

Fuel Hazard Reduction (Emergency Notice) Comments and notes by George Gentry RPF 2262.

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Currently, there exists in regulation an "Emergency Notice for Fuel Hazard Reduction". The Board adopted this regulation in 2004. This regulation is part of the Board's authority under PRC as follows:

4592. Emergency notice; contents. Notwithstanding any other provisions of this chapter, a registered professional forester may in an emergency, on behalf of a timber owner or operator, file an "emergency notice" with the department that shall allow immediate commencement of timber operations. The emergency notice shall include a declaration, under penalty of perjury, that a bona fide emergency exists which requires immediate harvest activities, and that any applicable timber yield taxes will be paid pursuant to Section 38115 of the Revenue and Taxation Code. Those emergencies shall be defined by the board and may include, but are not limited to, the necessity to harvest to remove fire-killed or damaged timber or insect or disease-infested timber, or to undertake emergency repairs to roads.

This provision grants wide latitude to the Board to determine the nature of an emergency. In the case of the Fuel Hazard Emergency, the Board determined that conditions in the state justified the use of measures to prevent uncontrolled spread of wildfire.

The existing Fuel Hazard Emergency utilizes several restrictive silvicultural practices. It:

- Mandates increasing the quadratic mean diameter of trees greater than 8 inches dbh
- Only trees less than 24 inches outside bark stump diameter may be removed, unless the goal of fuel reduction cannot be achieved. In that instance, trees less than 30 inches outside bark stump diameter may be removed to meet the fuel objectives stated in 14 CCR § 1052.1(e).
- Minimum post treatment canopy closure of dominant and codominant trees varies by region and is confusing. Should be standardized for easier enforcement and understanding.
- Post treatment stand shall contain no more than 200 trees per acre over 3 inches in dbh.
- Stocking shall meet commercial thinning requirement of 14 CCR § 913.3 [933.3, 953.3] immediately upon completion of operations. (generally, 100 sq. ft.)
- Compliance with 1038 b (1-10)

Below, as an example, is the standard utilized for THPs that include fuelbreaks:

Fuelbreak Language:

- *Fuel breaks are listed as a Special Prescription under 14CCR 933.4(c) and shall meet or exceed the minimum stocking standard (14CCR 932.7) upon completion of operations. In accordance with 14CCR 933(d), Fuelbreaks are considered Site IV timberlands for stocking purposes. Therefore, these areas will retain a minimum average point count of 150 or an average basal area of 50 square feet per acre.*

These are the Forest Practice sections referenced:

933.4(c) Fuelbreak/Defensible Space. Where some trees and other vegetation and fuels are removed to create a shaded fuel break or defensible space in an area to reduce the potential for wildfires and the

damage they might cause. Minimum stocking standards within the timber operating area shall be met immediately after harvest and shall be those found in **14 CCR 912.7 [932.7, 952.7]**. The RPF shall describe in the plan specific vegetation and f to meet the objectives of the Community

933(d) An assessment of maximum sustained production of high quality timber products is not required for a harvest designated as, and meeting the definition of fuelbreak/defensible space under 14 CCR 913.4 [933.4, 953.4] Special Prescriptions. Because these lands are designated as defensible space areas, the wood production potential of these lands is compatible with ns and they shall be considered site IV timberland for stocking purposes.

Referenced in 933.4 above:

912.7 [932.7, 952.7]

(2) The average residual basal area measured in stems 1 inch or larger in diameter, is at least 85 square ft. per acre on Site I lands, and 50 square ft. per acre on lands of Site II classification or lower. Site classification shall be determined by the RPF who prepared the plan.

To the extent basal area standards are specified in the rules in excess of 14 CCR § 912.7(b)(2) [932.7(b)(2), 952.7(b)(2)], up to 15 square feet of basal area of those standards higher than the minimum may be met by counting snags, and decadent or deformed trees of value to wildlife in the following sizes:

30 inches or greater dbh and 50 feet or greater in height on site I and II lands;
24 inches or greater dbh and 30 feet or greater in height on site III lands; and
20 inches or greater dbh and 20 feet or greater in height on site IV and V lands.

(c) The substitution provided for in 14 CCR § 912.7(b)(3) [932.7(b)(2), 952.7(b)(2)] may only be done when the potential spread of insects and diseases will not have a significantly adverse impact on long term productivity or forest health.

Language for 1052.4 as it currently exists, with areas for discussion:

1052.4 Emergency Notice for Fuel Hazard Reduction

The RPF preparing the Notice of Emergency Timber O duction shall describe the nature of the emergency and the need for immediate cutting in sufficient detail so that the reason for the emergency is clear. Emergency timber operations, under the presumed emergency standard of 14 CCR § 1052.1, may be commenced and conducted when in conformance with the following:

(a) RPF develops and documents the vegetative treatments necessary to meet the goals of 14 CCR § 1052.1(e), and ensures post-harvest conditions are in accordance with all subsections in 14 CCR § 1052.4. Such documentation shall include the following:

- (1) A description of the preharvest stand structure and statement of the postharvest stand stocking levels.
- (2) A description of the criteria to designate trees to be harvested or the trees to be retained.
- (3) All trees that are harvested or all trees that are retained shall be marked or sample marked by or under the supervision of a Registered Professional Forester before felling operations begin. When trees are sample marked, the designation prescription for unmarked areas shall be in writing and the sample mark area shall include at least 10% of the harvest area to a maximum of 20 acres per stand type which is representative of the range of conditions present in the area.
- (4) Post harvest compliance shall be determined by the combination of physical measurements and observations. Post-harvest compliance shall be met on at least 80 percent of the project area as calculated excluding WLPZs and other wildlife protection requirements developed in accordance with 14 CCR § 1052.4(e).

(b) The conditions of subsection 14 CCR § 1038(b)(1) through (10) are applied or, for operations in the Lake Tahoe Basin, (f)(1) through (14) are applied.

(c) Geographic area: operations are permitted:

- (1) Within ¼ mile from approved and legally permitted structures that comply with the California Building Code (legal structure). Such legal structures shall be within or adjacent to a community listed in the “California Fire Alliance list of Communities at Risk” (copyright date 2003 on file in the official rulemaking file and incorporated by reference) and have densities greater than 1 structure per 20 acres.
- (2) Within 500 feet of a legal structures outside the area defined in 14 CCR § 1052.4(c)(1);
- (3) Within 500 feet of either side of a public or federal road;
- (4) Within 500 feet on either side of a private road providing access to legal structures;
- (5) Within 500 feet on either side of a mainline haul road necessary for fire suppression or evacuation as identified in a fire prevention plan or with the written concurrence of a public fire agency and as accepted by the Director.
- (6) Within 500 feet on either side of ridges suitable for fire suppression as identified in a fire prevention plan or with the written concurrence of a public fire agency and as accepted by the Director.
- (7) Within 500 feet of infrastructure facilities such as transmission lines or towers or water conduits.

(Note: no proposed changes for the above. This language targets the high priority areas for ignition concerns, and fire defence, both direct and indirect).

(d) Vegetation Treatments: Tree removal shall target understory trees. The residual stand shall consist primarily of healthy and vigorous dominant and codominant trees from the preharvest stand. Standards listed shall be met by retaining the largest diameter trees in the preharvest project area.

(1) The quadratic mean diameter of trees greater than 8 inches dbh in the preharvest project area shall be increased in the post-harvest stand.

(note: increasing QMD meets the requirement of retaining the largest diameter trees, but seems poorly understood by laypeople)

(2) Only trees less than 24 inches outside bark stump diameter may be removed except under the following condition. If the goal of fuel reduction cannot be achieved by removing trees less than 24 inches outside bark stump diameter, trees less than 30 inches outside bark stump diameter may be removed if that removal is necessary to meet the fuel objectives stated in 14 CCR § 1052.1(e).

(note: arbitrary diameter limits for harvest seem unnecessary if QMD is increasing, and reduces flexibility in tree marking since it does not account for spatial variability).

(3) (A) Minimum post treatment canopy closure of dominant and codominant trees shall be 40 percent for east side pine forest types; 50 percent for coastal redwood and Douglas–fir forest types in or adjacent to communities and legal structures referenced in subsection 1052.4(c)(1) and (2); 60 percent for coastal redwood and Douglas–fir forest types outside of communities and legal structures referenced in subsection 1052.4(c)(1) and (2); and 50 percent for mixed conifer and all other forest types.

(note: basal area requirements and canopy retention requirements need to be consistent. If BA is lowered, it can be limited by canopy retention.)

(B) Post treatment stand shall contain no more than 200 trees per acre over 3 inches in dbh.

(note: QMD is calculated with trees over 8 inches, BA for fuel breaks are in trees over one inch DBH. This standard should be examined to consider making consistent applications).

(4) Stocking shall meet commercial thinning requirement of 14 CCR § 913.3 [933.3, 953.3] immediately upon completion of operations.

(A) In the High Use Subdistrict of the Southern Forest District where preharvest tree stocking does not meet commercial thinning requirement of 14 CCR § 953.3, the basal area minimum stocking standards for Selection Unevenaged Management in 14 CCR § 953.2 (a)(2)(A)1., 2., and 3., shall be met following harvesting.

(B) In areas where preharvest tree stocking does not meet commercial thinning requirement of 14 CCR § 913.3 [933.3, 953.3], and as necessary to establish or maintain an unevenaged stand structure, minimum stocking standards for Selection Unevenaged Management in 14 CCR § 913.2[933.2, 953.2] (a)(2)(A)1., 2., 3. and 4., shall be met following harvesting.

(note: this is the crux of the issue. Thinning requirement is too high for a fuel break. Consideration should be given to a lower standard, such as 50 sq. ft.)

(5) (A) This subsection applies to geographic areas listed in 14 CCR § 1052.4 (c) (2) and (6), and to areas within 500 feet of structures in 14 CCR § 1052.4(c)(1). Surface and ladder fuels in the harvest area, including logging slash and debris, brush, small trees,

and deadwood, that could promote the spread of wildfire shall be treated to achieve standards for vertical spacing between fuels, horizontal spacing between fuels, maximum depth of dead ground surface fuels, and reduction of standing dead fuels, as follows:

1. Ladder and surface fuels, excluding residual stand dominant and codominant trees, shall be spaced to achieve vertical clearance distance of eight feet or three times the height of the post-harvest fuels, whichever is the greater distance, measured from the base of the live crown of the post-harvest dominant and codominant trees to the top of the surface or ladder fuels, whichever is taller.

2. Ladder fuels, excluding residual stand dominant and codominant trees, shall be spaced to achieve horizontal clearance distance of two to six times the height of the post-harvest fuels measured from the outside branch edges of the fuels. On ground slopes of zero percent to 20 percent horizontal clearance distance shall be two times the height of post-harvest fuels; on ground slopes of greater than 20 percent to 40 percent horizontal clearance distance shall be four times the height of post-harvest fuels; on ground slopes of greater than 40 percent horizontal clearance distance shall be six times the height of post-harvest fuels.

3. Dead surface fuel depth shall be less than 9 inches.

4. Standing dead or dying trees and brush shall generally be removed. Such material, along with live vegetation associated with the dead vegetation, may be retained for wildlife habitat when isolated from other vegetation.

(B) This subsection applies to geographic areas listed in 14 CCR § 1052.4 (c)(3), (4), (5), and (7) and to areas between 500 feet to 1320 feet of structures in 14 CCR § 1052.4(c)(1).

1. Dead fuels, excluding dead branches on trees retained stocking, shall be treated to achieve a minimum clearance distance of 8 feet measured from the base of the live crown of the post-harvest dominant and codominant trees to the top of the dead fuels.

2. All logging slash created by the timber operations shall be treated to achieve a maximum post-harvest depth of 9 inches above the ground.

(C) The requirements of this subsection shall not supersede requirements of PRC § 4291.

(note: these standards can be confusing, some consideration should be given to a simplified approach.)

(6) Fuel treatments shall include chipping, removal or other methods necessary to achieve the fuel hazard reduction standards in this section, and shall be accomplished within 1 year from the start of operations, except for burning operations, which shall be accomplished by April 1 of the year following surface fuel creation.

(e) As part of the preharvest project design, the RPF shall evaluate and incorporate habitat requirements for fish, wildlife and plant species in accordance with 14 CCR §§ 898.2, 916.9 [936.9,956.9] and 919. Such evaluations shall include use of the California Natural Diversity Database (as referenced by the CDFW, <https://www.wildlife.ca.gov/DATA/CNDDB>) and local knowledge of the planning watershed. Consultation with CDFW personnel is recommended. Examples of habitat requirements to be incorporated into the project include retention of large woody debris and snags congruent with emergency condition goals, and vegetative screening for wildlife cover and visual aesthetics.

- (f) Operations conducted concurrently in the same geographic area (ref. 14 CCR § 1052.4(c)) pursuant to § 1038(b) shall not remove diseased trees in excess of the diameter limit required under 14 CCR § 1052.4(d)(2).

(see 5(A)(4) above. Dead and dying shall generally be removed. In designing a fuelbreak, it does not make sense to leave trees that are dead, dying, diseased that can contribute to fuel loading).