

The Federal Emergency Management Agency (FEMA) is responsible for coordinating the Federal response to disasters. To improve the Nation's emergency preparedness and response capabilities, FEMA believes that formal guidelines are needed to help dam owners, in coordination with emergency management authorities, effectively develop and exercise Emergency Action Plans (EAPs) for dams. Much more detailed information can be found in FEMA 64, *Federal Guidelines for Emergency Action Planning for Dams*, online at www.fema.gov/media-library/assets/documents/3357.

Residents located in inundation zones downstream of dams risk injuries, loss of life, and damage to property from a failure or operational incident. The purpose of an EAP is to protect lives and reduce property damage.

The level of detail in the EAP should be commensurate with the potential impact of a dam failure or operational incident. A dam with low or no potential impact should not require an extensive evaluation or be subject to an extensive planning process while dams with any significant potential impact may require a larger emergency planning effort. In addition, dams with greater potential for significant impacts tend to involve more entities that must coordinate responsibilities and efforts to effectively respond to an incident than low-hazard dams. Every EAP must be tailored to the site conditions.

Although the dam owner is responsible for developing and maintaining the EAP, the plan will not be effective unless it is developed and implemented in close coordination with all applicable emergency management authorities. Emergency management authorities will use the information in the dam owner's EAP to facilitate the implementation of their responsibilities. In general, State and local emergency management authorities will have some coordinating plans in place to address local emergency operations and/or warnings and evacuations.

Essentials for an EAP

- 1 Notification Flowcharts
- 2 Emergency Detection, Evaluation, and Classification
- 3 Responsibilities
- 4 Preparedness
- 5 Inundation Maps
- 6 Supporting Appendices

An EAP is a formal document that identifies potential emergency conditions at a dam and specifies actions to be followed to minimize loss of life and property damage.

The EAP includes:

- Actions the dam owner will take to moderate or alleviate a problem at the dam;
- Actions the dam owner will take, and in coordination with emergency management authorities, to respond to incidents or emergencies related to the dam;
- Procedures dam owners will follow to issue early warning and notification messages to responsible downstream emergency management authorities;
- Inundation maps to help dam owners and emergency management authorities identify critical infrastructure and population-at-risk sites that may require protective measures, warning, and evacuation planning; and
- Delineation of the responsibilities of all those involved in managing an incident or emergency and how the responsibilities should be coordinated.

More information on EAPs can be found at the interactive website *Responsible Dam Ownership*, www.damsafety.org/media/documents/owner%20documents/START.htm.



Emergency Action Plans for Dam Owners

Coordination

It is vital that the development of the EAP be coordinated with all entities, jurisdictions, and agencies that would be affected by an incident at the dam or that have statutory responsibilities for warning, evacuation, and post-incident actions. The EAP should contain clearly defined roles and responsibilities for each entity.

Coordination with emergency management authorities responsible for warning and evacuating the public is essential for ensuring agreement on individual and group responsibilities. Coordination will provide opportunities to discuss critical emergency planning concerns such as the order of public official notification, use of backup personnel, alternate means of communication, and special procedures for nighttime, holidays, and weekends.

Evacuation

Evacuation planning and implementation is typically the responsibility of State or local emergency management authorities. Although an EAP does not need to include an evacuation plan, it should indicate who is responsible for evacuation and whose plan will be followed.

Document Control and Protection of Critical Information

The dam owner should develop an EAP distribution list for all those who would be involved in implementing the EAP. The list must be reviewed and updated as part of updates to the EAP.

Maintaining an EAP

After the EAP has been developed, approved, and distributed, continual reviews and updates must be performed. Without periodic maintenance, the EAP will become outdated and ineffective.

Exercising an EAP

If EAP action items and procedures are not exercised periodically, those involved in its implementation may lose familiarity with their roles and responsibilities. A proposed exercise schedule and plans for an EAP exercise program should be included in the EAP.

Know the response agencies for your community and geographic region. Build relationships with these groups before an incident.

- » City Law Enforcement
- » County Law Enforcement
- » State Law Enforcement
- » Local Fire Service
- » Joint Terrorism Task Force
- » Federal Bureau of Investigation
- » Weapons of Mass Destruction
- » FBI Hotline
- » FEMA Regional Office
- » State Dam Safety Office
- » Downstream Dam Operator
- » Upstream Dam Operator
- » Community Planners
- » City Emergency Management
- » County Emergency Management
- » State Emergency Management
- » U.S. Coast Guard
- » Department of Homeland Security Protective Security Advisor
- » DHS National Infrastructure Coordinating Center
- » State Fusion Center

A suggested EAP outline, as well as more in-depth information on emergency action planning, is provided in FEMA 64, available online at www.fema.gov/media-library/assets/documents/3357.