## ICA COMMISSION AGENDA

December 4, 2013

ADOSH Director Bill Warren and Marshall Krotenberg, ADOSH Safety Compliance Supervisor, will be presenting at the December 4, 2013 Commission meeting.

# FATALITY/ACCIDENT

1. L3419-317242683 Arizona State Forestry Division

#### ICA AGENDA

12/4/13

Arizona State Forestry Division 1110 W. Washington St, Ste 100 Phoenix, AZ 85007

Years in Business: 100 Employed in establishment: 325 Covered by inspection: 325 Controlled by employer: 325

INSPECTION NO:

L3419-317242683

**INSPECTION TYPE:** 

FATALITY/ACCIDENT

**INSPECTION DATE:** 

07/01/2013

SITE LOCATION:

Weaver Mountains/Yarnell Hill Fire

Yarnell, AZ 85362

TYPE OF INDUSTRY:

Forestry/Wildland Fire

PREVIOUS HISTORY: No inspections in the past three years

Background: On the evening of Friday, June 28, 2013, lightning ignited a small fire on a peak in the Weaver Mountains located west of the Arizona towns of Yarnell, Glen Ilah, and Peeples Valley. Initial attack efforts initiated by Arizona State Forestry Division (ASFD) on Saturday, June 29, 2013, were unable to suppress the eight acre fire in steep, rocky, chaparral fuels. By the evening of June 29, 2013, the fire had escaped initial attack and had grown to over 100 acres. That evening ASFD began ordering a Type 2 Incident Management Team (overhead), crews, and resources to begin an extended attack the following day. Due to extreme fire behavior and afternoon thunderstorm winds, firefighting efforts to control the fire on Sunday, June 30, 2013 were futile. On that day the fire burned over 8,00 acres of wildland, over 114 structures, and resulted in multiple instances of firefighters being unnecessarily and unreasonably exposed to the deadly hazards of wildland firefighting, the most catastrophic being the entrapment, burn-over, and deaths of 19 members of the Granite Mountain IHC.

### CITATION 1 - WILLFUL SERIOUS

Item 1 - The employer did not furnish to each of his employees employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to their employees, in that the employer implemented suppression strategies that prioritized protection of non-defensible structures and pastureland over firefighter safety, and failed to prioritize strategies consistent with Arizona State Forestry Division - Standard Operational Guideline 701 Fire Suppression and Prescribed Fire Policy (2008). When the employer knew that suppression of extremely active chaparral fuels was ineffective and that wind would push active fire towards non-defensible structures, firefighters working downwind were not promptly removed from exposure to smoke inhalation, burns, and death: (23-403(A)).

- a) Yarnell Hill Fire, Yarnell, Arizona: On June 30, 2013, between 1230 and 1430, and after general public had been evacuated, thirty-one members of Structure Protection Group 2, charged with protecting non-defensible structures in the vicinity of the Double Bar A Ranch, were exposed to smoke inhalation, burns, and death by wind driven wildland fire.
- b) Yarnell Hill Fire, Yarnell, Arizona: On June 30, 2013, from and after 1530, one member of the Gran ite Mountain Interagency Hotshot Crew that continued to serve as a lookout was exposed to smoke inhalation, burns, and death by a rapidly progressing wind driven wildland fire.
- c) Yarnell Hill Fire, Yarnell, Arizona: On June 30, 2013, from and after 1530, approximately thirty firefighters continued indirect attack activities in Division Z (Zulu) and were exposed to smoke inhalation, burns, and death by a rapidly progressing wind driven wildland fire.
- d) Yarnell Hill Fire, Yarnell, Arizona: On June 30, 2013, from and after 1530, 19 members of the Granite Mountain Interagency Hotshot Crew continued in suppression activities, until 1642 when they were entrapped by a rapidly progressing wind driven wildland fire.

Prob. of Injury/ Illness or No. Cal. Days Uncorr.	Gravity- Based Penalty	Adjustme	nt Factors	Formula Amount	Division Proposal		
HG	\$70,000.00	1) Size 0%	2) Good Faith 0%	3) History 0%	4) Total 0%	\$70,000.00	\$70,000.00
Prob. of Injury/ Illness or No. Cal. Days Uncorr.	Gravity- Based Penalty	Adjustment Factors				Formula Amount	Division Proposal
23-418.01	n/a	1) Size 0%	2) Good Faith 0%	3) History 0%	4) Total 0%	\$ 475,000.00	\$ 475,000.00

A.R.S. Section 23-418.01: An Additional penalty of \$25,000 is assessed under A.R.S. section 23-418.01 for each employee that died.

#### **CITATION 2 – SERIOUS**

Item 1 – The employer did not furnish to each of his employees employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to their employees, in that the employer failed to implement fire suppression plans consistent with A.R.S. Section 37-623 Suppression of wildfires and Arizona State Forestry Divison – Standard Operational Guideline 701 Fire Suppression and Prescribed Fire Policy (2008) in a timely fashion during the lifethreatening transition between initial attack and extended attack fire operations thereby reducing the risk of firefighter exposure to smoke inhalation, burns, and death: (23-403(A)).

- a) Yarnell Hill Fire, Yarnell, Arizona: On June 29, 2013, when the fire escaped initial attack, an incident complexity analysis was not conducted and reviewed by fire management to ensure that wildfires increasing in a complexity are quickly identified and a safe transition occurs to the appropriate level incident response.
- b) Yarnell Hill Fire, Yarnell, Arizona: On June 29, 2013, when the fire escaped initial attack, an Escaped Fire Situational Analysis (EFSA) or similar Wildland Fire Situation Analysis (WFSA), Wildland Fire Decision Support System (WFDSS), or Operational Needs Assessment was not conducted by fire management to ensure a safe transition to extended attack.
- c) Yarnell Hill Fire, Yarnell, Arizona: On June 29, 2013, after the fire escaped initial attack and prior to transitioning to a more complex management team, an Incident Action Plan (IAP) containing objectives reflecting the overall incident strategy, specific tactical actions, and supporting information for the next operational period was not conducted by fire management to ensure a safe transition to extended attack.

Prob. of Injury/ Illness or No. Cal. Days Uncorr.	Gravity- Based Penalty	Adjustmer	Adjustment Factors				Division Proposal
НG	\$7,000.00	1) Size 0%	2) Good Faith 0%	3) History 0%	4) Total 0%	\$ 7,000.00	\$ 7,000.00

Item 2 – The employer did not furnish to each of his employees employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to their employees, in that pursuant to Arizona State Fire Division Standard Operating Guideline SOG-701, transition from initial attack to an extended attack operations is extremely dangerous and critical incident management personnel necessary to support the planning and implementation of fire suppression operations arrived late or were absent from their assigned positions during the life-threating transition thereby increasing the risk of firefighter exposure to smoke inhalation, burns, and death: (23-403(A)).

- a) Yarnell Hill Fire, Yarnell, Arizona: On or about June 30, 2013, fire management positions of Safety Officer and Planning Section Chief were unfilled and therefore unable to participate during critical fire suppression planning, transition planning, and oversight of ongoing wildfire suppression operations.
- b) Yarnell Hill Fire, Yarnell, Arizona: On June 30, 2013, at approximately 1330, Division Z Supervisor departed from his assigned position which left Division Z without supervision during ongoing wildfire suppression operations.

Prob, of Injury/ Illness or No. Cal. Days Uncorr.	Gravity- Based Penalty	Adjustment	t Factors	Formula Amount	Division Proposal		
HG	\$7,000.00	1) Size 0%	2) Good Faith 0%	3) History 0%	4) Total 0%	\$ 7,000.00	\$ 7,000.00

TOTAL PROPOSED PENALTY

\$559,000.00

\$559,000.00