



Curatorial Safety

Blasting Caps in the Parks

Blasting caps are used to detonate an explosive charge. Blasting caps contain a small explosive charge that in turn sets off a larger attached explosive (such as dynamite). As a result, blasting caps are considered explosives and are dangerous, as they could potentially detonate and injure and/or kill someone handling them. Types of blasting caps include:

1. **Fuse caps** contain explosives like mercury fulminate, lead azide, and lead styphnate. Fuse caps are usually small metal tubes 1” – 2” in length and approximately ¼” in diameter. Fuse caps can detonate if subjected to heat, shock, or static electricity. **Old fuse caps with crystallization (deterioration) are very dangerous.**
2. **Electric blasting caps** are similar to fuse caps, except they have two insulated electric wires attached to one end. Electric blasting caps can be detonated due to heat, shock, static electricity, radio frequencies, and electromagnetic radiation.
3. **Non-EI blasting caps** are safer than either fuse caps or electric blasting caps, and are crimped to flash tubing.

Blasting caps are a staple of the construction industry. Unfortunately, misplaced or lost blasting caps can sometimes be found at old construction sites, mines, alongside highway excavations, etc. Since all of these areas occur within various National Park Service units, you and/or your visitors could potentially find blasting caps at your park. Should you come across any blasting caps, contact your park’s law enforcement division, safety officer, local police, or sheriff’s department. **Do not pick up or handle any blasting caps! This also applies to tins or other containers used to store blasting caps as the friction caused by opening the tin could cause detonation.**

You might also have blasting caps in your museum collection. Recently, a park curator was examining several envelopes of items that were recovered during an archaeological investigation. Unfortunately, one of the envelopes contained blasting caps that had started to crystallize, **an extremely dangerous situation!** Luckily no one was injured, but that was the second time that a park in that region had found blasting caps in its collection within a year. **Remember, should you discover any blasting caps, do not pick them up or handle them. Call your law enforcement division or local police department to arrange for safe disposal.**

To see photographs of various types of blasting caps, refer to the Oregon State Police Arson/Explosives Section’s website at <http://www.osp.state.or.us/html/blasting_caps.html>.