

Emergency Action Plan - Fact Sheet

Statutory Requirements

Part 315, Dam Safety, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires that dam owners prepare, and keep current, Emergency Action Plans (EAP) for all high and significant hazard potential dams owned by that person.

An EAP is defined as “a plan developed by the owner that establishes procedures for notification of the department, public off-site authorities, and other agencies of the emergency actions to be taken prior to and following an impending or actual failure of a dam.”

Emergency Action Plans are only required for those dams which have a high or significant hazard potential rating. The hazard potential rating is determined by the Dam Safety Program, and is based upon an assessment of the potential for loss of life, property damage, and environmental damage in the area downstream of a dam in the event of failure of the dam or appurtenant works. Hazard potential rating is not based upon the structural or hydraulic condition of the dam. For a more detailed description of hazard potential rating, please refer to the Fact Sheet entitled “Hazard Potential Rating.”

The Administrative Rules for Part 315, provide the following minimum requirements for the content of an EAP:

- 1) The EAP shall include a description of the circumstances under which it shall be activated, what actions shall be taken, and who shall be responsible to take those actions when the plan is activated.
- 2) The EAP shall include the name, address, and telephone number of all of the following entities:
 - (a) The person who is responsible for the operation of the dam.
 - (b) The alternate person who is responsible for the operation of the dam.
 - (c) The local emergency management coordinator or coordinators.

3) The EAP shall include either of the following:

- (a) A listing of occupied facilities, buildings, and residences that may be threatened with flooding due to the failure of the dam.
- (b) Mapping that is adequate to clearly delineate the areas of potential inundation resulting from a failure of the dam.

The degree of detail for mapping or listings shall be determined through consultations between the dam owner and the appropriate emergency services agencies that are responsible for implementing the EAP.

Objectives of an Emergency Action Plan

In the development of an EAP, it is important to focus upon the objectives of the plan:

1. To pre-plan the coordination of necessary actions by the dam owner and the responsible local and state emergency management officials.
2. To identify conditions which could lead to dam failure in order to initiate emergency measures that could prevent or minimize the loss of life or property.
3. To provide timely notification of a warning of a dam emergency and evacuation in the event of potential failure of the dam.

Development of an Emergency Action Plan

One of the most important things to remember in the development of an EAP is that every plan is site-specific. Differences in downstream hazards, local emergency management agency preferences and procedures, and in the type and size of the dam will influence the content of the plan. The Local Emergency Management Directory can be found on the Michigan State Police internet site at:

http://michigan.gov/msp/0,4643,7-123-72297_60152_66814---,00.html

The Federal Emergency Management Agency (FEMA) has prepared Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners. These guidelines can be found at the FEMA's internet site at:

<http://www.fema.gov/federal-guidelines-dam-safety>

Following these FEMA guidelines should enable a dam owner to develop an EAP satisfying the statutory requirements delineated in Part 315. These guidelines are not statutory requirements, however, following these guidelines should help in the preparation of an EAP that is functional and useful.

According to the FEMA guidelines, an EAP typically contains six elements:

1. Notification – Timely and appropriate notification of an emergency is critical to effective implementation of an EAP.
2. Detection, Evaluation, and Classification – Emergency situations need to be timely and reliably recognized and appraised.
3. Responsibilities – Responsibilities must be clearly specified and understood by all parties, be site-specific, and must ensure effective, timely action.
4. Preparedness – Steps taken to moderate or alleviate effects of an emergency.
5. Mapping – Delineation of flooded areas in the event of dam failure.
6. Documentation – Information used in the development of the EAP.

It is important to coordinate the development of an EAP with your local emergency management coordinator. Prior to the acceptance of an EAP by the Dam Safety Program, we need documentation that the plan has been submitted to the local emergency management coordinator. It is helpful to discuss your plan with emergency management personnel at an early stage of plan preparation. Do not expect the local emergency management coordinator to develop your plan. Emergency Action Plan preparation is the responsibility of the dam owner.

Part 315, does not require that the EAP be prepared by a professional engineer. Dam break analysis and floodway mapping may require the services of an engineer, but the plan may be written by the dam owner.

Maintenance of an Emergency Action Plan

Work on an EAP does not end with the submittal of the final EAP to the Dam Safety Program and the local emergency management coordinator. In order for a plan to be effective, it must be reviewed and updated on a regular basis. Changes in downstream development, property ownership, and personnel may require revisions to the EAP. Rule 11 of the Dam Safety Rules requires the dam owner to determine if the plan is up-to-date and make any necessary revisions at the time subsequent dam inspection reports are due. More frequent review of the plan will help insure that the plan is useful in the event of an actual dam safety incident.