GREEN SHEET

California Department of Forestry and Fire Protection (CAL FIRE)

Informational Summary Report of Serious CAL FIRE Injuries, Illnesses, Accidents and Near-Miss Incidents



Structure Fire with Explosion – Near Miss

April 27, 2012

Monte Incident 12-CA-RRU-041726

Review Team Number 12-CA-RRU-041975

CA-CSR

A Board of Review has not approved this Summary Report. It is intended as a safety and training tool, an aid to preventing future occurrences, and to inform interested parties. Because it is published on a short time frame, the information contained herein is subject to revision as further investigation is conducted and additional information is developed.

SUMMARY

The following is an Informational Summary Report of an incident that occurred during suppression of a fire in the CAL FIRE/Riverside County Fire Department in which an explosion occurred injuring one fire captain

CONDITIONS

Weather – at 1636 hours from Pinyon RAWS, Temperature 74 Degrees, Relative Humidity 20%, Fuel Moisture 6%

Fuel Type – Mixed Brush and Chaparral 6-12 feet tall, two travel trailers with heavy fuel loading of paper from stored business files, a 40 foot long shipping container which contained wood working tools, guns, ammunition, and an unknown amount of gun powder.

Road conditions- Road is a narrow (<20 feet) dirt road

Topography- Ground is flat

Fire Behavior- Fire was actively burning materials including the trailers and impinging on shipping container upon arrival of the first engine company.

SEQUENCE OF EVENTS

At approximately 15:05 hours, units from CAL FIRE/Riverside County Fire Department were dispatched to a reported residential structure fire in the Pinyon area of Riverside County in the mountains south of Palm Desert. On arrival of the first engine company, the captain reported a travel trailer "fully involved," another trailer 50% involved with exposure to a shipping container and a sail boat exposure. Shortly after the first in Fire Captain gave a report on conditions, he reported hearing sounds of ammunition exploding and requested all incoming units be notified of the hazard. The Perris Emergency Command Center made positive notification to all responding equipment of the hazard. The first in Fire Captain assumed command and immediately established an isolation perimeter. Due to the limited water supply, additional engines and water tenders were ordered for a water shuttle operation.

As the incident progressed, the fire consumed the two travel trailers and became established in the shipping container. The door locks on the shipping container were cut using a rotary saw. After both doors were opened, water was applied from a distance but it had limited effect on the fire. The shipping container was full of contents making it difficult for fire streams to penetrate the entire length to the fire. A decision was made to cut a hole in the side of the shipping container with the rotary saw to provide access to the far end of the shipping container. Solar panels (photovoltaic energy system) on the roof of the shipping container were supplying power to the area. The decision was made to disable the panels on the roof to completely disable the electrical energy production. After fire personnel disabled the solar panels, they opted to place a ventilation hole in the roof structure of the shipping container to allow the smoke to escape and provide better visibility to the interior.

At approximately 1640 hours, crews once again noted a significant amount of ammunition begin to explode. The property owner returned to the scene and notified the incident commander that there was ammunition and reloading equipment in the shipping container which also included black powder and smokeless gun power. The Incident Commander made the decision to pull fire crews further back and to reset the hose lines. During the repositioning of the hose lines, a violent explosion occurred inside the shipping container. After the explosion, a Fire Captain was located on the ground near a chain link fence. On scene personnel immediately assisted the fire captain and quickly removed him to a safe area due to possible secondary explosions. The Incident Commander which was now the Battalion Chief immediately completed an accountability check of all incident personnel. Additionally, an ambulance, the Hazardous Materials Unit and the Riverside County Sheriff's Department Hazardous Device Team (bomb squad) were requested by the Incident Commander. It was later identified that a large gun safe containing weapons, ammunition and gun powder had a catastrophic failure which blew off the front door and top.

INJURIES/DAMAGES

One Fire Captain experienced concussion like symptoms and was transported to a local hospital for evaluation. He was released later that evening back to full duty.

There was no other reported damage to equipment and or injuries to other personnel.

SAFETY ISSUES FOR REVIEW

- Personnel should remember that there is no such thing as a routine incident. Size up is an ongoing and continuous process throughout the duration of an incident.
- All hazards should be communicated to all responding personnel and a positive confirmation that the message was received should be obtained.
- The contents of vehicles and structures are the great unknown and responders should always (expect the unexpected.)
- In this incident all appropriate PPE was being worn; this minimized and prevented additional injuries.

INCIDENTAL ISSUES/LESSONS LEARNED

(For Near-Miss and Non-Serious Accidents)

• All personnel must remember that when an evacuation notification is given that process must begin without hesitation even if they do not know the nature of the hazard.



