APPENDIX 7 – OCCUPATIONAL SAFE WORK STANDARD #1

Operational Safe Work Standards #1

WILDFIRE DANGEROUS TREES

Applies to	Personnel employed by or contracted with the Forest Service and involved in ground fire suppression operations.
Purpose	To provide a safe work environment and to meet Workers' Compensation Occupational Health & Safety Regulations. The Forest Service will have Safe Work Standards that constitute safe methods, conditions and requirements for workers involved in fire line suppression operations.
Critical Safety Statements	**In wildfire operations, if a worker will be put at undue risk of being injured by a suspect or potentially dangerous tree, the tree must be removed or assessed by a Certified Danger Tree Assessor who determines whether the tree is safe or dangerous and manages it in accordance with the established practices.**
Exceptions	In Very Low Risk activities (site survey, reconnaissance, tree marking, boundary and fire guard/control layout, establishing hose lays in green unburned areas, burning off, road travel with light vehicles such as ATV's, pickups <-5500 kg GVWR in green unburned areas) a formal Dangerous tree assessment is NOT required. Workers need to keep a "heads up" and stay away from any obvious dangerous trees and overhead tree hazards (insecurely lodged trees, hanging top or limbs). The use of spotters to watch suspect or potentially dangerous trees in order to allow other workers to carry out fire suppression actions may be utilized as long as the work carried out is critical to controlling the fire, there is no other practical alternative safety procedure, and the use of spotters is for a short duration only. If this practice is to be employed, then it is essential that all workers on site are aware of the procedures to be used and appropriate action required if a tree appears in any way to be posing a threat of injury to workers on-site at that time. All procedures must be documented and placed on the appropriate incident file. If conditions call for an alternate safe work procedure from these standards, an amending written practice will be developed to address the specific situation and ensure the safety of personnel. The appropriate Fire Centre Manager or the Director must approve this practice.
Contact	Mel Dunleavey: mel.dunleavey@gems3.gov.bc.ca or (250) 992-2144
DEFINITION(s)	
Dangerous Tree	Any tree that is hazardous to workers because of location or lean, physical damage, overhead hazards, deterioration of limbs, stem or root system, or a combination of these.
Certified Danger Tree Assessor	A person who has successfully passed one or more of the "Wildlife/Danger Tree Assessor's course" modules sponsored by the Wildlife Tree Committee of British Columbia since November 1998, and who holds a valid certificate which signifies this designation. For wildfire applications the assessor must hold a valid "wildfire module" certificate.
PROCEDURES	

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Hazards

During the initial site survey and fire attack planning process, the types and locations of potential hazards (including potentially dangerous trees) will be disclosed to workers. Appropriate action will be taken to avoid or mitigate hazards.

Wind Influence

Workers must be aware of wind conditions and the influence of wind on tree stability. Strong winds increase the potential of trees failing. Potentially dangerous trees within reach of work areas must be removed or managed by a certified assessor who determines whether the tree is safe or dangerous, and manages it in accordance with the established practices. If wind conditions become strong enough (i.e., winds set whole trees in motion and cause branches to break and fly in the air, or walking is impeded by the wind), workers should consider leaving the work area and go to a safe refuge.

Assessment

A certified danger tree assessor will rate the tree as:

Safe The tree can be left standing (i.e., less than 50% stem damage to coniferous trees or less than 50% of roots severed, burned, or damaged by heavy equipment, fire, decay or any combination of these.)

Dangerous The tree must be removed, or remove dangerous part of the tree (e.g., hazardous limb), or a No Work Zone must be established and flagged around it.

Assessment for dangerous trees is required for the active work area, the perimeter of the work area (within 1 ½ tree lengths or greater, depending on site factors such as slope), and other locations including but not limited to rest areas, staging areas, and access and egress routes.

Communication

Once an assessment is complete, the following details must be communicated to the workers in the area:

1. The location of the areas that have been assessed for dangerous trees;
2. The marking method used for trees assessed as "dangerous" or "safe";
3. The location and marking method used for No Work Zones;
4. The type of work activity the area has been assessed for.

Re-assessment

Re-assessment of previously assessed areas should occur if:

1. Buildup Index values are above the established thresholds and there is continuous active burning within the area of work, or
2. More than three days with continuous burning have passed since the last assessment, or
3. The work activity in the area creates more disturbance than what the area was originally assessed for.

Falling Danger Trees

No person will fall dangerous trees unless they have formal training in falling and have demonstrated competence in falling dangerous trees. No person will blast dangerous trees unless they have formal blasting training.

Machine-constructed fire guards do not normally require pre-falling of Dangerous Trees because of short exposure time and Roll Over Protection Systems used on heavy equipment.

This is a Provincial Standard. It is in the best interest of safety and safety alone.
Updated: May 3rd, 2002

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FAQ's	
Q1.	Do all areas of a fire, where there will be workers, need to be assessed?
A1.	No, but to comply with WCB Regs. either all suspect trees are felled or a dangerous tree assessor must assess the area.
Q2.	Requiring approval of work procedure exceptions by a Fire Centre Manager or Director ties the Incident Commander's hands.
A2.	It needn't, a documented phone call to the Fire Centre Manager could serve as the approval. The Fire Center Manager could follow-up in writing.
Q3.	Can "Forestry Module" Wildlife Danger Tree Assessors conduct Danger Tree Assessments on Wildfires?
A3.	No - WCB will not recognize assessments conducted on a wildfire by Forestry Wildlife Danger Tree Assessors. There are significant differences in the process and tree defect ratings and therefore would not be considered the standard of care on a wildfire. These assessors can take a 1 day update to be considered qualified to do dangerous tree assessments on a wildfire.

Original signed by Peter Fuglem Director Protection Branch	May 10, 2002 Updated March 2004
Director's Approving Signature	**Approval Date**