



**Ventura County Fire Department
Fire Prevention Bureau
Fire Hazard Reduction Program
165 Durley Avenue
Camarillo, CA 93010**

February 10, 2020

INFORMATION BULLETIN

**Notice of New Defensible Space and Fuel Modification Zone Standard
and Retro-Fit Provisions**

On April 19, 2019, a new Fire Department [Standard 515 – Defensible Space and Fuel Modification Zones](#) was issued. Contained within the standard are provision for retro-fit of existing landscape areas to bring them into reasonable compliance with the new standard. (Note: Standard 515 was re-issued January 1, 2020 with formatting changes only corresponding to the adoption of VCFD Ordinance 31)

Please see the attached Standard 515 and [Administrative Ruling 806](#) regarding application of Standard 515 and the retro-fit process. Also included is [Standard 517](#) regarding mulch and wood chips within the required defensible space zone. The Fire Hazard Reduction Program Unit (FHRP) has started notifications to affected parcels. In most cases, the affected parcels are common areas and other agency open space / landscaped areas within 100 feet of structures.

Please contact the FHRP unit at fhrrp@ventura.org or 389-9759 if you have any questions or visit our website VCFD.org or VCFHRP.org for additional information regarding fire hazard clearance requirements.



VENTURA COUNTY FIRE PROTECTION DISTRICT
FIRE PREVENTION BUREAU
165 DURLEY AVENUE
CAMARILLO, CA 93010

www.vcfd.org

Office: 805-389-9738 Fax: 805-388-4356

ADMINISTRATIVE RULING 806 APPLICABILITY OF VCFD STANDARD 515

APPROVED BY: _____



FIRE MARSHAL

Subject:

2020 Ventura County Fire Code, Appendix W, Sections W104 and W105. Installation, maintenance and spacing of plants, trees and other vegetation within required defensible space and fuel modification zones within Ventura County and VCFD Standard 515.

Code Requirements:

Ventura County Fire Code (VCFC) and State Codes: Public Resource Code (PRC) 4291 & Government Code (GC) 51182, require a minimum 100-foot defensible space zone around buildings.

The codes specify that the amount of vegetation clearance needs to be such that it will not form a means of rapidly transmit fire from other nearby vegetation to a structure or from a structure to nearby vegetation. It does not specify any spacing requirements of plants and vegetation within the defensible space zone. Ventura County Fire Department is required to enforce at a minimum the Calfire requirement within defensible space zones.

Discussion:

To provide written spacing specifications for design, installation and maintenance of plant, trees and vegetation, a tree and Fuel Mosaic spacing requirement was first introduced under VCFPD Ordinance 27 January 1, 2011 and carried forward under Ordinance 28 and Ordinance 30.

Review of defensible space zones that did not have any spacing between plants, trees and vegetation that would fall within the current fuel mosaic requirements indicated too much dead understory and material within the landscaped and mosaic area. There was concern regarding the amount of heat and ember production this would create. Additional review was conducted of the recent fires within Ventura County and Los Angeles County over the past three years. Areas that did

not have any spacing and or where too large of a fuel mosaic existed, had the fire burn completely through the defensible space zone exposing homes to greater heat, flames and embers.

Additionally, over the past years, other fire agencies, including Calfire, have issued plant and tree spacing requirements for defensible space zones.

To address the concerns regarding excessive fuel loading within defensible space zones, including current fuel mosaic requirements, and to protect life and property, a new VCFD Standard 515 *Defensible Space and Fuel Modification Zones* was issued April 19, 2019 to specify spacing requirements for plants, trees and vegetation within a defensible space zone. This Administrative Ruling addresses the applicability of Standard 515 as it relates to VCFD Ordinance 31, Appendix W. Prior tree, plant and fuel mosaic requirements of Ordinance 30 Sections W105.1.1 and W105.1.2 were repealed April 19, 2019 and replaced with Standard 515 under the previous version of Administrative Ruling 806 issued April 19, 2019.

Requirements:

Standard 515 is applicable to all new required defensible space and fuel modification zones (FMZ) and any replanting in existing defensible space and FMZ.

Standard 515, Chapter 4, has retro-fit provisions for defensible space and FMZ in existence prior to April 19, 2019. Upon notification by the fire department, there is a four (4) year period in which to bring the existing installation into reasonable compliance with VCFD Standard 515. It is not the intent of the VCFD to require indiscriminate removal of trees and vegetation, but to reduce the risk of fire exposure to persons and buildings by thinning, reducing and possible removal of vegetative fuels within the defensible space / FMZ to provide reasonable compliance with Standard 515.

Retro-Fit Process:

VCFD Fire Hazard reduction Program (FHRP) Unit will notify property owners (or their representative) that the defensible space / FMZ on their property is subject to retro-fit under Standard 515. The FHRP unit will meet on-site with the owner to conduct a survey of the defensible space / FMZ to determine how the requirements of Standard 515 will apply to the existing area, identify priority areas, and answer any questions that may arise. For larger properties (EG. HOA common area, government owned open space parcel, etc), a plan and time table may be required to be submitted for review and approval by the FHRP unit.

For additional information or for questions regarding this Administrative Ruling, please contact the FHRP Unit Manager at 805-389-9759 or email fhrp@ventura.org



STANDARD 515

DEFENSIBLE SPACE AND FUEL MODIFICATION ZONES

The information contained in this standard is provided solely for the convenience of the reader and was being enforced by the Ventura County Fire Protection District at the time of its publication. The District reserves the right to make changes and improvements to this standard when required by law, or at any time. The District's current standards will be posted and made available for downloading by the public at the following web site: www.vcfd.org.

Please note that the District assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure their work complies with any applicable codes, ordinances, and regulations.

For questions regarding this standard, please contact the VCFD Fire Hazard Reduction Program Unit at 805-389-9759 or FHRP@ventura.org

CHAPTER 1 – ADMINISTRATION

1.1 Purpose. Defensible space and fuel modification zone provisions are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures, fire exposures from adjacent structures and to mitigate fires from spreading to wildland fuels that may threaten to destroy life, overwhelm fire suppression capabilities, or result in large property loss. Proper installation, spacing and maintenance of plants and landscape is one of the key elements in the survivability of a structure during a wildfire. For information regarding Prohibited Plants, VCFD Plant Reference Guide and the Fire Hazard Reduction Program (FHRP), please visit VCFHRP.org

1.2 Scope. This standard provides the general requirements for the installation, maintenance and spacing for plants, trees and other vegetation within a defensible space and fuel modification zone (FMZ) required by VCFPD Ordinance and State Law.

1.3 Applicability. Defensible Space and Fuel Modification Zones located within a State Responsibility Area (SRA), Local Responsibility Area Very High Fire Severity Zone LRA VHFSZ), Hazardous Fire Area (HFA), or any property, as determined by the fire department. Maps of SRA and LRA VHFSZ can be viewed at: http://www.fire.ca.gov/fire_prevention/fhsz_maps_ventura

1.4 Responsibility. Any Person owning, leasing, controlling, operating or maintaining any building in, upon, or adjoining any Hazardous Fire Area, and any Person owning, leasing or controlling any land adjacent to such buildings, shall provide around and adjacent to such building an effective defensible space on their property for a distance not less than 100 feet from all portions of the building. Distances may be increased by the Fire Department because of a site-specific analysis

based on local conditions and when required based on a Fire Protection Plan. Reference: Public Resource Code (PRC) 4291, Government Code (GC) 51182, and current VCFPD Ordinance.

1.4.1 Clearance Area. Property owners are required to maintain only the portion of the defensible space that falls upon their property.

1.4.2 Required Clearance. Clear cutting of brush, plants and trees is not required. All plants, trees, landscape and vegetation located within the Defensible Space or Fuel Modification Zone (FMZ) shall comply with this standard. Ornamental landscape is not exempt from these requirements.

CHAPTER 2 – DEFINITIONS

Combustible Material. Includes seasonal and recurrent weeds, stubble, brush, dry leaves, mulch, tumbleweeds, rubbish, recyclable material, litter or flammable materials of any kind.

Defensible Space. An area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

Fire Hazard Severity Zones (FHSZ). Are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas (SRA) or as Local Responsibility Agency Very High Fire Hazard Severity Zones (LRA VHFHSZ) designated pursuant to California Government Code, Sections 51175 through 51189.

Fuel Modification. A method of modifying fuel load by reducing the amount of flammable vegetation or altering the type of vegetation to reduce the fuel load.

Fuel Mosaic. A Fuel Modification system that provides for the creation of islands and irregular boundaries to reduce the visual and ecological impact of Fuel Modification.

Hazardous Fire Area (HFA). Is land which is covered with grass, grain, brush, or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion and includes any location within 500 feet of a forest or brush, grass, or grain covered land, exclusive of small individual lots or Parcels of land located outside of a brush, forest grass, or grain covered area. Such areas are designated by the Fire Code Official. The Fire Code Official is authorized to utilize, as references, the definition of Wildland-Urban Interface Area, State SRA maps, LRA Fire Hazard Severity Zone Maps designated pursuant to California Government Code, Sections 51175 through 51189 and the International Wildland-Urban Interface Code.

Ornamental Landscape. All grasses, plants, trees and other vegetation installed by a property owner. This is usually for aesthetic purposes or privacy screening.

Wildland-Urban Interface (WUI) Area. That geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels

VCFD Defensible Space/ FMZ zones defined:

Zone A: This is a limited planting area within 30 feet of structures and slopes not greater than 20%, 50 feet when slopes are greater than 20%.

Zone B: This is the area from outer edge of Zone A to 100 feet from structures.

Zone C: This is considered a thinning zone and is any FMZ greater than 100 feet from structures.

CHAPTER 3 – REQUIREMENTS BY ZONE

3.1 Zone A.

3.1.1 0-5 Feet from structure. Very low growing (3" high), high water content ground cover and few small shrubs (2 foot high). No landscape mulch or wood chips. Use clear soil, rocks, gravel or concrete. No Trees. This is a recommended no planting zone.

3.1.2 5-30/50 feet from structure. Minimal plantings including ground cover and shrubs. Limited trees of a very fire resistive type and additional spacing. Trees should be spaced to allow min 10' clearance to structure at full maturity. Also see **VCFD FMZ Spacing Table 3**.

3.1.3 Limitations. Plants and trees identified as "Target" (undesirable plants) by VCFD shall not be planted within Zone A. See VCFD Plant Reference Guide.

3.2 Zone B. Follow **VCFD FMZ Spacing Table 3**.

3.3 Zone C. When provided, either by conditions of development, voluntary by the property owner, or required by the Fire Department, this zone is more of a progressive thinning zone to lessen spread of fire as it approaches the primary FMZ adjacent to structures. The amount of fuel reduction and removal should take into consideration the type and density of fuels, aspect, topography, weather patterns and fire history.

Table 3 on next page

VCFD FMZ Spacing Table 3

Type of Vegetation	Max Height (H)	Max Area /diameter (W)	Slope % / Min Spacing (S)*
Ground Cover	6 inches	NA	NA
Mosaic Grouping of Ground Cover (GC)	18 inches	Groupings shall not exceed 500 sq ft without spacing (S) to next grouping	<20: 2 x GC height (H) 20-40: 4 x GC height (H) >40: 6 x GC height (H)
Single Shrub	6 feet	4 feet diameter	<20: 2 x shrub height (H) 20-40: 4 x shrub height (H) >40: 6 x shrub height (H)
Grouping of shrubs	4 feet	Groupings shall not exceed 50 sq ft without spacing (S) to next grouping	<20: 20 feet 20-40 40 feet >40 Not Allowed
Single Tree	NA	NA	<20: 10 feet 20-40: 20 feet >40: 30 feet

*** Spacing (S) Notes:**

- a. Spacing is measured canopy to canopy at maturity.
- b. Ground cover up to 3" high, when approved, may be installed within the required clear space (S) between groups. If natural or annual grasses are used, they shall be mowed to a maximum height of 3" stubble with clippings removed.
- c. Ground cover under tree canopies, when approved, shall have a clear distance above the ground cover a minimum 3 times the height of the ground cover (3H) to the lowest branch of the tree canopy and shall not be within 3 feet of the trunk of the tree.

3.4 Additional Requirements.

3.4.1 Highly Flammable Trees. Highly flammable trees are not allowed unless approved by the Fire Code Official

3.4.2 Tree Spacing. The horizontal distance between crowns of trees and crowns of adjacent trees, overhead electrical facilities or unmodified fuel is not less than 15 feet.

3.4.3 Roof Clearance. The vertical clearance distance above any roof is not less than 3 feet.

3.4.4 Chimney Clearance. The horizontal and vertical clearance to any chimney or heat producing device is not less than 10 feet.

3.4.5 Limbing of Trees. Trees exceeding 6 feet in height shall be limbed up from the ground 5 feet or 1/3 the height of the tree, whichever is less.

3.4.6 Maintenance. All plants and trees shall be maintained free of deadwood, leaves and limbs that can increase ability to ignite and/or carry fire. This includes dried palm fronds.

3.4.7 Tree Litter. Tree litter shall not exceed 2" depth underneath tree canopies.

3.4.8 Tree Canopy Clearance. Where tree canopies touch or extend past the 100-foot defensible space zone, there shall be a clear area from the edge of the tree canopy to the brush of not less than 15-feet, which may require clearance outside the 100-foot zone.

3.4.9 Roofs and Gutters. Roofs and gutters on buildings shall be maintained free of any leaves, needles or other vegetative materials.

3.4.10 Mulch and Wood Chips. Mulch and wood chips shall comply with VCFPD Standard 517 and are not allowed within 5-feet of structures.

3.4.11 Irrigation. Irrigation is not required for any defensible space or FMZ.

3.5 Modifications. Modifications to this standard may be allowed on a case by case basis after review and approval of a planting and maintenance plan. Requests shall be submitted to the Fire Prevention Bureau – FHRP Unit.

CHAPTER 4 – EXISTING INSTALLATIONS

4.1 Compliance. When required by the VCFD, existing defensible space / FMZs installed prior to the date of this standard shall require retro-fit, including thinning and or removal of plants, trees and vegetation, to meet this standard.

4.1.1 Timing. Work to bring an existing defensible space and FMZ may be done over a 4-year period once notified by the VCFD. Start from structure(s) outward. 30 feet the first year, then 25 feet each additional year.



STANDARD 517 APPLICATION OF MULCH AND CHIPS IN DEFENSIBLE SPACE

The information contained in this standard is provided solely for the convenience of the reader and was being enforced by the Ventura County Fire Protection District at the time of its publication. The District reserves the right to make changes and improvements to this standard as and when required by law, or otherwise, at any time. The District's current standards will be posted and made available for downloading by the public at the following web site: www.vcfd.org.

Please note that the District assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure their work complies with any and all applicable codes, ordinances, and regulations.

Supersedes: VCFPD Standard 14.9.2

CHAPTER 1 – ADMINISTRATION

1.1 Purpose. This standard is prepared to address the concerns and issues associated with fires starting within or spreading from mulch and wood chips that have been spread within the defensible space area around structures. These fires pose hazards to emergency responders, the surrounding communities and the wildland area. This standard is intended to provide basic fire safety measures that should limit fire spread within the defensible area.

1.2 Scope. This standard provides the requirements of the fire code official under Ventura County Fire Code (VCFC), Section 2808 and Appendix W. This standard applies to the application of mulch and wood chips in defensible space areas. This standard shall also be used in conjunction with Ventura County Resource Management Agency (RMA) (Planning & Environmental Health Divisions), Ventura County Agricultural Commissioner, VCFC, Ventura County Ordinance Code (VCOC) and other applicable Laws, Regulations, Rules and Codes including incorporated Cities, (if applicable). Where any conflict occurs with the requirements of this standard and other Laws, Regulations, Rules and Codes, the most restrictive application shall apply, unless prohibited by Law.

1.3 Applicability. This standard shall parcel owners who apply (spread) mulch and wood chips in any required defensible space area are subject to the requirements of the VCFC and this standard.

1.4 Permits. No additional permits or plans are required to apply mulch and/or wood chips within the defensible space.

1.5 Modifications. Increases in the limitations of this standard may be considered on a case-by-case basis. A written request and justification prepared by a qualified expert acceptable to the fire code official and based upon site-specific conditions shall be submitted and approved prior to land application. Such written requests shall be made by the property owner of record. Additional

measures to prevent the ignition and spread of fire shall be provided as approved by the fire code official.

CHAPTER 2 – DEFINITIONS

Compost and Compostable Material. Any organic material that when accumulated is capable of rapid decomposition and generating temperatures of at least 122-degrees Fahrenheit.

Contaminants. Pieces of non-compostable solid waste that includes, but not limited to, paper, plastics, metals, glass, clothing, painted or treated wood, plywood and other similar materials.

Disposal. The final deposition of solid waste onto property. Disposal includes, but is not limited to, the following activities:

- a) Application of mulch exceeding an average of twelve (12) inches in total depth, except as provided for in Section 4704 (d)(2) of the Ventura County Ordinance Code.
- b) Application of mulch in which the mulch contains contaminants that exceed 0.1% of the total volume of mulch at the time of application.
- c) Storing or stockpiling of compostable material onto land for a combined period of time greater than six (6) months, or agricultural and green material for twelve (12) months on prime agricultural land as defined in Government Code Section 51201, unless the Regional Water Quality Control Board, in consultation with the Resource Management Agency's Environmental Health Division, makes a written finding that the material may remain within the operations area for a period of time greater than specified.

Hazardous Fire Area (HFA). Is land which is covered with grass, grain, brush, or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion and includes any location within 500 feet of a forest or brush, grass, or grain covered land, exclusive of small individual lots or Parcels of land located outside of a brush, forest, grass, or grain covered area. Such areas are designated by the Fire Code Official. The Fire Code Official is authorized to utilize, as references, the definition of Wildland-Urban Interface Fire Area, State SRA maps, Local Agency Fire Hazard Severity Zone Maps designated pursuant to California Government Code, Sections 51175 through 51189 and the International Wildland-Urban Interface Code.

Invasive Species. A non-indigenous species that adversely effect the habitats they invade economically, environmentally or ecologically. An inventory of invasive plants is maintained by the California Invasive Plant Council (<https://www.cal-ipc.org/plants/inventory>).

Organic Mulch. A compostable material limited to landscape waste and crop production byproducts consisting of leaves, yard trimmings, wood waste, branches and stumps, and whole plants/trees, that have been mechanically reduced in size and have been composted prior to application.

Wood Chips. Shall be from trees only. No hazardous brush is allowed including, but not limited to: sage, coyote brush or chamise. Chips should average 2-4 inches in length. Fine ground or stringy

types of material which can ignite faster and burn more readily shall not be used. These materials include, but are not limited to, Gorilla Hair (shredded redwood or western red cedar) and Coconut fiber. Wood chips are not required to be composted prior to applications.

CHAPTER 3 – GENERAL REQUIREMENTS

3.1 Type of Material. Mulch and wood chips consisting of invasive species, hazardous trees, non-native vegetation, pine needles, leaves, grass and in-organic materials, such as shredded rubber, are not allowed within the required defensible space zone.

3.2 Maximum Depth of Application. The application and spread depth shall not exceed two (2) inches in height within the required defensible space zone.

3.3 Composted Material. Organic mulch shall be clean and already composted.

3.4 Contaminants. Organic mulch and wood chips shall be free of any contaminants.

3.5 Delivery for Land Application. Organic mulch and wood chips delivered to a parcel for land application shall be applied within Seven (7) days of delivery or placed into piles complying with VCFD Standard 516. At no time shall any pile exceed 6 feet in height.

3.6 Limitations. Land application within the required defensible space zone shall be in accordance with Table 3.6. Land application outside the required defensible space shall be in accordance with Ventura County Ordinance Code and VCFD Standard 516 as applicable.

Table 3.6 Land Application Limitations within Defensible Space of a Structure

Zone	Distance from Structure	Requirement of Application
A	0 - 5 feet	Land application prohibited. Must use non-combustible materials such as gravel, decompose granite, etc.
B	>5 - 30 feet	Limited non-continuous use of organic mulch is allowed. No wood chips. Use a mosaic (non-uniform) pattern with a maximum application area of 20-feet x 20-feet and a minimum 5-foot separation between application areas.
C	>30 - 100 feet	Organic mulch and wood chips allowed. No limitation on application areas.
D	>100 - 200 feet	Same as Zone C or as determined by the Fire Code Official if additional defensible space is required for the parcel beyond 100 feet.

CHAPTER 4 – ADDITIONAL INFORMATION

For questions regarding this standard, please contact the Fire Hazard Reduction Program Unit (FHRP) at fhrp@ventura.org or 805-389-9759.

Additional information regarding defensible space requirements, fire hazard reduction and general fire safety, please visit www.vcfhrp.org and www.vcreadyssetgo.org