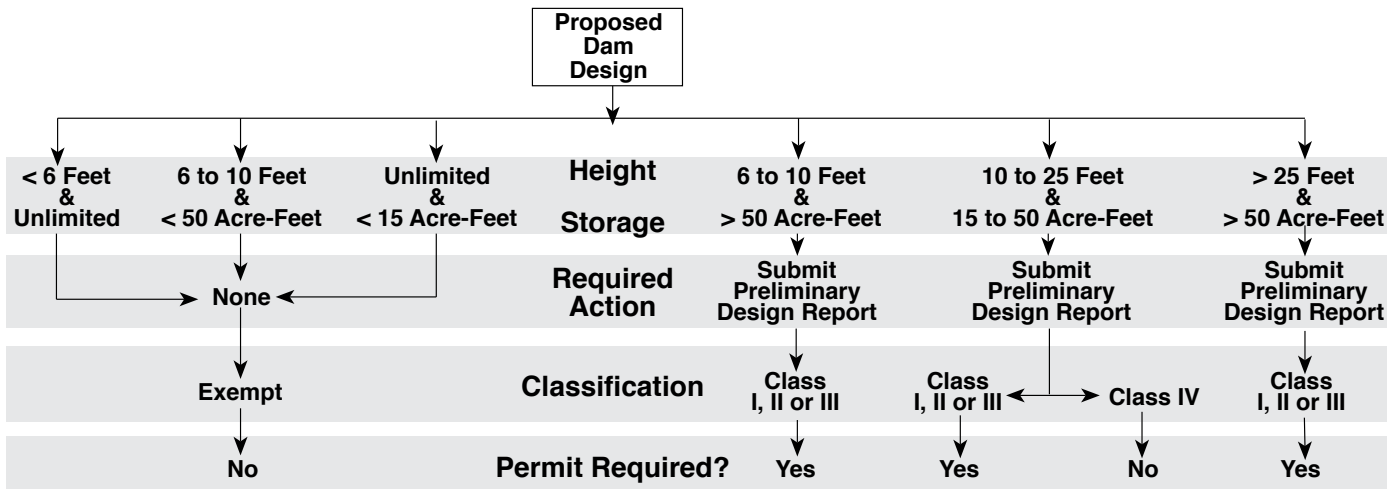
Without exception, construction of any proposed dam cannot begin until the applicant has received an exemption or a permit issued by the chief of the Division of Soil and Water Resources. The construction permit will contain terms that must be met and may contain conditions that apply to the approved design and specifications. Terms of the permit may refer to specific sections of the Ohio Administrative Code.

To receive a copy of "Ohio Laws and Administrative Rules for Issuing Construction Permits for and Making Periodic Inspections of Dams, Dikes and Levees," or to arrange a meeting to discuss any design requirements, please contact:

Ohio Department of Natural Resources  
Division of Soil and Water Resources  
Dam Safety Engineering Program  
2045 Morse Road  
Columbus, Ohio 43229-6693  
Voice: (614) 265-6731 Fax: (614) 447-9503  
E-mail: [dswc@dnr.state.oh.us](mailto:dswc@dnr.state.oh.us)  
Website: <http://ohiodnr.gov/soilandwater>  
**Emergency 24hr hotline: 614-799-9538**

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# Diagram of Construction Permit Determination



“**Height**” means the vertical dimension of a dam as measured from the natural stream bed or watercourse at the downstream or outside toe of a dam to the top of the dam.

“**Storage**” means the total volume impounded when the pool level is at the top of the dam immediately before it is overtopped.

## “Classification”

Class I - If the danger of probable loss of human life or serious damage to homes, high-value industrial or commercial properties, or major public utilities exists, the dam shall be placed in Class I. Dams having a storage volume greater than 5000 acre-feet or a height greater than 60 feet shall be placed in Class I.

Class II - If a possible health hazard or probable loss of high value property or damage to major highways, railroads, or other public utilities exists, but loss of human life is not anticipated, the dam shall be placed in Class II. Dams having a storage volume greater than 500 acre-feet or a height greater than 40 feet shall be placed in Class II.

Class III - If property losses are restricted mainly to rural lands and buildings and local roads, and no loss of human life or hazard to human health is anticipated, the dam shall be placed in Class III. Dams having a height greater than 25 feet or a storage volume of greater than 50 acre-feet shall be placed in Class III.

Class IV - If property losses are restricted mainly to the dam and rural lands, and no loss of human life or hazard to health is anticipated, dams which are 25 feet or less in height or have a total storage volume less than 50 acre-feet shall be placed in Class IV.

