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OR-OSHA CONCLUDES INVESTIGATION INTO FATAL CANNON EXPLOSION

(Portland) The Department of Consumer and Business Services announced today that investigators with the DCBS Occupational Safety and Health Division (also known as Oregon OSHA) have concluded the inquiry into the August 1, 2003 explosion of a ceremonial cannon that resulted in the death of a 16-year old employee of the Cascade Pacific Council, Boy Scouts of America. As a result of the investigation, Oregon OSHA has issued a citation to the Cascade Pacific Council, Boy Scouts of America for several alleged violations of the Oregon Safe Employment Act.

Christopher Kroker was assigned duties that included firing a ceremonial cannon during flag-lowering ceremonies at Camp Meriwether, a Boy Scouts camp located near Tillamook. On August 1, Kroker and an assistant were attempting to fire the cannon when the device failed to fire on two attempts. Following the conclusion of the flag-lowering ceremony, Kroker attempted to fire the cannon a third time when the device exploded, causing severe injuries. Kroker was transported by helicopter to Legacy Emanuel Hospital in Portland, where he remained under intensive care treatment until his death on August 5, 2003.

Five alleged violations of state safety rules are contained in the citation, three of which are classified as “serious” by Oregon OSHA and the remaining two as “other-than-serious.” The civil penalty assigned for each alleged violation is based on the likelihood and severity of potential injuries stemming from that violation. The total proposed civil penalty for this citation is \$ 11,500. Oregon OSHA’s citation does not identify any of the alleged violations as the direct cause of Mr. Kroker’s death.

The five alleged violations identified in the Oregon OSHA citation are:

- **The employer did not ensure that workers were properly instructed and supervised in the safe operation of equipment.** The Oregon OSHA investigation revealed that Mr. Kroker had not been properly instructed in the safe use of the ceremonial cannon. The investigation determined the cannon had been overloaded with black powder and projectiles at the time of the explosion. Training materials supplied by the employer on cannon use did not address basic national artillery safety procedures for proper use of a ramrod, quantity of powder charges, necessary protective equipment during cannon use, and procedures for safe positions of the cannon operator during loading and firing. The investigation additionally revealed that

supervisors supplied an inappropriate grade, and amount, of gun powder for use in the cannon. (Serious violation - \$7000 penalty)

- **Explosives or blasting agents were stored, handled or transported in a hazardous manner.** The grade of black powder used in the cannon was outside of national artillery safety standards for the cannon. The Oregon OSHA investigation also revealed the quantity of powder used exceeded safety standards. In addition, black powder was stored in containers not approved for storage and an inventory of black powder in storage at Camp Meriwether was not maintained. (Serious violation - \$2500 penalty)
- **The employer failed to keep open flames at least 100 feet from where explosives were handled, stored, or used.** During the accident investigation, it was determined that black powder had been stored in a container within 100 feet of a forging operation and a campfire at Camp Meriwether. (Serious violation - \$1500 penalty)
- **An employer having 11 or more employees had not established a safety committee.** Oregon Administrative Rules require that formal safety committees meeting OR-OSHA regulations must be established in any business with more than 10 employees. An average of 18 people are employed at Camp Meriwether. No records existed to verify required training in hazard identification and accident investigation. (Other-than-serious violation - \$500 penalty)
- **The employer did not assess the workplace to determine if hazards existed that would require the wearing of personal protective equipment.** No records were provided during the investigation which demonstrated the hazards present during cannon use were assessed to determine if equipment would be needed to protect the cannon operator during loading or firing. (Other-than-serious violation - no civil penalty)

Oregon OSHA was notified shortly after the explosion occurred. Investigators responded to the site of the incident and then conducted over four months of research, interviews and review of the Cascade Pacific Council-Boy Scouts of America safety-and-health-management program. The Cascade Pacific Council-Boy Scouts of America has up to twenty days following issuance of the citation to file an appeal with Oregon OSHA.

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