Blasting Area Awareness

Workers use explosives and blasting agents in construction. It's important that the people who work on sites that have blasting know the hazards, process and what to do in emergencies.

Hazards

Flyrock is any object that travels outside the blast area. It can weigh from a few ounces to several tons. Flyrock can travel very far and is responsible for the most serious injuries on sites where blasting occurs.



Flyrock is a concern for EVERYONE on blast sites, not just those near the explosion.

Other blasting site hazards include:

- Noise
- Vibration
- Pressure waves

- Heat
- Fumes
- Dust

The closer you are to the blast, the greater the risk of these hazards.

Planning

The blaster-in-charge will communicate the blasting plan to site personnel and will conduct a pre-blast meeting to go over:

- When a blast will occur
- Number of blasts planned
- Signals prior to and after a blast (all-clear)

Working near where blasting personnel prepare charges can cause premature detonation.



Immediately follow any instructions you receive from the blaster-in-charge or guards.

Signs

Signs may indicate blasting procedures, warning signals and may also warn personnel about blasting activities:

- BLASTING ZONE AHEAD: the road or path leads to a blasting zone
- TURN OFF TWO-WAY RADIOS AND CELL PHONES: turn off devices that could cause a premature detonation
- END BLASTING ZONE: indicates the terminating edge of the blasting zone

The blaster-in-charge or authorized agent will cover or remove the signs when no explosives are in the area or explosives are otherwise secured.

Blasting procedure signs tell you what different signals that the blasting crew will use mean.

Signal Systems, Barricades and Guards

Signal systems must:

- Be audible, simple and understood by EVERYONE
- Include at least two warnings prior to a blast (preferably with sirens or horns)
- Include an "all clear" signal when the area is safe again

Barricades and guards control the flow of traffic into and through the blast zone.

Re-Entering the Site

Silences does NOT equal safety! A **misfire** is a charge that does not detonate or only partially detonates. A **hangfire** explosion is a blast that occurs after the blaster-in-charge expects it to happen.

The blaster-in-charge will conduct a post-blast inspection.



Wait for the "all clear" signal to re-enter the blast site.

Emergencies

Expect that the blaster-in-charge may suspend operations due to:

- Severe weather
- Unauthorized personnel on-site (report to your supervisor immediately)

If you see someone ignore warning signs and go into an unsafe blasting area, alert your supervisor immediately.