- (1) "Abatement" means the elimination of additional fire hazard by burning, physical removal, or other means.
- (2) "Additional fire hazard" means additional fire hazard as defined in RCW 76.04.005.
- (3) "Adze eye hoe" means a serviceable forest firefighting hoe with a blade width of at least five and three-quarters inches and a rectangular eye. The blade shall be sharpened, solid, and smooth. The handle shall be hung solid with no more than three-quarters of an inch nor less than one-eighth of an inch extending beyond the head, smooth, aligned, and at least thirty-two inches long.
- (4) "Approved exhaust system" means a well-mounted exhaust system free from leaks and equipped with spark arrester(s) rated and accepted under United States Department of Agriculture Forest Service current standards.
- (a) Turbochargers qualify as an approved exhaust system when all gases pass through the turbine wheel. The turbine must be turning at all times, and there must be no exhaust bypasses. A straight mechanical-driven supercharger does not qualify as an approved exhaust system in lieu of an approved spark arrester.
- (b) Passenger vehicles and trucks may be equipped with an adequately baffled muffler in lieu of a spark arrester.
- (c) General purpose spark arresters for use on equipment, vehicles, and motorcycles operating on forest land must meet the performance levels set forth in the Society of Automotive Engineers (SAE) Recommended Practice SAE J350, "Requirements of Single Position Application General Purpose Arresters." The spark arrester shall be permanently marked with the model number and the manufacturer's identification or trademark. When the inlet and outlet of an arrester are not easily identified, they must be marked. Arresters on mobile equipment shall not be mounted more than forty-five degrees from the qualified position.
- (d) Portable power saws purchased after June 30, 1977, and used on forest land, must meet the performance levels set forth in the Society of Automotive Engineers (SAE) Recommended Practice SAE J335b, "Multi-Positioned Small Engine Exhaust Fire Ignition Suppression." Requirements to obtain the SAE J335b specifications are as follows:
- (i) The spark arrester shall be designed to retain or destroy ninety percent of the carbon particles having a major diameter greater than 0.023 inches (0.584 mm).
- (ii) The exhaust system shall be designed so that the exposed surface temperature shall not exceed five hundred fifty degrees Fahrenheit (288 degrees Centigrade) where it may come in direct contact with forest fuels.
- (iii) The exhaust system shall be designed so that the exhaust gas temperature shall not exceed four hundred seventy-five degrees Fahrenheit (246 degrees Centigrade) where the exhaust flow may strike forest fuels.
- (iv) The exhaust system shall be designed in such a manner that there are no pockets or corners where flammable material might accumulate. Pockets are permissible only if it can be substantiated by suitable test that material can be prevented from accumulating in the pockets.

- (v) The exhaust system must be constructed of durable material and so designed that it will, with normal use and maintenance, provide a reasonable service life. Parts designed for easy replacement as a part of routine maintenance shall have a service life of not less than fifty hours. Cleaning of parts shall not be required more frequently than once for each eight hours of operation. The spark arrester shall be so designed that it may be readily inspected and cleaned.
- (vi) Portable power saws will be deemed to be in compliance with SAE J335b requirements if they are certified by the United States Department of Agriculture, Forest Service, and the San Dimas Equipment Development Center.
- (e) Portable power saws which were purchased prior to June 30, 1977, and which do not meet the Society of Automotive Engineers Standards, must meet the following requirements:
- (i) The escape outlet of the spark arrester shall be at an angle of at least forty-five degrees from a line parallel to the bar;
- (ii) The configuration of spark arrester shall be such that it will not collect sawdust no matter in what position the saw is operated;
- (iii) Spark arrester shall be designed and made of material that will not allow shell or exhaust temperature to exceed eight hundred fifty degrees Fahrenheit;
- (iv) The arrester shall have a screen with a maximum opening size of 0.023 inches (0.584mm.);
- (v) The arrester shall be capable of operating, under normal conditions, a minimum of eight hours before cleaning is needed;
- (vi) The screen shall carry a manufacturer's warranty of a minimum of fifty-hour life when installed and maintained in accordance with the manufacturer's recommendation;
- (vii) The arrester shall be of good manufacture and made so that the arrester housing and screen are close fitting;
- (viii) The arrester shall be at least ninety percent efficient in the destruction, retention or attrition of carbon particles over 0.023 inches (0.584mm.);
- (ix) Efficiency is to be measured as described in Power Saw Manufacturer's Association Standard, Number S365;
- (x) Construction of the arrester shall permit easy removal and replacement of the screen for field inspection and cleaning.
- (f) Multipositioned engine powered tools, other than power saws, used on forest land must meet the performance levels set forth in the Society of Automotive Engineers (SAE) Recommended Practice J335b, "Multi-Positioned Small Engine Exhaust Fire Ignition Suppression."
- (g) Locomotive spark arresters for use on logging, private or common carrier railroads operating on or through forest land must meet the performance levels set forth in the Association of American Railroads (AAR) Recommended Practice, "Standard for Spark Arresters for Non-Turbo Charged Diesel Engines Used in Railroad Locomotives."
- (5) "Axe" means a serviceable, double-bitted, swamping axe or single-bitted axe of at least a three-pound head and thirty-two inch handle. The blades shall be sharpened, solid and smooth. The handle shall be hung solid, smooth and straight.
- (6) "Certified electrical fence controller" means an electrical fence controller that meets the standards for fire safety developed by Underwriters Laboratories (UL) and indicates approval by bearing the UL label on the controller.
- (7) "Currently with the logging" and "current with the felling of live timber, or with the current logging operation" means during the

logging operation or associated activities on any landing, setting or similar part of the operation.

- (8) "Debris disposal fire" means an outdoor fire for the elimination of a fire hazard and for the purpose of clean-up of natural vegetation and residue of a natural character such as leaves, clippings, prunings, trees, stumps, brush, shrubbery, and wood so long as it has not been treated by an application of prohibited material or substance in a pile no larger than that allowed in WAC 332-24-211.
- (9) "Department" means the department of natural resources, or its authorized representatives, as defined in chapter 43.30 RCW.
- (10) "Dump" includes, without limitation, dumping, depositing, or placing.
- (11) "Electrical fence controller" includes any controller, equipment, appliance, device, or apparatus used as an electrical fence controller, energizer, or pulsator which uses or conveys an electrical current.
- (12) "Fire extinguisher" means, unless otherwise stated, a fully charged and operational chemical fire extinguisher rated by underwriters' laboratory or factory mutual, appropriately mounted in either a vertical or horizontal position, and located so as to be readily accessible to the operator. When two fire extinguishers are required, they are to be appropriately mounted and located so that one is readily accessible to the operator and the other is separate from the operator and readily accessible to other personnel. The fire extinguisher shall be equipped with a gauge to determine the level of charge present to propel the chemical from the extinguisher; however fire extinguishers required for use with portable power saws are not required to be equipped with a gauge to determine the level of charge.
- (13) "Fire hazard" means the accumulation of combustible materials in such a condition as to be readily ignited and in such a quantity as to create a hazard from fire to nearby structures, forest areas, life and property.
- (14) "Fire tool box" means a compartment of sound construction with a waterproof lid, provided with hinges and hasps and so arranged that the box can be properly sealed and the contents kept dry. The box shall be red in color and marked "fire tools" in white or black letters at least three inches high. The fire tool box shall contain a minimum of:
  - (a) Two axes or pulaskis;
  - (b) Three adze eye hoes;
  - (c) Three shovels.
- (15) "Firewatch" means at least one competent person to be at the site(s) for one hour following the operation of spark-emitting equipment on class 3L days or above, or as determined by the department based on the national fire danger rating system and other fire danger conditions. The firewatch shall be vigilant and so located or positioned to be able to detect within five minutes fires which may originate at the site(s) of the equipment operation. The firewatch shall report a fire to the responsible protection agency within fifteen minutes of detection.
- (16) "Fixed-position machine" means any machine used for any portion or phase of harvesting, thinning, site preparation, land clearing, road, railroad and utility right of way clearing or maintenance, mineral or natural resources extraction, or other operation that performs its primary function from a fixed-position. This definition applies even though said machine is capable of moving under its own power to a different fixed position.

- (17) "Forest debris" means forest debris as defined in RCW 76.04.005.
  - (18) "Forest land" means forest land as defined in RCW 76.04.005.
- (19) "Isolation" means the division or separation of an additional fire hazard into compartments by a constructed barrier of at least one hundred feet in width at its narrowest point. The constructed barrier must be free and clear of forest debris as defined in RCW 76.04.005 and must be approved, in writing, by the department.
- (20) "Mill waste" means waste of all kinds from forest products, including, but not limited to, sawdust, bark, chips, slabs, and cuttings from lumber or timber.
- (21) "Operation" means the use of equipment, tools, and supporting activities on or adjacent to forest land that may cause a forest fire to start. Such activities may include, but are not limited to, any phase of harvesting, thinning, site preparation, land clearing, road, railroad, and utility right of way clearing and maintenance, and mineral or natural resource extraction. The operating period shall be that time period when the activity is taking place and includes that time when a firewatch would be required to be in attendance.
- (22) "Outdoor fire" means the combustion of material in the open, or in a container, with no provisions for the control of such combustion or the control of the emissions from the combustion products.
- (23) "Person" shall mean any individual, partnership, private, public, or municipal corporation, county, the department or other state or local governmental entity, or association of individuals of whatever nature.
- (24) "Prohibited material or substance" includes rubber products, plastics, asphalt, garbage, dead animals, petroleum products, paints, or any similar materials that emit dense smoke or create offensive odors when burned, pursuant to RCW 70.94.775(1).
- (25) "Pulaski" means a serviceable axe and hoe combination tool with not less than a three and one-half pound head and thirty-two inch handle. The blades shall be at least two and one-half inches wide, sharpened, solid and smooth. The handle shall be hung solid, smooth and straight.
  - (26) "Pump truck or pump trailer" means:
- (a) A serviceable truck or trailer which must be able to perform its functions efficiently and must be equipped with a water tank of not less than a three hundred gallon capacity, filled with water. The complete pump truck or pump trailer shall be kept ready for instant use for suppressing forest fires. If a trailer is used, it shall be equipped with a hitch to facilitate prompt moving. A serviceable tow vehicle shall be immediately available for attachment to the trailer. The pump truck, or pump trailer with its tow vehicle, must be available throughout the operating and watchperson periods.
- (b) The pump may be a portable pump or suitable power take-off pump. It shall be plumbed with a bypass or pressure relief valve. The pump shall develop, at pump level, pressure sufficient to discharge a minimum of twenty gallons per minute, using a one-quarter inch nozzle tip through a fifty foot length of one inch or one and one-half inch rubber-lined hose.
- (c) The pump truck or pump trailer shall be equipped with the following:
- (i) A minimum of five hundred feet of one or one and one-half inch cotton or synthetic jacket hose;
  - (ii) A fully stocked fire tool box.

- (d) The tank shall be plumbed so that water may be withdrawn by one person by gravity feed. This outlet shall be adapted to accept the hose used with the pump truck or pump trailer. The outlet shall be located for easy filling of pump cans.
- (e) The pump truck or pump trailer must be equipped with fuel, appropriate tools, accessories and fittings to perform its functions for a continuous period of four hours. A recommended list of tools, fittings and accessories may be obtained from the department.
- (27) "Recreational fire" means an outdoor fire for the purpose of sport, pastime or refreshment, such as camp fires, bonfires, cooking fires, etc., in a hand-built pile no larger than four feet in diameter and not associated with any debris disposal activities related to fire hazard elimination or yard and garden refuse clean-up.
- (28) "Reduction" means the elimination of that amount of additional fire hazard necessary to produce a remaining average volume of forest debris no greater than nine tons per acre of material three inches in diameter and less.
- (29) "Shovel" means a serviceable, long-handled or "D"-handled, round-point shovel of at least "0" size with a sharpened, solid and smooth blade. The handle on the shovel shall be hung solid, smooth and straight.
- (30) "Snag" means a standing dead conifer tree over twenty-five feet in height and sixteen inches and over in diameter, measured at a point four and one-half feet above the average ground level at the base.
- (31) "Tractor or other mobile machine" means any machine that moves under its own power when performing any portion or phase of harvesting, thinning, site preparation, land clearing, road, railroad and utility right of way clearing or maintenance, mineral or natural resource extraction, or other operation. This definition includes any machine, whether crawler or wheel-type, whether such machine be engaged in yarding or loading, or in some other function during the operation.
- (32) "Uncertified electrical fence controller" includes all electrical fence controllers that do not meet the standards for fire safety developed by Underwriters Laboratories (UL) and does not have the UL label on the controller.

[Statutory Authority: RCW 76.04.015. WSR 91-20-060 (Order 583), § 332-24-005, filed 9/24/91, effective 10/16/91; WSR 87-11-005 (Order 504), § 332-24-005, filed 5/8/87.]