Board of Forestry and Fire Protection

DRAFT -Finding of Emergency and Notice of Proposed Emergency Action, (pursuant to GOV § 11346.1)

"Emergency Emergency Fuel Hazard Reduction Amendments, 2019"

Notice Date: XXX

The Board of Forestry and Fire Protection (hereafter "Board") has adopted emergency regulations related to emergency timber harvesting practices to reduce wildfire threat and hazardous fuel conditions throughout the state. This action is being taken in accordance with GOV §§ 11346.1, 11346.5 (2) through (6) inclusive, and 11349.6. The Board adopted the emergency regulation at their regular meeting scheduled on XXX.

If you wish to comment on the adopted emergency regulations, you must submit the comment directly to the Office of Administrative Law (hereafter "OAL") within **five (5) calendar days** of OAL's posting of the proposed emergency regulations on the OAL web site. You may submit comments on the adopted emergency regulations to:

Mail:

OAL Reference Attorney 300 Capitol Mall, Suite 1250 Sacramento, California 95814

Fax:

(916) 323-6826

E-mail:

staff@oal.ca.gov.

OAL will accept all comments submitted by the specified deadline.

When you submit a comment to OAL, you must also submit a copy of your comment to the rulemaking agency's specified contact person provided below.

<u>Mail:</u>

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Regulations Program Manager
Board of Forestry and Fire Protection
P.O. Box 944246
Sacramento. CA 94244-2460

Fax:

(916) 653-0989

E-mail:

publiccomments@BOF.ca.gov

GOV § 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to OAL, the adopting agency provide a notice of the proposed emergency action with the agency. After submission of the proposed emergency to the OAL, OAL shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in GOV 11349.6

This regulation will likely be submitted to the Office of Administrative Law on XXX. If the regulation were submitted to OAL on that date, the public comment period will close on XXX.

OAL will confirm that the agency has received the comment. Pursuant to Title 1, California Code of Regulations, §§ 55(b)(1) through (4), the comment must state that it is about an emergency regulation and include the topic of the emergency.

The Board is <u>not</u> required to and, in this instance, is not likely to respond to comments submitted. However, should the Board choose to respond, it must submit its response to OAL within **eight (8) calendar days** following the date of submission of the proposed emergency regulation to OAL, unless specific exceptions are applicable. [Title 1 CCR § 55].

Pursuant to GOV § 11346.1(a)(2)(A), the specific rule text associated with the proposed action immediately follows this notice.

Pursuant to **GOV § 11346.1(b)(2),** following is a description of the facts demonstrating the existence of an emergency and the need for immediate action, and demonstrating, by substantial evidence, the need for the proposed regulation to effectuate the statute being implemented, interpreted, or made specific and to address only the demonstrated emergency.

Wildfire Hazard

Wildfires have influenced California's landscape as a natural process for millennia, with their frequency, intensity, and seasonal timing being major factors in determining not only floristic composition, but also general land use, throughout the state. Anthropogenic activity, including fire suppression without active forest management, as well as increases in human-caused wildfires, over the last several centuries has resulted in alterations to the natural fire regime, which has resulted in substantial ecosystem stress, particularly in forest and shrub-dominated habitats¹. Due to fire suppression, the Sierra Nevada and northwestern California have experienced less frequent fires than have historically occurred, causing a buildup of forest fuels, and southern California is experiencing larger and more frequent fires than under

¹ Ainsworth, J. and Doss, T. A. 1995. Natural history of fire & flood cycles. California Coastal Commission.

historic conditions². Additionally, fire suppression in forested areas has resulted in dense forest stands and has caused a build-up of fuels resulting in higher-than-natural intensity and heat of wildfires, which can destroy otherwise fire-adapted plants and damage soil structure³. Furthermore, the recent and prolonged periods of drought throughout the state have resulted in forests which are more prone to fire due to tree mortality from both drought and pests, and are more vulnerable due to fires from the buildup of fuels resulting from these environmental and anthropogenic conditions.

In addition to changing forest conditions, increasing development in the Wildland-Urban Interface (WUI) continues to put more people, homes, and infrastructure in harm's way from wildland fire. The most recent assessment of California's WUI shows that as of 2010, there were about 3 million housing units in Fire Hazard Severity Zones (FHSZ) that are potentially at risk from wildland fire. A large proportion of the houses within FHSZ are in the southern portion of the state. The top five counties for FHSZ housing units, all in southern California, contain about half of all statewide housing units in FHSZ. However, this is a statewide problem, with 37 counties having at least 10,000 housing units in FHSZ⁴. Furthermore, since the frequency of extreme weather events is projected to increase, urban areas both immediately adjacent to and near wildlands will be at risk. The 2017 October Fire Siege clearly showed that the damage from wildland fires can occur in areas previously thought to be at low risk. Recent wildland fires also have demonstrated that post-fire mudslide events can cause substantial loss of life and damage to property and natural resources.

The aggregation of these changing forest conditions and human demographics has resulted in increases in the number of wildfire ignitions, areas burned, and impacts to ecosystems. The number of ignitions has been increasing since 2007, the average acreage burned has doubled since the 1960's, and forests represent approximately one-third of the 700,000 acres which burn annually. Additionally, the increasing prevalence of very large fires (>100,000 acres) across the West, as well as large scale tree mortality events, has led many experts to posit that the US has entered an era of "mega-fires" or "mega-disturbances." During this decade, although the number of annual fires has decreased compared to the 2000s, the average fire size has increased from approximately 11,000 acres to 15,000 acres. ⁵ 15 of the 20 largest wildland fires of the modern era have occurred since 2000, and ten of the most destructive have occurred since 2015 including the 2018 Mendocino Complex, which burned almost 460,000 acres. Five of the 20 deadliest fires in California's history have occurred within the last two years alone (2017 and 2018). The California Department of Insurance identified that insured losses from 2017 and 2018 wildfires and 2018 mudslides totaled over 13.8 billion dollars. This trend of increasingly large, destructive, and costly wildfires is likely to continue

² Safford, H.D. and Van de Water, K.M. 2014. Using Fire Return Interval Departure (FRID) analysis to map spatial and temporal changes in fire frequency on National Forest lands in California. Research Paper PSW-RP-266, USDA Forest Service, Pacific Southwest Research Station, Albany, CA.

³ Baker, W.L. and Shinneman, D.J. 2004. Fire and restoration of pinyon-juniper woodlands in the western United States: a review. Forest Ecology and Management 189:1-21.

⁴ Fire Hazard Severity Zones, FRAP, v11; Census block data, U.S. Census Bureau, 2010.

⁵ CAL FIRE California Interagency Fire Perimeter Database 2017

unless immediate action is taken.

Finding of Emergency

The Board recognizes that wildfire conditions pose a significant, urgent, extensive, and on-going threat to humans and natural resources throughout the state and the imminent nature of the fire hazard problem has been repeatedly recognized by many high-profile efforts, including the Governor's Blue Ribbon Fire Commission of 2004; U.S. General Accounting Office report on western National Forest fire conditions; the Western Governors' Association promulgation of the National Fire Plan; the USDA Forest Service (USFS) Sierra Nevada Forest Plan Amendment, 2004; legislation proposed by both houses of the California Legislature; Governor Brown's Executive Order B-52-18 (May 2018); the Little Hoover Commission report Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada (February 2018); and Governor Newson's Strike Force Report on Wildfires and Climate Change (April 2019).

The Board additionally recognizes that the combination of terrain, fuel type, and fuel condition is steadily becoming more hazardous on timberlands. Healthy forests are a common goal for Californians, but overstocked forests cause increased tree mortality resulting in the build-up of flammable fuels. Modern stocking measurements throughout the state indicate increasing levels of stocking on private lands over the last three decades far beyond levels associated with the site capacity. This suggests that stands are susceptible to significant levels of pest mortality and increased dead fuel loads. When combined with recent drought and climatic damage, these conditions can lead to catastrophic wildfire events. The treatment of these hazardous fuels reduces the impact of wildfires on communities and natural and cultural resources, and restores health to fire-adapted ecosystems.

The Board recognizes that its authority in the regulation of forest management activities will play a critical role in the treatment of hazardous fuel conditions statewide and the provision of mechanisms by which the state and its citizens may achieve identified vegetation treatment goals. Governor Newsom's Strike Force has recently highlighted this role and made recommendations related to the adoption of regulations to encourage additional private landowners to engage in fuel reduction projects. The Board initially adopted regulations related to the emergency reduction of hazardous fuel loading in 2004, and since the adoption, the regulatory process has been utilized 342 times in total. However, during the period between 2015 and 2018, when half of the most destructive wildfires in California have occurred, the Board's regulatory process for emergency fuel hazard reduction has only been utilized 10 times.

Promulgation of these regulations is immediate and necessary to modify the geographic scope, and amend the conditional requirements, of existing regulations related to the emergency reduction of hazardous fuels in order to both increase the utilization of the regulatory permitting process as well as to improve the efficacy of vegetative treatments in addressing the existing problem of hazardous fuel conditions. The following is a list of evidences of the immediate and necessary need for emergency regulations to address the hazardous fuel conditions throughout the state for the immediate preservation of the public peace, health and safety, and general welfare:

One: The values at stake in wildland fire protection are extensive and at imminent threat. The most recent assessment of California's Wildland-Urban Interface (Fire Hazard Severity Zones, FRAP, v11; Census block data, U.S. Census Bureau, 2010) shows that as of 2010, there were about 3 million housing units in FHSZ that are potentially at risk from wildland fire, with 37 counties having at least 10,000 housing units in FHSZ.

Two: Wildfire risk is increasing statewide. Within the last decade, the average wildfire size in the state has increased from approximately 11,000 acres to 15,000 acres. 15 of the 20 largest wildland fires of the modern era have occurred since 2000, and ten of the most destructive have occurred since 2015, including the 2018 Mendocino Complex, which burned almost 460,000 acres. Five of the twenty deadliest fires in California's history have occurred within the last two years alone (2017 and 2018). This trend of increasingly large and destructive wildfires is likely to continue unless immediate action is taken.

Three: Extreme costs associated with wildfire losses. The California Department of Insurance has reported that direct incurred insured losses from 2017 and 2018 wildfires and associated 2018 mudslides total over \$13.8 billion, with the uninsured losses currently unquantified.

Four: Governor Newsom's Strike Force recommendations to the Board. Early in his administration Governor Newsom created Strike Force which was directed to develop a comprehensive roadmap to address the issues of wildfires, among other issues. Within the Strike Force's April 2019 report to the Governor, the Strike Force recommended that "[t]he Board of Forestry and Fire Protection should consider changes in regulations, through an emergency rule-making process as needed, to encourage private landowners to engage in fuel reduction projects."

Five: Public outreach to the Board for assistance with this emergency issue. The Board has been contacted via by numerous forest product industry representatives, forestry consulting representatives, and private landowners requesting regulatory relief to facilitate reconstruction efforts. Promulgation of these regulations is immediate and necessary in order to address the threat of hazardous fuel conditions on forested lands.

Pursuant to **GOV § 11342.545**, this situation calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare. The situation presents a significant hazard from the accumulation of forest fuels which may promote large and destructive wildfires. The Board was compelled to respond to the evidence, as described above, to address this hazard. These regulations are immediate and necessary to, in part, address this fuel hazard in specific and strategic locations in order to reduce the threat of these wildfires. Appropriate and strategic fuel reduction can:

- Reduce the risk of fire on timberlands.
- Reduce large, damaging wildfires.
- Decrease losses of homes and structures to wildfire events.

- Provide strategic fuelbreaks which can be utilized by firefighting agencies in future firefighting efforts.
- Increase public safety.

The Board is proposing action to adopt 14 CCR §§ 913, 933, 953, and 1052.4.

Pursuant to **GOV § 11346.1(b)(2)**, following are the list of each technical, theoretical and empirical study, report, or similar document, if any, upon which the Board relied to make the "emergency" finding:

Board of Forestry and Fire Protection, CAL FIRE, "2018 Strategic Fire Plan for California", August 22, 2018.

Little Hoover Commission, "Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada", Report #242, February 2018.

California Department of Insurance, "Insured Losses from the 2018 Mudslide and the 2017 & 2018 Wildfires", September 6, 2018

Governor Newsom's Strike Force, "Wildfires and Climate Change: California's Energy Future", April 12, 2019.

Pursuant to GOV § 11346.1(b)(2), following is the information required by GOV § 11346.5(a)(2) (the reference to the authority(s) under which the regulation is proposed and a reference(s) to the particular code sections or other provisions of law that are being implemented, interpreted, or made specific).

14 CCR § 1038 Note: Authority cited: Sections 4551, 4551.5, 4552, 4553, 4561, and 4592 Public Resources Code. Reference: Sections 4513, 4528, 4551.5, 4554, 4555, 4561, 4562, 4584, and 4592.

Pursuant to 1 CCR § 20(c), the follow document is incorporated by reference in these regulations:

"List of Communities at Risk", California Department of Forestry and Fire Protection, as published April 13, 2019.

The Board has available the entire rulemaking file, including all information considered as a basis for this proposed regulation, available for public inspection and copying at its office in Sacramento, California.

Publishing "List of Communities at Risk", California Department of Forestry and Fire Protection, as published April 13, 2019, in full, in the CCR would be cumbersome, unduly expensive, and impractical. "List of Communities at Risk", California Department of Forestry and Fire Protection, as published April 13, 2019, is widely available to the public online.

Pursuant to **1 CCR § 48**, the notice required by Government Code section 11346.1(a) shall contain the following or substantially similar statement:

"Government Code section 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to the Office of Administrative Law, the adopting agency provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the agency. After submission of the proposed emergency to the Office of Administrative Law, the Office of Administrative Law shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6."

Pursuant to 1 CCR §50(a)(5)(A) and GOV § 11346.1(a)(2) the Board provided a five working-day notice. The proposed action was, at a minimum, posted on the Board's website (pursuant to GOV § 11346.4(a)(6)), sent to the Board mailing list (pursuant to GOV § 11346.4(a)) and widely distributed via email (pursuant to GOV § 11340.85) at least five working days prior to being submitted to the Office of Administrative Law.

Pursuant to GOV § 11346.1(b)(2), following is the information required by GOV § 11346.5(a)(3)

INFORMATIVE DIGEST

Pursuant to the Z'berg-Nejedly Forest Practice Act of 1973, PRC § 4511, et seq. the Board is authorized to construct a system of forest practice regulations applicable to timber management on state and private timberlands.

Pursuant to PRC § 4551.5, the rules and regulations that the Board is authorized to adopt include measures for fire prevention and control and for prevention and control of damage by forest insects, pests, and disease.

Additionally, pursuant to PRC § 4592, the Board is required to define emergencies by which 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."

Furthermore, pursuant to PRC § 4528(d), "site classification" is defined as a "...classification of productive potential of timberland into one of five classes by board regulation, consistent with normally accepted forestry practices."

Pursuant to this statutory authority, the Board amended 14 CCR §§ 913, 933, 953, and 1052.4, in accordance with the provisions of these statute.

The <u>effect</u> of the proposed action is to increase the utilization of the regulatory permitting process of the Emergency Notice for Fuel Hazard Reduction of 14 CCR § 1052.4 in order to address the emergency conditions across forested lands throughout the state, as well as to improve the efficacy of vegetative treatments in addressing the existing problem of hazardous fuel conditions within this process.

Additionally, the proposed action will clarify that, on lands subject to timber operations pursuant to 14 CCR § 1052.4, an assessment of maximum sustained production of high quality timber products is not required, and that those lands are to be considered site IV timberland for stocking purposes pursuant to 14 CCR §§ 912.7, 932.7, and 952.7 immediately following operations.

The primary <u>benefit</u> of the proposed action is the reduction in risk to life, property and the environment posed by destructive wildfires through the strategic treatment of hazardous fuel conditions.

The proposed action does not differ substantially from an existing comparable federal regulation or statute.

The Board performed a search of existing regulations and concluded that the proposed regulation is not inconsistent or incompatible with existing state regulations.

- Pursuant to GOV § 11346.1(b)(2), following is the information required by GOV § 1346.5(a)(4). There are no other matters as are prescribed by statute applicable to the specific state agency or to any specific regulation or class of regulations.
- Pursuant to GOV § 11346.1(b)(2), following is the information required by GOV § 11346.5(a)(5). The Board finds that the proposed regulation does not impose a mandate on local agencies or school districts.
- Pursuant to GOV § 11346.1(b)(2), following is the information required by GOV § 1346.5(a)(6). No costs or savings to any state agency are expected.

The proposed regulation does not impose a reimbursable cost to any local agency or school district (under Part 7 (commencing with Section 17500 of Division 4)). There are no other nondiscretionary costs or savings imposed on local agencies. There are no costs or savings in federal funding to the state.

The Board took action to authorize emergency rulemaking based on the findings provided pursuant to GOV § 11346.1(b)(2). The problem that the Board has addressed in the proposed action is described in the findings provided pursuant to GOV § 11346.1(b)(2). The fundamental problem is that hazardous fuel conditions exist throughout the state which may require immediate and emergency treatment in order to abate an existing threat of wildfire and the regulatory permitting mechanism which exists to facilitate these operations is not sufficient in order to address these hazardous conditions.

The <u>purpose</u> of the proposed action is to: 1) clarify the scope of lands which may be subject to timber operations pursuant to an Emergency Notice for Fuel Hazard Reduction; 2) to improve the efficacy and suitability of fuel treatments within the Emergency Notice for Fuel Hazard Reduction; 3) to improve immediate wildfire resiliency in post-harvest stands; and 4) to standardize and simplify, to some extent, the conditional requirements of the existing process in order to promote the use of this regulatory process in order to encourage the treatment of hazardous fuel

conditions throughout the state and to improve the pace and scale of fuel treatments.

Amend 14 CCR §§ 913 [933, 953](d) Silvicultural Objectives.

The proposed amendment provides that activities conducted pursuant to 14 CCR § 1052.4 are subject to the minimum resource conservation standard requirements of 14 CCR §§ 912.7, 932.7, and 952.7 as they pertain to site IV lands described in those sections. The intent of the harvesting activities permitted by 14 CCR § 1052.4, as described herein, is to provide for the immediate reduction in hazardous fuels which constitute a real emergency in order to reduce the potential destructive impacts of wildfire. The activities of 14 CCR § 1052.4 are intended to promote the forest goals of the state through the minimization of these hazardous wildfire events and, in strategic locations, provide the greatest value to the state's forest resources as defensible space and fuelbreaks. The inclusion of the term "fuelbreaks" here is consistent with both the goals of the Emergency Notice for Fuel Hazard Reduction, as well as the existing requirements of the fuelbreak special prescription of 14 CCR § 913.4 [933.4, 953.4], which incorporates and provides for shaded fuelbreaks within the definition of 14 CCR § 895.1. The purpose of these amendments is to improve the efficacy of both the fuel treatments as well as the fire resiliency of the postharvest stand conditions. Reduction in required stocking provides for more open forest conditions which promotes reduced continuity and availability of fuels as well as potentially reduced fire behavior intensity. Additionally, these stand conditions allow for improved efficacy of these areas as strategic locations from which to fight fires and they function as fuelbreaks by minimizing the work necessary for future operations to treat areas in active fire conditions, as well as allowing for improved efficacy of aerial firefighting techniques. Furthermore, this change is necessary in order to clarify that the potential productivity of lands, pursuant to PRC § 4528(d), subject to timber operations pursuant to 14 CCR § 1052.4 is dependent upon the land-use itself as a fuelbreak. This amendment is necessary to clarify both the purpose of these Emergency Notice for Fuel Hazard Reduction activities, as well as to specify that, due to this express purpose, the wood fiber production potential is consistent with the production potential of site IV lands.

Amend § 1052.4(a)(1)

The proposed amendment requires that a description of the postharvest stand structure be included with the documentation that is required to be submitted by an RPF to ensure that their proposed vegetation treatments are necessary to meet the goals of 14 CCR § 1052.1(e). The term stand structure is used throughout the Forest Practice Rules (FPR) (Chapter 4, Division 1.5, of Title 14 of the California Code of Regulations) and is understood to be the general arrangement of forest conditions. The purpose of this amendment is to ensure that the proposed activities will achieve the purpose of 14 CCR § 1052.4. The purpose of the 14 CCR § 1052.4 is to provide for postharvest conditions which have reduced fuel hazard and the inclusion of postharvest stand structure is necessary to demonstrate that this achieved. The amendment is additionally necessary to promote enforcement of this requirement by Cal Fire.

Amend § 1052.4(a)(2)

The purpose of this amendment is to require a description of criteria used to designate the harvesting of dead and dying trees to be included in the materials submitted by an RPF to ensure that their proposed vegetation treatments are necessary to meet the goals of 14 CCR § 1052.1(e) and to ensure that those vegetation treatments are effective through review by Cal Fire. This amendment is necessary to clarify that these criteria must be provided in order to demonstrate

compliance with the intent of the emergency notice process, as well as to promote enforcement of that process by Cal Fire.

Amend § 1052.4(a)(3)

The purpose of this amendment is to eliminate redundant language within the section. Given that 14 CCR § 1052.4(a)(2) requires a description of criteria to designate those trees to be harvested or retained, the additional requirement that this information be provided when a sample mark occurs is redundant and unnecessary. This is necessary to clarify that separate criteria are not required for these designations and to improve the legibility of the provision.

Additionally, the term "area" has been clarified as "Harvest Area", regarding where a sample mark is required and is necessary to clarify that no other area should be used when evaluating the range of conditions present. This clarification is necessary to ensure accurate implementation and enforcement of these regulations.

Amend § 1052.4(a)(4)

This paragraph has been relocated for suitability and applicability to 14 CCR § 1052.4(d)(4)(B). Previously, this paragraph appeared to require 80% compliance of the subsection related to documentation which must be provided by an RPF to demonstrate compliance with the provisions of the Emergency Notice for Fuel Hazard Reduction, which lacked clarity of application and enforcement. This relocation is necessary in order to promote the clarity of the regulations. Please see the necessity discussion of 14 CCR § 1052.4(d)(4)(B) for additional discussion.

Amend § 1052.4(b)

The purpose of these amendments is to identify additional operational requirements for activities conducted pursuant to 14 CCR § 1052.4, and to make those requirements consistent with the standard operational requirements of those activities conducted pursuant to 14 CCR § 1038. These requirements are substantively identical but, due to a large re-organization of those provisions by the Board in February of 2019 (OAL Matter # 2019-0207-02E). This amendment is necessary to ensure clarity of these requirements due to the re-numbering and re-organization.

Amend § 1052.4(c)(1)

The purpose of this amendment is to update the list of communities which include structures around which activities pursuant to 14 CCR § 1052.4 are permitted within one-quarter mile and to update the title of the Building Standards Code, as well as to simplify the language by which the list is incorporated. Since it was initially created as a "California Fire Alliance List of Communities at Risk", it has undergone additional revision and is now referred to simply as the "List of Communities at Risk". This amendment allows those communities which have been added to the list, under the same set of criteria as the previously identified communities, to be eligible for these fuel hazard risk reduction activities. This amendment is necessary in order to achieve fire protection surrounding those communities in California which are currently identified as at-risk and to specify those communities.

Amend § 1052.4(c)(2)(A)-(C)

The purpose of this amendment is to re-organize the existing requirements of 14 CCR § 1052.4(2)-(4). This does not alter any of the material requirements of these provisions, but simplifies their organization in order to promote simplicity and legibility within the regulations.

Amend § 1052.4(c)(2)(D)&(E)

This proposed amendment describes the geographic scope of permitted locations for implementation of 14 CCR § 1052.4. Both the amended and previous regulations allowed for operations within 500 feet of mainline haul roads (with conditions), and within 500 feet of either side of a ridge (with conditions). However, the conditional elements of both of these provisions have been clarified as requiring that a public fire agency concur that those areas are suitable for fire suppression, or, in the case of mainline haul roads, evacuation. In addition to this written concurrence, activities pursuant to 14 CCR § 1052.4 in those areas must be determined, by the Director, to be consistent with the purposes of the Act and Rules. Previously, the requirement that those areas be identified in a fire prevention plan with the written concurrence of a public fire agency and accepted by the Director lacked clarity given the vague and often inconsistent nature of "fire prevention plans". The purpose of this amendment is to increase the geographic availability of this amendment through allowing the inclusion of those areas which may be strategic for fuel treatment, but may otherwise have been overlooked in a "fire prevention plan". This amendment is necessary to ensure that these fuel hazard reduction activities are consistent with providing a benefit to reducing actual fire hazard in key and strategic locations across the landscape. Additionally, the amendment is necessary to clarify the conditions under which activities may be approved within these geographic areas.

Amend 1052.4(c)(2)(F)

The proposed amendment describes the geographic scope include areas within 500 feet of infrastructure within the geographic scope of activities pursuant to 14 CCR § 1052.4, with the written concurrence from a public fire agency that those areas are at risk of wildfire threat and would be appropriate to address with the emergency fuel hazard reduction process of 14 CCR § 1052.4. In addition to this written concurrence, activities pursuant to 14 CCR § 1052.4 in those areas must be determined, by the Director, to be consistent with the purposes of the Act and Rules. The purpose of this amendment is to increase the geographic availability of this provision through allowing the inclusion of those areas which may be strategic for fuel treatment, but may otherwise have been overlooked in a "fire prevention plan". This is necessary to identify types of infrastructure which may benefit from fuel treatment and to provide for treatment in those areas, while ensuring that those activities are providing a benefit to fire hazard reduction and are consistent with the Act and Rules.

Amend § 1052.4(d)

The proposed amendment requires that tree removal conducted pursuant to 14 CCR § 1052.4 target codominant, in addition to understory, trees, and that those trees which remain should be well distributed, healthy and vigorous dominant and codominant trees. The purpose of these requirements is to improve both the efficacy of fuel treatments in addressing fuel hazard and wildfire resiliency in the post-harvest stand conditions. Removal of those trees which are codominant, which are defined pursuant to 14 CCR § 895.1, in part, as "...hav[ing] medium sized crowns, but are crowded on the sides.", will increase canopy separation in the post-harvest stand

and, in doing so, will disrupt the horizontal continuity of these treated stands and may serve to disrupt or prevent continuous crown fires. Similarly, a well distributed residual stand will serve to disrupt the horizontal continuity of the canopy fuel strata. The term "well distributed" is used throughout the Forest Practice Rules, including within 14 CCR §§ 913.1[933.1, 953.1](c), 913.8(a), (a)(2), (b)(2), 916.5[936.5, 956.5](e)"G", "H", and "I", 921.8(a), 961.8(b), 1038(c)(6)(A), 1038(f)(2), 1051(a)(1), 1051.4(a)(1), to describe a spatial arrangement of trees which is desirable from a forest-health perspective, as well as which achieves the goals of a particular harvesting prescription or management objective. Its use here to describe a similar result is suitable and appropriate. These amendments are necessary in order to clarify these desired post-harvest outcomes of the prescriptive requirements of 14 CCR § 1052.4 which are described throughout the section.

Additionally, the proposed amendment eliminates a provision which required the retention of the largest diameter trees in the preharvest area. The purpose of this amendment is to eliminate this requirement which was not necessary to achieve the desired outcomes of improved resiliency to wildfires and which was largely redundant due to existing diameter limits on harvestable trees within 14 CCR § 1052.4. The amended vegetation treatment requirements within 14 CCR § 1052.4 are intended to achieve post-harvest stand conditions which have significantly reduced and discontinuous fuel strata in order to improve resilience to wildfires and reduced hazardous fuels. A requirement to retain the largest trees in a post-harvest stand does not necessarily ensure that the trees which remain provide the greatest amount of disruption to fuel continuity or wildfire resiliency. While it is true that the majority of large trees across California's forested landscapes are well-adapted to fire regimes or are less likely to ignite under a wider range of fire conditions, the previous requirement that only the "largest" did not ensure that large trees with these characteristics were remnant, simply that those trees which were relatively the largest were not harvested. The prescriptive requirements of amended 14 CCR § 1052.4(d)(1) serve to achieve the goals of this rulemaking and section and, in doing so, eliminates the need for the previous requirement within this provision. This is necessary in order to provide additional clarity as to the implementation of various prescriptive requirements which are found later within this subsection.

Amend § 1052.4(d)(1) (removed)

The proposed amendment eliminates the existing requirement that the quadratic mean diameter of trees greater that eight inches dbh be increased from the preharvest to the postharvest stand. The purpose of this amendment was to eliminate this requirement which was not necessary to achieve the desired outcomes of improved resiliency to wildfires and which was largely redundant due to existing diameter limits on harvestable trees within 14 CCR § 1052.4. The amended vegetation treatment requirements within 14 CCR § 1052.4 are intended to achieve post-harvest stand conditions which have significantly reduced and discontinuous fuel strata in order to improve resilience to wildfires and reduced hazardous fuels. A requirement to increase quadratic mean diameter from the preharvest to the postharvest stand does not necessarily ensure that the trees which remain provide the greatest amount of disruption to fuel continuity or wildfire resiliency. While it is true that the majority of large trees across California's forested landscapes are well-adapted to fire regimes or are less likely to ignite under a wider range of fire conditions, the previous requirement to increase quadratic mean diameter did not ensure that large trees with these characteristics were remnant, simply that those trees which were relatively the largest were

harvested in smaller quantities relative to smaller diameter trees. The prescriptive requirements of amended 14 CCR § 1052.4(d)(1) serve to achieve the goals of this rulemaking and section and, in doing so, eliminates the need for the previous requirement within this provision. This is necessary in order to provide additional clarity as to the implementation of various prescriptive requirements which are found later within this subsection.

Amend § 1052.4(d)(1)(A) (previously (d)(2))

The proposed amendment modifies the prescriptive diameter limits on those trees which may be harvested. The purpose of this amendment was to ensure that large trees, which generally provide for disruption of fuel continuity (with higher, less connected canopies) and greater fire resiliency (through various biological and physical mechanisms, including thicker bark and general resistance to combustion) remain on the landscape post-harvest. These prescriptive requirements of 30 inches, conditional allowance of up to 36 inches, and the measurement of stump diameter at 8 inches above ground level exist within 14 CCR § 1038.3(h) and (d)(5)(F), where they provide prescriptive requirements intended to permit harvesting of trees with the purpose of reducing flammable materials to reduce fire spread, duration and intensity, fuel ignitability, or ignition of tree crowns, and are suitable and appropriate here for achieving the similar goals of this section. These amendments are necessary to clarify these prescriptive requirements in order to promote accurate implementation and enforcement of these regulations.

Amend § 1052.4(d)(1)(B)

The proposed amendment modifies the prescriptive diameter limits on those oak trees which may be harvested. The purpose of this amendment was to ensure that large oak trees, which generally provide for disruption of fuel continuity (with higher, less connected canopies) and greater fire resiliency (through various biological and physical mechanisms, including thicker bark and general resistance to combustion) remain on the landscape post-harvest. These prescriptive requirements of 26 inches, and the measurement of stump diameter at 8 inches above ground level exist within 14 CCR § 1038(j)(D)(ii), where they provide prescriptive requirements intended to permit harvesting of trees with the purpose of reducing flammable materials and maintaining a fuel break, and are suitable and appropriate here for achieving the similar goals of this section. These amendments are necessary to clarify these prescriptive requirements in order to promote accurate implementation and enforcement of these regulations.

Amend § 1052.4(d)(2)

The proposed amendment allows for the removal of dead or dying trees, without the conditional diameter limits of 14 CCR § 1052.4(d)(1), according to the Board's established standards for snag removal which exist within 14 CCR § 919.1 [939.1, 959.1]. The purpose of this amendment is to improve the efficacy of the fuel treatments pursuant to this section by eliminating dead or dying trees, which are generally a susceptible fuel bed, from the landscape under established regulations which exist to provide for human and forest health and safety while providing for ecological considerations. These standards are appropriate and suitable here to provide for similar objectives. This amendment is necessary to clarify the allowance for the harvesting of dead and dying trees and to provide tor the conditional elements under which such harvesting is permissible.

Amend § 1052.4(d)(3) (previously (3)(A))

The proposed amendment reduces the requirements for canopy retention of dominant and codominant trees following vegetation treatment conducted pursuant to 14 CCR § 1052.4. The proposed amendment reduces canopy closure requirements for east side pine forest types, coastal redwood and Douglas-fir forest types and mixed conifer and all other forest types by ten percent. The purpose of this amendment is to improve the efficacy of both aerial fire suppression techniques, as well as fuel treatments in reducing potential fire behavior. The relationship between canopy closure and potential fire behavior, not accounting for windspeed, is direct in that reductions in canopy bulk density or closure result in a reduced potential for extreme fire behavior through the reduction in trapped heat and un-combusted gaseous fuels, as well as by reducing the likelihood of continuous crown fires due to physical separation of tree crowns. The relationship between those winds which have the greatest effect on driving fire behavior, generally referred to as midflame winds, and canopy closure is somewhat inverse in that greater canopy closure reduces the influence that these midflame winds have on potential fire behavior due to the buffering effects of forest canopy on localized winds. Furthermore, the efficacy of aerial fire suppression techniques is indirectly related to the closure of tree canopy in that water or other material dropped from fixed or rotary wing aircraft is not able to penetrate through canopy layers to effect surface fire behavior. The nature of these relationship necessitates that a balance be achieved in order to address potential hazardous fire behavior. The chosen ten percent reduction in canopy closure is appropriate in order to improve the efficacy of these fuels treatments related to the stated goals of the section, as well as those within 14 CCR § 1052.1(d), by achieving an increase in the removal of trees, the elimination of fuel continuity, as well as a reduction in crown fuels while maintaining canopy closure in quantities great enough to address potential issues related to midflame winds and allowing penetration for aerial firefighting techniques. These amendments are necessary in order to clarify these prescriptive requirements to aid in implementation and enforcement of these regulations, as well as to improve the efficacy of these treatments.

Additionally, the distinction in canopy treatments for areas directly surrounding those communities and structures referenced in 14 CCR § 1052.4(c)(1) and (2)(a) and those areas outside of those communities and structures has been eliminated. The purpose of this elimination is to achieve the same improved efficacy in vegetation treatments as described above. This elimination is necessary in order to achieve this improvement, as well as to clarify that a distinction in treatment no longer exists within these areas in order to adequately implement and enforce these regulations.

Amend (former) § 1052.4(d)(3)(B)

The proposed amendment eliminates a requirement that the postharvest stand contain no more than two hundred trees per acre which are over three inches in diameter at breast height. The purpose of this amendment is to simplify the existing regulations and streamline their requirements in order to increase the utilization of this permitting policy in order to achieve the state's forest policy goals. This prescriptive requirement was eliminated in favor of reliance upon the performance standards which exist within 14 CCR §§ 1052.4, (a), and (a)(1)-(4), combined with the other existing prescriptive requirements of this section, in order to achieve vegetation treatments which are suitable for addressing the goals of hazardous fuel reduction described within this 14 CCR § 1052.1(d) and elsewhere within this section. This reduction in prescriptive requirements eases the regulatory burden on those preparing Emergency Notices for Fuel

Hazard Reduction and allows for potentially greater application through eliminating a potentially costly vegetation treatment requirement, the purpose of which is made somewhat redundant through the performance-based requirements stated above. This amendment is necessary to clarify this elimination in order to aid in implementation and enforcement of these regulations.

Amend (former) § 1052.4(d)(4)

The proposed amendment eliminates the existing provisions related to post-harvest stocking requirements in favor of reliance on the amended 14 CCR § 1052.4(e). The purpose of this amendment is to both improve the efficacy of vegetation treatments within the fuels reduction process, as well as to promote standardization of the regulations in order to increase implementation of the regulations as a mechanism for achieving the state's forest policy goals. Please see the necessity statement for amendments to 14 CCR § 1052.4(e) for additional discussion related to this purpose. This elimination is necessary to eliminate any potential conflicts with the newly amended 14 CCR § 1052.4(e) and to clarify that these requirements are no longer extant in this form.

Amend § 1052.4(d)(4)(A) (previously (5)(A))

The proposed amendments to this subsection eliminate the distinction in fuels treatment within those areas surrounding communities, legal structures, or ridges, and all other areas. The purpose of this amendment is to improve the efficacy of fuel treatments within strategic locations, as well as to standardize fuel treatment requirements of the section. This distinction has been abandoned in favor of standardized fuel treatment across all areas, as well as additional fuel treatments within one hundred fifty feet of legal structures in order to address fuel hazard within those zones critical for public safety. Please see necessity statements for 14 CCR § 1052.4(d)(5)(A)2. for additional discussion on this issue. This amendment is necessary in order to achieve improved fuel treatment standards across all areas, and to clarify the applicability of these fuel treatment standards for implementation and enforcement.

The proposed amendment also specifies that the debris which must be treated pursuant to these provisions is woody debris, as defined within 14 CCR § 895.1. The purpose of this amendment is to clarify what types of materials require treatment as well as to accurately convey the intent of the regulations. This amendment is necessary to clarify this provision for implementation and enforcement of these regulations.

Additionally, the proposed amendment to this paragraph eliminates redundant language regarding what types of fuel must be treated to prescriptive standards, as those fuels and their prescriptive standards are explicit within the subparagraphs following this provision. The purpose of this amendment is to eliminate this redundant and unnecessary language in favor of simpler and more standardized regulations. This amendment is necessary to improve the clarity of the regulations through the elimination of this unnecessary introductory language.

Amend § 1052.4(d)(4)(A)1. (previously (5)(A)1.)

The proposed amendment requires that vertical clearance distance measurements be taken relative to both preharvest fuels and vegetation, excluding dominant and codominant trees. The purpose of this amendment is to improve the clarity of this provision, as previously there may have been confusion as to where measurements were to occur. The general purpose of this

provision is to provide a prescriptive requirement for clearance from the bottom of the postharvest tree canopy to the tops of potential combustible material below in order to allow for vertical separation of those fuels. This amendment does not alter the prescriptive clearance, but clarifies the material from which these measurements are to be taken. This is necessary in order to improve the legibility of these regulations and to aid in their implementation and enforcement.

Amend (former) § 1052.4(d)(5)(A)2.

The proposed amendment eliminates the prescriptive requirements surrounding horizontal spacing of ladder fuels. The purpose of this amendment is to standardize the regulations with the goal of increasing the utilization of this regulatory fuels reduction tool. Previously, these standards were extremely prescriptive and potentially overly burdensome for practitioners and were often confusing to implement. These prescriptive requirements have been discarded in favor of reliance upon the performance standards which exist within 14 CCR §§ 1052.4, (a), and (a)(1)-(4), combined with the other existing prescriptive requirements of this section, in order to achieve vegetation treatments which are suitable for addressing the goals of hazardous fuel reduction described within 14 CCR § 1052.1(d) and elsewhere within this section. This reduction in prescriptive requirements eases the regulatory burden on those preparing Emergency Notices for Fuel Hazard Reduction and allows for potentially greater application through eliminating a potentially confusing prescriptive requirement, the purpose of which is made somewhat redundant through the performance-based requirements stated above. This amendment is necessary to clarify this elimination in order to aid in implementation and enforcement of these regulations.

Amend § 1052.4(d)(4)(A)2. (previously (d)(5)(A)3.)

The proposed amendment requires that within one hundred fifty feet of legal structures described in 14 CCR §§ 1052.4(c)(1) and (c)(2)(A), all dead surface fuels must be chipped, burned, or removed within forty-five days from the start of timber operations and that, in all other areas, dead surface fuel within the harvest area must be treated to a depth of less than nine inches. The purpose of this amendment is to improve the efficacy of fuels treatments conducted pursuant to this section within strategic locations. The requirement that material be eliminated surrounding structures provides for greater resiliency to wildfires in areas which are particularly critical for public safety purposes. Additionally, though the requirement that dead surface fuel be treated to less than nine inches had previously existed, the proposed amendment clarifies the fuels which may be inclusive within those dead surface fuels requiring treatment. This amendment is necessary in order to improve the clarity of this provision as well as to promote consistency with 14 CCR § 1052.4(d)(2)a.

The proposed amendment to 14 CCR § 1052.4(d)(4)(A)2.a. requires specific fuels treatments within 150 feet of structures. The purpose of this amendment, in addition to improvements to efficacy of fuel treatment in critical areas as described above, is to maintain consistency with existing Board regulations within 14 CCR § 1038(c) related to the implementation of defensible space statutory requirements of PRC § 4291. These requirements are similar to those of 14 CCR § 1038(c)(3), with the added requirement that all dead surface fuels be treated, not only those created by timber operations. The intent of this section is to address emergency fuel hazard conditions and, in those emergency situations, public safety surrounding structures which may potentially contain humans is absolutely critical. For this reason, additional fuel treatment is

necessary in order to provide for public safety. This amendment is necessary to clarify this requirement.

Amend (former) § 1052.4(d)(5)(A)4.

The proposed amendment eliminates the requirement that standing dead or dying trees and brush generally be removed. The purpose of this amendment is to eliminate language which lacks clarity and is largely unenforceable regarding when, where, or why dead material should be removed. The Board has amended 14 CCR § 1052.4(d)(3) to implement requirements and conditions surrounding the removal of dead trees which have greater clarity and are enforceable. This amendment is necessary to eliminate this unclear provision and to eliminate any issues of consistency which may exist between this previous provision and the newly amended 14 CCR § 1052.4(d)(3). Please see necessity statement for 14 CCR § 1052.4(d)(3) for additional discussion.

Amend (former) § 1052.4(d)(5)(B)

The proposed amendment eliminates the provisions related to vegetation treatments in specified areas. The purpose of this amendment is to support the restructuring and standardization of the amended regulations. The prescriptive requirements of these provisions are largely unaltered, related to fuel treatment depth and vertical clearance of ladder fuels, as those requirements now exist within amended 14 CCR § 1052.4(d)(5)(A)1. and 2., though with slightly modified conditions, the purpose and necessity of which are discussed above within this document. This amendment is necessary to clarify the restructuring and standardization of these regulations and to support the modified prescriptive requirements of the section.

Amend § 1052.4(d)(4)(B)

The proposed amendment relocates a provision which required postharvest compliance of certain provisions on 80% of the project area, with certain conditions and exclusions, from the subsection related to material which must be provided to the RPF, to this paragraph related to fuels treatments. The purpose of this amendment is to clarify which aspects of the section require 80% compliance, and that those aspects are directly related to the treatment of ladder and surface fuels. Additionally, the purpose of this amendment is to increase the utilization of this regulatory fuels treatment tool by providing an allowance that operational considerations may prevent certain areas across broad landscapes from receiving treatment, such as areas which are restricted from operation by 14 CCR § 1052.4(b). This amendment is necessary to improve the clarity of this allowance, in that it is exclusively related to ladder and surface fuel treatment.

Amend § 1052.4(e)

The proposed amendment requires that, on lands which are subject to timber operations pursuant to 14 CCR § 1052.4, immediately upon completion of those timber operations, stocking is required to meet the minimum resource conservation standards as described within 14 CCR § 912.7, 932.7, and 912.7. Additionally, these requirements need only be consistent with 14 CCR §§ 913, 933, or 953(d), as applicable by forest district, which allows for the utilization of site IV stocking on lands subjected to harvesting pursuant to 14 CCR § 1052.4. The purpose of this amendment is to improve both the efficacy of the fuel treatments and the future resiliency of the post-harvest stand conditions as well as providing for adequate resource conservation standards which exist within 14 CCR § 912.7, 932.7, and 952.7. Furthermore, this retention standard exists

within the requirements of the Fuelbreak/Defensible space special silvicultural prescription and are suitable and appropriate here to address the reduction in the potential for wildfires and the damage they may cause, which is also the intent of the prescriptive requirements of 14 CCR § 1052.4. This amendment is necessary to clarify these requirements for the implementation and enforcement of these standards.

Amend § 1052.4(f) (previously (e))

The proposed amendment requires that an RPF incorporate certain ecological requirements as identified elsewhere in the Forest Practice Rules and eliminates a requirement to "evaluate" these requirements as well. The purpose of this amendment is to eliminate the word "evaluate" which lacked clarity of implementation and enforcement. Those habitat requirements which are identified within this provision do not require additional evaluation for implementation, but are required simply to be implemented as necessary. This amendment is necessary to improve the clarity and enforceability of this provision.

Additionally, the proposed amendment adds reference to sections related wildlife protective practices within the northern and southern forest districts which were omitted from the previous regulations, as well as reference to those range of sections which may require incorporation into project design. The purpose of this requirement is to ensure that Emergency Notices for Fuel Hazard Reduction incorporate existing regulatory requirements related to the protection of wildlife resources, while still providing for the emergency reduction of hazardous fuels. This amendment is necessary to clarify those regulations which require incorporation into project design.

Amend (former) § 1052.4(f)

The proposed amendment eliminates a restriction on the harvesting of diseased trees which are in excess of the previous diameter limits within this section, when those trees were harvested under operations conducted concurrently in the same geographic area as any pursuant to 14 CCR § 1038(b). The purpose of this amendment is to eliminate a restriction on a harvesting activity which may be necessary to improve forest health, and which is unrelated to the emergency reduction of hazardous fuels. The two regulatory permitting mechanisms of 14 CCR §§ 1052.4 and 1038(b) serve separate functions are not intended to interfere with one another. This amendment is necessary to clarify that this restriction is no longer applicable.