Safety Alert #2009-01 was issued on June 25, 2009, regarding safety concerns with the continued use of older models of chain saw chaps (NFES 0044, 0045, 0078, 0150) constructed using USFS Specification 6170-4E. Under this specification (6170-4E), the chaps provided a protection level up to 2,750 fpm chain speed and a minimum leg width of 12 inches. Requirements in the American Society for Testing and Materials (ASTM) F 1897 Standard Specification for Leg Protection for Chain Saw Users, published in 2004 and 2008, and the National Fire Protection Association (NFPA) 1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting published in 2005 now exceed the cut resistance and chap leg width found in chaps made to the older specification. Saw chaps constructed using the older specification 6170-4E no longer comply with current industry standards and do not provide the level of protection currently required.

In 2000, USFS Specification 6170-4E was superseded by USFS Specification 6170-4F. The current specification (6170-4F) provides a higher level of protection or cut resistance of up to 3,200 feet per minute (fpm) chain speed. The chaps were also redesigned to give a larger area of coverage for the legs. The current USFS Specification 6170-4F meets or exceeds both the ASTM and NFPA requirements. Although the large majority of chaps now in service conform to the USFS Specification 6170-4F, recent safety inspections revealed that chain saw chaps produced using USFS Specification 6170-4E (April 1997) are still in service in some locations.

Caches should immediately remove from service any chaps in their inventory that are not labeled with specification, USFS 6170-4F or are not certified to NFPA 1977-05. Screening for unserviceable chaps should be continued as an ongoing process through
the refurbishment process. Chaps removed from service shall not be donated or transferred to other agencies and must be properly destroyed or made unserviceable.

Chaps meeting USFS Specification 6170-4F are either green or orange in fabric color, have leg width of at least 14 inches, black-colored webbing and trim, and are labeled with specification number 6170-4F. See illustrations below for a comparison of the old and current model chaps.
For additional information or questions regarding this Cache Memorandum, please contact John Smith, Program Leader, USFS Missoula Technology and Development Center at 406-829-6793 or email jrsmith01@fs.fed.us.

/s/ Tory Henderson

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