

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



Humboldt-Del Norte Unit

Inmate Firefighter Chainsaw Injury

September 23, 2011

Schoolhouse

11-CAHUU-005184

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

Below is the Informational Summary Report (Green Sheet) of an incident which occurred on September 23, 2011 at approximately 1300 hours. An inmate firefighter sustained a serious injury to his left upper thigh from a chainsaw during a tree felling operation while on a scheduled work project in the Bald Hills area of the Redwood National Park.

CONDITIONS

Weather observations obtained from the Schoolhouse RAWS site at 1310 hours on September 23, 2011 located approximately one mile from the accident location:

- Temperature 74° F
- Relative Humidity 44%
- Mostly Sunny
- Wind Speed - 6 mph, gusts 12 mph
- Wind Direction – North

Other Conditions

- Aspect – West
- Elevation 2747'
- Fuel Type – Oak Woodlands
- Slope 10-15%
- Equipment – Husqvarna 372XPW chainsaw, 24 inch bar, semi-skip chisel bit chain
- Legal Location – NE ¼ Section 19, T9N, R3E, Humboldt Base Meridian
- Lat/Long – N 41°09.318, W 123° 53.147
- Descriptive location – Robber's Gulch Road in the Skookum Prairie area of the Bald Hills District in the Redwood National Park

SEQUENCE OF EVENTS

On September 23, 2011 at approximately 1300 hours, an inmate firefighter assigned to the Alder Conservation Camp (CC #20) was working on a scheduled work project as a member of Alder Crew (ALD) #2. The project was located in the Skookum Prairie area of the Bald Hills District in the Redwood National Park. The intent and scope of the project was to restore the oak woodlands with mechanical thinning of young Douglas fir trees. During the course of the project the injured inmate firefighter sustained a laceration to his leg by a running chainsaw used in the tree felling operation.

Prior to beginning work on the project the Fire Captain (FC) provided his crew with a project and safety briefing. All assigned personnel documented the training by signing an IIPP-6. During the pre-work briefing work assignments were given. Saw teams were tasked with felling, limbing and bucking small Douglas fir trees. Other inmates were assigned to clean up behind the saw teams and make piles of the slash for future burning.

One of the saw teams was engaged in a felling operation working on a tree approximately 4 ½ " diameter at breast height (DBH) and 34' 3" tall. This tree was one of two trees adjacent to each other with little separation between them. While attempting the back-cut, the tree sat back and pinched the bar. The saw was now stuck in the tree, and the size of the tree left no room to drive a wedge and lift the tree off the bar. When the chainsaw bar got stuck in the tree, the tip of the bar was resting against the adjacent tree. An inmate assigned to a slash clean-up crew noticed the problem. He approached the problem tree with the intent on assisting the sawyer by pushing the tree forward to relieve some of the weight from the tree so the chainsaw bar could be removed. While attempting to push the tree forward and off of the bar, the sawyer triggered the saw throttle to assist in removing the saw. This action resulted in the chainsaw bar tip striking the adjacent tree, causing a rotational kick-back of the saw. The chainsaw's reaction caused the saw to strike the inmate across his upper left thigh resulting in a laceration. The inmate was not wearing PPE to be engaged in chainsaw operations.

Upon notification of the accident, the FC initiated a request for an immediate medical response through the Emergency Command Center, which included a medevac helicopter for patient transport. This was due to both the type and location of the injury and extended patient transport time on the ground.

Patient care was initially provided by the FC and National Park staff members who were at the project site. The patient was packaged for transport and moved to an area approximately one mile from the accident site that would serve as the medevac helicopters landing zone (LZ). Responding ground units assisted in patient care at the LZ.

The patient was flown to a local Trauma Center for evaluation and treatment.

INJURIES/DAMAGES

The inmate firefighter sustained a serious deep laceration to his upper left thigh region. The laceration was approximately 15 cm in length and approximately 3 cm deep. There was no arterial bleed. Orthopedic Surgeons were requested by the Emergency Room physician and it was determined surgery would be required to repair damage to the muscle and tissue. A combination of stitches and staples were required to close the wound. The inmate firefighter was admitted overnight and released the following day. The inmate firefighter was transferred to a CDCR Medical Ward where he will continue care and treatment.

SAFETY ISSUES FOR REVIEW

- Review policies regarding chainsaw use, required training, and related activities in accordance to CAL FIRE Handbook 1700, Sections 1780, 1781 and Handbook 4000, sections 4044 through 4044.10
- Conduct Work Safety Briefings or Tailgate Safety Sessions at the beginning of a project and prior to the start of each work day. Document them on an IIPP6.
- Maintain communications and situational awareness between all crew members. Ask for assistance whenever necessary. Be sure assistance is provided appropriately.
- Maintain ten feet from chain saw operations unless approved by the sawyer(s) to assist and are properly attired with chain saw chaps (4314.4).
- Proper use of PPE is a significant factor in the prevention of serious injuries.
- Ensure that all personnel are properly trained and utilizing proper techniques when operating tools.

INCIDENTAL ISSUES/LESSONS LEARNED (For Near-Miss and Non-Serious Accidents)

- Continually monitor the work and working conditions of subordinates.
- While this incident occurred during routine project work in a wildland setting, it easily could have occurred during emergency operations on a wildland fire. All personnel must understand the proper techniques involved in chainsaw operations. Training must be ongoing during operations and all employees must recognize the potential dangers when working around chainsaws.

