

Preface to ICODS Guidelines May 17, 2007

A dam, like any other part of the infrastructure, will change and deteriorate over time. Appurtenances such as gates and valves must be routinely exercised to ensure their operability. Inspection and monitoring of the dam identifies changing conditions and problems as they develop, and maintenance prevents minor problems from developing into major ones. Despite efforts to keep the dam in good condition and to perform inspection and maintenance, a dam can develop problems that can lead to failure. Early detection and appropriate response are crucial for maintaining the safety of the dam and downstream people and property. An emergency action plan (EAP) is a collection of information that helps a dam owner properly respond to many potential problems at the dam.

The Interagency Committee on Dam Safety (ICODS) was established in 1980. The committee consists of representatives from over nine federal agencies with dam safety interests. The committee encourages the establishment and maintenance of effective federal programs, policies, and guidelines to enhance dam safety and security. One of the products that the committee developed is a set of guidelines to organize the format and content of EAPs. The guidelines were developed to provide consistency and uniformity.

The Ohio Department of Natural Resources, Division of Water, uses the ICODS guidelines as the foundation for the format and content of Class I EAPs. In certain cases, an owner of a Class I dam may be inclined to use a different format or incorporate the content of the ICODS guidelines into an existing set of procedures. This is acceptable if the new format contains all appropriate content from the guidelines. The ICODS guidelines can also be used to develop EAPs for Class II and Class III dams. The guidelines were developed for dams that are generally bigger and have more potential downstream hazard. For smaller dams with less downstream hazard, similar to many Class II and III dams, some of the sections can be reduced or eliminated (see table below). However, much of the content is applicable and should be included. Please contact the Division of Water for clarification.

EAP Section	Class I Dams	Smaller, Less Hazardous Dams
Section I	Required	Required - Brief
Section II	Required	Required
Section III	Required	Required
Section IV	Required – Engineer needed	Required – Engineer not required
Section V	Required	Required - V(a) can be brief
Section VI	Required	Required - Brief
Section VII	Required - Must include investigation of 3 scenarios: sunny day, 100-year flood/25% PMF, and design flood; see “Dam Failure Inundation Mapping - Items for Submittal”; engineer needed	Usually not required – See inspection report
Section VIII	Required	As appropriate

Ohio Administrative Code Rules Pertinent to EAPs

1501:21-21-04 (A) Pursuant to the provisions of section 1521.062 of the Revised Code, the owner of a dam or levee shall be responsible for the continued safe operation and use of the structure so that it does not constitute a hazard to life, health, or property.

(B) In the interest of safeguarding life, health, and property, the chief may require the owner to prepare a written manual detailing the operation, maintenance, and inspection procedures necessary for the continued safe operation and use of the dam or levee, and an emergency action plan. The contents of such manual and plan shall be as described respectively in rules 1501:21-15-06 and 1501:21-15-07 of the Administrative Code.

1501:21-15-07 An emergency action plan shall be required for all class I, II and III structures. The emergency action plan for all class I structures shall include but not be limited to an inundation map of the critical routing reach. An inundation map may also be required for class II and III dams as designated by the chief. The required detail of this map depends upon the complexity of the downstream hazard and shall be acceptable to the chief. Three copies of the emergency action plan shall be submitted to the chief for approval upon the completion of construction or as otherwise directed by the chief. The chief may require additional copies as necessary.