



A Tradition of Stewardship
A Commitment to Service

Alicia Amaro
Napa County Fire
Asst. Fire Marshal
1199 Big Tree Road
St. Helena, CA 94574

alicia.amaro@fire.ca.gov

Main: (707) 967-1425
Fax: (707) 967-1474
Cell: (707) 486-5782

INTER-OFFICE MEMO

TO: Hillary Gitelman
Conservation, Development, and Planning Department

FROM: Alicia Amaro, Fire Department

DATE: April 9, 2010

SUBJECT: Vineyard 22 Winery Use Permit Comments
Apn: 021-420-015 P10-00034

Site Address: 1156 Deer Park Road, Deer Park

The Napa County Fire Marshal staff has reviewed the Use Permit application to establish a 10,000 gallon per year winery within 10,050 square feet of caves and 5,400 square feet of winery structures which includes covered and uncovered work areas, mechanical and equipment storage and outdoor terrace. Based on the use and occupancy of the cave as described in the use permit application we have classified this cave to be a Type III wine cave. We recommend that the following items shall be incorporated as project conditions or mitigation measures if the commission approves the project.

- 1. All construction and use of the facility shall comply with all applicable standards, regulations, codes and ordinances at time of building permit issuance.**
- 2. A Type III cave will be treated as a structure and will be subject to the requirements of the 2007 California Building Code (CBC), 2007 California Fire Code (CFC) for exiting requirements.** Number of exits, allowable travel distance to an exit, exit signage, emergency lighting and exit hardware shall be consistent with the code requirements.
3. An approved automatic fire sprinkler will be required for the cave. The fire sprinkler system shall be installed and maintained in accordance to the *National Fire Protection Standard (NFPA) #13 (Installation of Sprinkler System, 2002 edition)*
4. An approved automatic fire sprinkler system will be required for all proposed structures 3,600 feet or greater. The sprinkler system shall be installed and maintained in accordance

with the *National Fire Protection Association Standard (NFPA) #13 (Installation of Automatic Sprinkler Systems 2002 edition)*. A minimum of 60 minutes of water storage to operate the sprinkler system will be required.

5. The ***minimum*** required fire flow for the protection of the ***proposed*** buildings is 300 gallons per minute for 60 minutes duration at 20 pounds residual water pressure with a storage volume of 9,000 gallons. This fire flow is based on the square footage of the cave and the type of building construction and has been reduced by 50% due to the automatic fire sprinkler system. The fire flow and storage volume in a sprinklered building is in ***addition*** to the water demand for the sprinkler system.
6. A fire pump may be required to meet the fire flow requirements. The fire pump shall be installed and maintained in accordance to the *National Fire Protection Standard #20 (Installation of Stationary Pumps for Fire Protection 2003 edition)*. Fire pumps are required to be listed and tested by an approved testing agency and are required to be either diesel driven or electric. Electric fire pumps also require a secondary power source.
7. The private fire service mains shall be installed and maintained in accordance with the *National Fire Protection Standard # 24 (Installation of Private Fire Service Mains and Their Appurtenances 2002 edition)*.
8. The location, number and type of fire hydrants connected to the water supply shall be in accordance with the *California Fire Code, 2007 edition*. Fire hydrants shall be placed within 250 feet of all exterior portions of the building. Fire hydrants shall be provided at all cave portals and the location shall be indicated on the building plan submittal. **The location of the hydrant as shown on the plan needs to be moved outside the covered work pad.**
9. The Type III wine cave will require a manual and automatic fire alarm system throughout. All post indicator valves, control valves, waterflow devices and fire pumps will also require monitoring by an approved remote station or central alarm monitoring company. The fire alarm system shall be designed and installed in accordance with the *National Fire Protection Standard #72 (Fire Alarm Code, 2002 edition)*.
10. Fire apparatus access roads shall be provided to within 150 feet of all portions of the structures. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet at the building site and an unobstructed vertical clearance of not less than 15 feet. **The walk path for fire access needs to be within 150 feet from the closest point where a fire engine can park to the entrance of the tasting area. Need to show more accurate calculations to reflect this requirement.**
11. Fire access roads shall be provided to all cave portals, unless the cave exits into a structure.
12. Access roads from the public and/or private right-of- ways to the project/ building site shall comply with Napa County Road and Street Standards and shall be reviewed by the Napa County Public Works Department.
13. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide driving

capabilities in all weather conditions. Said access shall be provided prior to any construction or storage of combustible materials on site.

14. The applicant shall be responsible for maintaining 10 feet of defensible space along each side of the roadway. This defensible space zone shall include the removal of all dead fuel, dry grass mowed to less than four inches in height, the removal or cutting of all brush, the removal of small trees less than 8 inches in diameter and the removal of all ladder fuel on existing trees up to 8 feet in height, within 10 vertical feet of each side of the roadway.
15. A defensible space zone shall be created around all structures. This defensible space zone shall be 100' from all portions of a structure. Flammable vegetation shall be removed and/or modified in the defensible space zone to create a fuel break that will help protect the structures from an encroaching wildland fire and will protect the surrounding wildland areas from a structure fire originating on-site.
16. The request for beneficial occupancy ***will not*** be considered until all fire and life safety issues have been installed, tested and finalized.
17. The approved address numbers shall be placed on the building by the applicant in such a position as to be plainly visible and legible from the street or streets fronting the property and shall be placed as to be seen from all entrances. Proposed address shall be indicated on the elevation drawings contained within the building plan submittal. The address numbers shall be a minimum of 4" in height for the building, contrasting in color with their background and shall be illuminated.
18. An approved project sign shall be placed at vehicle access points into the project during construction to assist emergency responders. The sign shall identify the project name and address. Such signs shall be clearly visible and legible from the street fronting the project.
19. The applicant shall properly identify all required fire lanes. Fire lanes shall be painted red with white letters to read "NO PARKING FIRE LANE CVC 22500.1, stenciled every 30 feet on top of the curb or on signs.
20. An approved access walkway shall be provided to all exterior doors and openings required by either the *California Fire Code* or the *California Building Code*. A concrete sidewalk or other approved hard surface will meet the intent of the access walkway requirement. Adequate space adjacent to the access walkway, vertically and horizontally, shall be provided to allow firefighters to access required building openings in order to effectively perform rescue operations, to allow for equipment maneuverability. Any landscaping adjacent to the access walkway shall be such that it does not obstruct the functional purpose of the walkway upon maturity.
21. Buildings with high piled storage exceeding 12 feet in height shall be equipped with smoke and heat vents and curtain boards in accordance with the *California Fire Code, Chapter 23, 2007 edition*.
22. Firefighter access doors in high piled storage occupancies shall be installed every 100 linear feet per the *California Fire Code, Chapter 23, 2007 edition*.

23. Currently serviced and tagged fire extinguishers with a minimum rating of 2A10BC shall be provided within 75 feet of travel distance from any portion of the facility and shall be mounted 3 1/2 to 5 feet to the top of the extinguisher.
24. A minimum of two exits shall be provided for all caves, the exits shall be located remotely from each other and arranged to minimize any possibility that more than one exit may be blocked by any one fire or emergency condition.
25. Exit travel distance shall comply with the *California Building Code*. Any cave that is used for assembling people must be sprinklered and the maximum travel distance shall not exceed 250 feet.
26. All exit doors shall be operable without the use of a key or any special knowledge or effort.
27. Illuminated exit signs and emergency back up lighting shall be installed throughout the building per the *California Building Code, section 1004, 2007 edition*.
28. A Knox cabinet will be required to allow emergency vehicle access to the site. Because an alarm system is required the Knox box/cabinet will require "tamper monitoring".
29. The Knox Cabinet shall have one or all of the following items placed in the Knox cabinet, dependent on requirements of this facility:
 - a. A minimum of 2 master keys to the structure(s) for emergency access.
 - b. 2 scaled site plans of the facility, identifying all buildings, hydrants, fire department access around the facility, and location of all water, electric, and gas shut-off valves.
 - c. 2 scaled floor plans of all structures showing doors, offices, etc.
 - d. Napa County Hazardous Materials Business including all MSDS forms, etc.
 - e. **A digital file of the site and floor plans in a PDF format must be submitted at building final in addition to the hard copies listed above.**
30. When the Napa County Fire Department deems is necessary for Fire and Life Safety, the owner, agent or lessee shall put in writing the intended use of the cave areas; I.e. storage, processing of wine at a winery and/or assembly use areas. This information is based off the use permit.
31. The applicant shall provide the Fire Department the ability to communicate between emergency personnel inside the cave.
32. A complete set of Building Plans shall be submitted to the Fire Department for review and approval for egress requirements.
33. Barricades shall be provided to protect any natural gas meter, fire hydrant, or other fire department control device, which may be subject to vehicular damage. Approved signs may be required to identify the location of fire protection devices.
34. Technical assistance in the form of a fire protection engineer or consultant, acceptable and reporting directly to the NCFD shall be provided by the applicant at **no** charge to the

County for independent peer review of alternate methods and materials proposals.

35. Plans detailing compliance with the fire and life safety conditions-of-approval shall be submitted to the Napa County Fire Marshal's Office for review and approval prior to building permit issuance and /or as described above.
36. "Fire Plan Review and Inspection" fees shall be paid to the Fire Department for all applicable plan review and inspection work at the established hourly rate as adopted by the Napa County Board of Supervisors by resolution.

Please feel free to contact the Napa County Fire Marshal's Office at (707) 967-1425 to discuss any fire protection issues you may have regarding your project.

Alicia Amaro
Assistant Fire Marshal