On June 10, 2005, an unplanned detonation of a blast hole occurred at a surface coal mine in Indiana. A total of 189 blast holes had been drilled, loaded, and primed for blasting. The mine was using the Orica electronic blasting system to set up the blast, check the circuitry, log and assign delay sequence timing, program and arm the electronic detonators for blasting, and to detonate the round. In preparation for the blast and once all personnel were off of the blast area at a point of safety, the blaster connected the Orica Logger to the Orica Blaster and then began the calibration and programming process. While the electronic detonators were being programmed, the number 173 blast hole unexpectedly detonated after a short time into the programming sequence. No injuries or property damage occurred.

Thunderstorms and lightning had been noted in the area at the time of the incident. This incident is currently under investigation to determine the cause of the unplanned initiation of the number 173 blast hole.

**Best Practices**

- Insure that the manufacturer’s instructions for the use of an electronic blasting system are being followed.
- Insure that the blast site is cleared and secured and that blasting personnel are in a safe location when using any electronic blasting system to program and arm the electronic detonators for the blast.
- Determine that stray electrical current is not present during the blast set up to create a safety hazard.
- Suspend blasting operations during the approach and progress of an electrical storm and withdraw persons from the blast area or to a safe location.