

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



Tree Felling Incident / Inmate Firefighter Serious Injury

March 20, 2012

**Lockheed Incident
12-CA-CZU-002307**

**Empire SART
12-CA-CZU-002317**

California Northern Region

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.

Lookouts

Communications

Escape Routes

Safety Zones

SUMMARY

On Tuesday, March 20, 2012, at 1115 hours an inmate firefighter from Ben Lomond Camp was struck by a felled tree at a fuels management project approximately three miles northwest of Ben Lomond Camp in Santa Cruz County. The inmate firefighter sustained fractures to a leg, arm, and lumbar vertebra.

CONDITIONS

Topography: Varied 30-60% slope

Fuel Type: The incident occurred in a fuel model 9 consisting of an overstory of Tanoak, Madrone, Live Oak, and Douglas-Fir. The understory consisted of manzanita and various brush species.

Weather Observations: March 22, 2012, 1100 hours from Ben Lomond RAWS Station

Temperature: 53 Degrees Fahrenheit

RH: 83%

Winds: 3 MPH SSW, Gusts to 7 MPH

Rainfall: The last rainfall reported by the Ben Lomond RAWS Station on March 18, 2012 was 0.43 inches

Equipment: Husqvarna 575XP Chainsaw with 24" bar

SEQUENCE OF EVENTS

On Tuesday, March 20, 2012, Ben Lomond Crews 1 and 5 were assigned to a fuels management project in Santa Cruz County off of the north end of Empire Grade Road. The crews arrived at the project at about 1000 hours. The project consisted of brush removal and some tree felling on slopes of up to 60%.

An inmate firefighter faller trainee from Crew 5 was assigned to fell a 60' Tanoak tree with an approximate 16 inch Diameter Breast Height (DBH). The lay of the tree was determined to be uphill and an appropriate undercut was made on the tree. Upon making the back-cut, the tree fell away from its intended lay approximately 90 degrees and struck another inmate firefighter working within the fall zone.

The Crew 5 Captain took immediate action to have the inmate extricated from under the tree, while the Crew 1 Captain notified Felton ECC of the medical emergency and requested resources.

The two crews worked together to extricate and package the injured crew member for transport. The injured inmate firefighter was air lifted to Stanford University Hospital.

INJURIES

The crew member sustained fractures to the right femur and tibia, left ulna and radius, and a fracture of the lumbar spine.

SAFETY ISSUES FOR REVIEW

- Establish cutting area control ensuring **NO ONE** is working within **TWO** times the height of the tree to be felled.
- Review tree felling procedures with assigned personnel in a Tailgate Safety Briefing.
- Review and maintain LCES.
- Be aware of complacency due to repetitious activity.
- Maintain situational awareness when involved with all saw operations, particularly tree felling operations.
- Follow standard operating procedures for felling per Section 4044.1.1 of the Training Handbook and Cal OSHA Title 8, Div 1, Chapter 4, Subchapter 13, Article 5 Falling and Bucking.

