

## Physical Security Measures for Levees

There are no industry standards for the physical security of levees, and the level of physical security is very much the province of the individual levee owner/operator. In choosing the security measures to be employed, a number of factors should be considered, including:

- A prior history of thefts, vandalism, or other securityrelated problems either directed against the levee itself or the surrounding area.
- Threats directed against the levee or the staff that operate it.
- The potential consequences of the failure of the levee or the malfunctioning of critical control devices that may be damaged through theft or other deliberate acts.
- The need to mitigate liability issues resulting from potential deliberate acts.
- Visibility and public access to the levee.
- Whether temporary protective measures, such as additional access restrictions or increased security patrols, are needed at critical locations during periods of greatest vulnerability and consequences (i.e., high water conditions).

The best source for determining the appropriate level of security is the owner/operator's knowledge of the history of the levee and a common sense assessment of what measures are appropriate, if any. Input should also be sought from the local law enforcement agency. Other local levee owner/ operators may also have suggestions on security measures that they have used.

The following is a description of the types of measures that **could** be employed:

- Installing fencing, gates, or other barriers to restrict access to the levee or support facilities.
- Limiting access to critical facilities or features to authorized persons through measures such as unique or restricted keying systems, remote "smart locks," or access card systems.
- Instructing maintenance staff to be alert for cuts in fencing, broken locks, or other irregularities.
- Posting signs in non-public areas to warn persons that they are trespassing. (The local law enforcement agency can advise as to the language and posting requirements.)
- Marking tools and maintaining an accurate inventory of generators, power tools, and other valuable equipment, which will aid in their recovery if stolen.
- Ensuring that metal products such as copper or aluminum are secured at night and marked to help identify them if stolen. (A unique color spray paint as well as marking/branding of wire reels may help.)
- Implementing access control measures to identify and process all personnel, visitors, vehicles, vendors, and contractors (i.e., photo IDs, uniforms, marked vehicles, visitor passes, contractor IDs displayed by all personnel while in critical buildings or areas).
- Installing door alarms or other systems to monitor entry into critical buildings or areas.
- Implementing recorded closed circuit television systems (CCTV) that can provide surveillance capability of a protected facility.

- Integrating alarm, CCTV, and other security systems that report to a staffed levee facility or a contract alarm station for incident assessment and dispatch of the appropriate company or law enforcement personnel as needed.
- Placing barriers to delay or stop vehicles, particularly in vital areas where only authorized vehicles should be allowed.
- Lighting critical areas to deter trespass and facilitate observation at night. An alternative would be lighting that is activated by motion detection that also provides a deterrent effect.
- Establishing a contract with a reputable security vendor who can provide either random patrols or more stringent on-site security when circumstances require such actions.
- Creating a security awareness program to advise neighbors and employees of the types of problems being experienced and how to report suspicious activities. The local law enforcement agency should be able to assist in this.
- Asking the local law enforcement agency to assess the security of the levee and its facilities, particularly in response to local crime patterns.

This list of possible measures is not intended to be allinclusive but offers common security measures that could be considered to provide an adequate level of security to levees.



For questions or more information, please contact dams@dhs.gov.