

CERTIFIED CALIFORNIA SUSTAINABLE WINEGROWING: REQUIRED PRACTICES

The below list shows the 60 prerequisite practices for vineyards, and 41 prerequisite practices for wineries, which are based on the California Code of Sustainable Winegrowing 4th Edition (Code Workbook). In many cases, the prerequisite practices are required to be met by the second year of certification and beyond, while some must be met by the first year certified. While prerequisites specify minimal sustainability practices, certified vineyards and wineries often go above and beyond these certification requirements. Year Two requirements must be met by vineyards and wineries to use the certification logo on the bottle.

MINIMUM REQUIREMENT IN YEAR TWO AND BEYOND



CODE WORKBOOK CRITERIA

VINEYARD CERTIFICATION PREREQUISTE PRACTICES

	MINIMOM REQUIREMENT IN YEAR I WO AND BETOND
2-1. Integrating Sustainability Into Business Strategy	Sustainability is integrated into the company business strategy.
2-2. Environmental Compliance Planning	A compliance strategy to address legal and regulatory requirements is implemented.
3-12. Addressing Biological Problems	Biological problems in soil verified by testing are addressed, if applicable.
3-16. Scion/Cultivar	Scion was selected for appropriate climate, soil and rootstock.
3-18. Conservation of Habitat for Wildlife and Pest Predators	Important habitat was protected during vineyard establishment.
4-3. Nutrient Management	Results of plant tissue analysis and other factors are used to guide nutrient applications.
4-4. Nitrogen Management	Nitrogen is only applied when needed and when vines can best utilize it.
4-5. Fertigation	Fertilization timing is seasonally correct and based on soil and vine needs.
4-10. Surface Water Diversions for Erodible Sites	Erosion is controlled with temporary measures in winter.
4-11. Management of Erosion from Roads, Ditches and Culverts	Soil erosion is controlled.
4-14. Soil Carbon Sequestration	Soil health practices with carbon sequestration potential are known.
5-1. Water Management Strategy	A water management strategy is developed based on grape growing goals, soil types, slopes, etc.
5-2. Monitoring and Amending Quality of Irrigation Water	Irrigation water is tested for quality.
5-3. Off-Site Water Movement	Off-site water movement is minimized.
5-5. Distribution Uniformity for Irrigation Systems	Irrigation distribution uniformity is checked.
5-6. Filters and Lines	Irrigation lines and filters are cleaned and inspected.
5-7. Water Budget	Irrigation water is applied at the optimized amount.
5-8. Measuring Water Use	Vineyard water use is measured.
5-9. Soil Water-Infiltration Rates and Water-Holding Capacity	Water-holding capacity of soil is estimated and used for estimating volume for irrigation applications.
5-10. Soil Moisture and Plant Water Status Monitoring Methods	Soil moisture monitoring devices are used to schedule irrigation.
6-1. Vineyard Monitoring for Insect and Mite Pests	Vineyard is monitored weekly for insects and mites and a record is kept.
6-2. Training for Pest and Disease Monitoring	Vineyard employees are trained to identify pest problems.
6-3. Economic Thresholds and Pest-Natural Enemy Ratios for Leafhoppers, Mites and Thrips	Control decisions for pests are based on the presence of pests.



VINEYARD CERTIFICATION PREREQUISTE PRACTICES (Cont.)



CODE WORKBOOK CRITERIA

MINIMUM REQUIREMENT IN YEAR TWO AND BEYOND

6-4. Minimizing Risks from Insecticides and Miticides	Lower risk pesticides are used whenever possible and risks to environmental and human health are considered.
6-5. Cultural Practices for Insect and Mite Management	Cultural practices such as cover crops and leaf removal are considered for pest management.
6-7. Use of Weather Data and Degree-Days for Managing Moth Pests	Moth pests are treated based on experience and time of year or vine development.
6-8. Portion of Vineyard Treated for Mites or Leafhoppers	Pest hotspots are identified and the block or vineyard is treated to control mites or leafhoppers.
6-9. Mealybug Management	Mealybugs are monitored annually and areas are treated if found.
6-11. Vineyard Monitoring for Disease	Vineyard is monitored weekly for diseases and a record is kept.
6-13. Minimizing Risks from Fungicides for Powdery Mildew and Botrytis Control	Lower risk fungicides are used whenever possible and risks to environmental and human health are considered.
6-15. Bunch Rot Management	Practices are used to reduce physical fruit damage and weather and growth stage was considered prior to applying any fungicides.
6-16. Pierce's Disease (PD) Management where Blue-Green Sharpshooter is Primary Vector	The vineyard is monitored for blue-green sharpshooters to control Peirce's Disease.
6-17. Vineyard Monitoring for Weeds	Vineyard is monitored weekly for weeds and a record is kept.
6-20. Herbicide Leaching Potential	Pest management decisions are made with awareness of herbicide leaching potential.
6-22. Vineyard Monitoring for Vertebrate Pests	Vineyard is monitored monthly for vertebrate pests (as appropriate) and a record is kept.
6-23. Vertebrate Pest Management	Extra precautions are taken to ensure non-target animals do not ingest any anticoaulants or strychnine baits to control vertebrates, if used.
6-26. Sprayer Calibration and Maintenance	Sprayer is calibrated, coverage is checked, and nozzles are replaced every year to ensure optimal use of crop protection materials.
6-27. Spray Coverage	Spray coverage is adjusted according to canopy size and density.
6-28. Spray Buffer Zone	Sensitive areas are protected from spray with buffer zones.
6-34. Using Lower Risk Crop Protection Materials	Red List crop protection materials are not used and lower risk alternatives are considered before use of any Yellow List materials.
7-3. Juice Chemistry	Juice chemistry, such as Brix, was tracked and recorded for enhanced wine quality.
8-1. Ecosystem Processes - Resource Base Ecosystem Biodiversity	The vineyard or winery understands the practices that promote ecosystem biodiversity.
8-2. Watershed Management - Watershed Awareness	Pertinent watershed issues are known and efforts are made to minimize any negative impacts.
8-4. Ecosystem Management - Riparian Habitat	Any vineyard planted next to a waterway is in accordance with legal requirements.
8-5. Ecosystem Management - Aquatic Habitats: Streams, Rivers and Wetlands	Aquatic habitats are considered in vineyard management.
8-8. Sensitive Species	Sensitive species are known.
8-9. Sensitive Species and Collaboration with Partners	If applicable, any sensitive species on the property are addressed with expert advice.
9-1. Planning, Monitoring, Goals and Results	An energy audit is conducted and results are used for energy efficiency decisions.
9-3. Vineyard Vehicles	Efforts are made to improve the energy efficiency of vineyard irrigation pumps.
9-12. Renewable Sources of Power	Renewable energy options are researched.
11-1. Planning, Monitoring, Goals and Results	Total amount of hazardous waste is monitored.
11-3. Hazardous Materials - Hazardous Material Storage and Replacement	Hazardous materials are stored away from storm drains.



CODE WORKBOOK CRITERIA

VINEYARD CERTIFICATION PREREQUISTE PRACTICES (Cont.)



13-1. Planning, Monitoring, Goals and Results	Environmental considerations are included in purchasing decisions.
14-1. HR Planning and Goals	The vineyard or winery stays aware of human resources legal requirements.
14-5. Safety Training	Employee safety and training meetings are held at least annually and safety audits are conducted as needed.
14-8. Promoting Sustainability in the Workplace	Employees involved in sustainability efforts are informed about practices and procedures.
15-1. Neighbors and Community Relations	Neighbors know how to contact the vineyard or winery, and a process is in place for considering and acting on neighbor/community questions or concerns.
15-2. Awareness of Potential Neighbor and Community Issues	The vineyard or winery knows the perceptions of neighbors and how the operation may affect them.
16-1. Planning, Monitoring, Goals and Results	There is awareness of some sources of air emissions associated with the vineyard or winery.
16-3. Unpaved Surfaces - Roadways and Traffic and Equipment Staging Areas	Dust from roadways is minimized.



WINERY CERTIFICATION PREREQUISTE PRACTICES

CODE WORKBOOK CRITERIA

MINIMUM REQUIREMENT IN YEAR TWO AND BEYOND

MINIMUM REQUIREMENT IN YEAR TWO AND BEYOND

Sustainability is integrated into the company business strategy.
A compliance strategy to address legal and regulatory requirements is implemented
A food safety strategy is being investigated or developed.
A security or defense strategy is being investigated or developed to minimize risks associated with winegrape and/or wine shortages.
The vineyard or winery understands the practices that promote ecosystem biodiversity.
Pertinent watershed issues are known and efforts are made to minimize any negative impacts.
Any vineyard planted next to a waterway is in accordance with legal requirements.
Aquatic habitats are considered in vineyard management.
Sensitive species are known.
If applicable, any sensitive species on the property are addressed with expert advice.
An energy audit is conducted and results are used for energy efficiency decisions.
Efforts are made to improve the energy efficiency of winery motors, drives and pumps.
Efforts are made to improve the energy efficiency of the refrigeration system.
Renewable energy options are researched.
s Winery water use is known and monitored.
Winery water quality is tested.



WINERY CERTIFICATION PREREQUISTE PRACTICES (Cont.)



CODE WORKBOOK CRITERIA	MINIMUM REQUIREMENT IN YEAR TWO AND BEYOND
10-3. Water Supply	Meters are installed on winery wells or water use is measured.
10-7. Crush Operations	Pre-cleaning of crush equipment and high-pressure nozzles are used to reduce winery water use.
10-8. Presses	Pre-cleaning of presses and high-pressure nozzles are used to reduce winery water use.
10-11. Barrel Washing	Barrels are cleaned with hot water and high-pressure nozzles to reduce winery water use.
10-15. Landscaping	Winery landscaping irrigation lines are checked at least annually for leaks and defects.
11-1. Planning, Monitoring, Goals and Results	Total amount of hazardous waste is monitored.
11-3. Hazardous Materials - Hazardous Material Storage and Replacement	Hazardous materials are stored away from storm drains.
12-1. Planning, Monitoring, Goals and Results	Winery solid waste is monitored and a solid waste audit is conducted at least every five years.
12-7. Cardboard	Cardboard is recycled.
12-8. Paper	Paper is recycled.
12-11. Metals	Metals are recycled or reused.
12-14. Capsules	Aluminum and tin capsules are recycled.
12-15. Landscape Residuals	Landscape residuals are left on the ground, disposed of, or composted.
12-17. Single Stream Recycling	Recyclable materials (e.g., paper, plastic, glass, metal) are recycled.
13-1. Planning, Monitoring, Goals and Results	Environmental considerations are included in purchasing decisions.
13-15. Packaging - To Customers	Requirements for packaging materials included environmental considerations and packaging materials from suppliers is reused.
14-1. HR Planning and Goals	The vineyard or winery stays aware of human resources legal requirements.
14-5. Safety Training	Employee safety and training meetings are held at least annually and safety audits are conducted.
14-8. Promoting Sustainability in the Workplace	Employees involved in sustainability efforts are informed about practices and procedures.
15-1. Neighbors and Community Relations	Neighbors know how to contact the vineyard or winery, and a process is in place for considering and acting on neighbor/community questions or concerns.
15-2. Awareness of Potential Neighbor and Community Issues	The vineyard or winery knows the perceptions of neighbors and how the operation may affect them.
15-3. Mitigation of Light, Noise and Traffic Impacts	Winery impact on light, noise and traffic for neighbors is known and mitigation options are being researched, if needed.
16-1. Planning, Monitoring, Goals and Results	There is awareness of some sources of air emissions associated with the vineyard or winery.
16-3. Unpaved Surfaces - Roadways and Traffic and Equipment Staging Areas	Dust from roadways is minimized.
16-10. Winery Refrigerants	An audit of the refrigeration system is completed and the type and amount of refrigerants are known.