

LIVE WINERY CHECKLIST 2022

1 DOCUMENTATION AND TRAINING

1.1 Documentation and scope of management system

- 1.1.1 **R** The winery has created and implemented a written Sustainability Plan that addresses key sustainability issues in winery operations and has management-level endorsement.
- 1.1.2 **R** The winery meets whole-winery sustainability requirements, outlined in the notes for this item.
- 1.1.3 **R** The winery has uploaded a facility and grounds plan to the LIVE website, and the plan meets the program requirements outlined in the notes for this item.
- 1.1.4 **R** Any expansion of the winery facility or new construction complies with LIVE and Salmon-Safe requirements—please see the notes for this item. If there is no construction or expansion during the current year, choose N/A.
- 1.1.5 **R** The winery operates with a traceability system that allows its products and their certification status to be identified and traced from point of sale back to farm production records.
- 1.1.6 **R** The winery documents Scope 1 and 2 greenhouse gas emissions for the facility, completing the Winery GHG Workbook for the most recent calendar year.
- 1.1.7 **R** The winery documents its water use, completing the Winery Water Use Report for the most recent calendar year.
- 1.1.8 **R** The winery documents its use of key materials, outlined in the notes for this item, and completes the Winery Materials Use Report for the most recent calendar year.
- 1.1.9 **R** The winery keeps maintenance records of major/heavy equipment (forklifts, tanks, bottling equipment), making them available upon request to LIVE and LIVE inspectors.
- 1.1.10 **R** The winery maintains truthful documentation demonstrating its compliance with LIVE requirements for a minimum of three years, and it provides access to documentation (upon request) to LIVE and LIVE inspectors.
- 1.1.11 **R** The winery has planned and is making progress on implementation of one or more continual improvement projects.
- 1.1.12 **G** The winery has submitted a new idea this year to LIVE for inclusion on the Continuous Improvement List.

1.2 Training of management team

- 1.2.1 **R** A winery representative attends a LIVE-approved training course annually. Approved training courses include the LIVE Annual Meeting, LIVE lectures, educational conferences, and extension events—please see the notes for this item.
- 1.2.2 **R** The winery maintains an understanding of and complies with LIVE logo use rules.
- 1.2.3 **G** The winery owner/manager attended further training courses in the past year.
- 1.2.4 **G** A representative from each winery function (i.e. tasting room, office, etc.) attended further training courses the past year.
- 1.2.5 **G** The winery provided internal sustainability training to its staff or hosted an open training in the past year.
- 1.2.6 **G** The winery organized a tasting panel with participation from workers throughout the winery in the past year.

2 GRAPES AND ENOLOGY

2.1 Grape sourcing

- 2.1.1 **R** The winery controls use of certification marks and claims, ensuring that wines using a mark/claim are made from at least 97% fruit that meets LIVE's vineyard certification requirements.
- 2.1.2 **G** At least 25% of all fruit used in the winery is from vineyard acreage enrolled with LIVE, a USDA-accredited organic certification program, Demeter's biodynamic certification program, or Salmon-Safe.
- 2.1.3 **G** At least 50% of all fruit used in the winery is from vineyard acreage enrolled with LIVE, a USDA-accredited organic certification program, Demeter's biodynamic certification program, or Salmon-Safe.
- 2.1.4 **G** At least 50% of all fruit used in the winery is from vineyards certified by LIVE.
- 2.1.5 **G** At least 85% of all fruit used in the winery is from vineyards certified by LIVE.
- 2.1.6 **G** 100% of all fruit used in the winery is from vineyards certified by LIVE.
- 2.1.7 **G** The winery offers an incentive for LIVE-certified fruit.

2.2 Yeast selection

- 2.2.1 **R** Genetically modified microorganisms are not used in the production of wine. LIVE inspectors reserve the right to take tank samples to be analyzed for GMO.

2.3 Sulfur dioxide levels

- 2.3.1 **R** For wines with residual sugar under 1%, total SO₂ is less than 150mg/L (choose N/A if not produced). When total SO₂ exceeds this level for a bottling lot, the winery must take steps to prevent use of LIVE certification marks and claims on the wine.
- 2.3.2 **R** For wines with residual sugar over 1%, total SO₂ is less than 240 mg/L (choose N/A if not produced). When total SO₂ exceeds this level for a bottling lot, the winery must take steps to prevent use of LIVE certification marks and claims on the wine.

3 ENERGY USE AND GREENHOUSE GAS EMISSIONS

3.1 Energy strategy and sources

- 3.1.1 **R** The winery has prepared an energy efficiency plan and conducts an annual internal review of the plan's effectiveness.
- 3.1.2 **G** The winery has increased its percentage of non-fossil based fuel(s) from the previous year.
- 3.1.3 **G** The winery has undergone a third-party energy audit within the past three years and used the results to develop and implement its energy efficiency plan.
- 3.1.4 **G** At least 50% of all grapes were transported from a source less than 60 miles from winery.

3.2 Greenhouse gas emissions reporting and reduction

- 3.2.1 **R** The winery has recorded Scope 1 and 2 greenhouse gas emissions for the most recent calendar year.
- 3.2.2 **G** The winery has tracked and reported emissions from business travel for the most recent calendar year.
- 3.2.3 **G** The winery has tracked and reported emissions from freight transport for the most recent calendar year.
- 3.2.4 **G** The winery has reported the details of glass bottles used in its production.
- 3.2.5 **G** The winery has started a greenhouse gas reduction certification process or audit.
- 3.2.6 **G** The winery has successfully completed verification of energy efficiency achievements in Scopes 1 and 2, demonstrating at least 5% reduction in per case energy use over three years.
- 3.2.7 **G** The winery has successfully completed verification of energy efficiency achievements in Scopes 1 and 2, demonstrating at least 10% reduction in per case energy use over three years.

- 3.2.8 **G** The winery has successfully completed verification of energy efficiency achievements in Scopes 1 and 2, demonstrating at least 15% reduction in per case energy use over three years.
- 3.2.9 **G** The winery has successfully completed certification of ongoing achievement in per case emissions reductions.

3.3 Lighting

- 3.3.1 **Y** The winery uses energy efficient bulbs (CFL or LED) throughout non-production areas of the facility.
- 3.3.2 **Y** Natural lighting is used where and when available and lights are kept off unless necessary.
- 3.3.3 **Y** Where appropriate, light switches are labeled to identify the lights in the winery.
- 3.3.4 **Y** Lighting control such as motion detectors, photocells, or time clocks are used in the winery where appropriate.

3.4 Temperature control

- 3.4.1 **R** Tanks are inspected for coolant leaks annually. Any leaks found are repaired and recorded prior to use.
- 3.4.2 **G** Tanks and lines are fully insulated.
- 3.4.3 **G** Winery refrigerant levels are monitored on an annual basis.
- 3.4.4 **G** The winery site utilizes naturally insulating features on-site—such as caves, berms, and underground buildings—to optimize energy use.
- 3.4.5 **G** The winery site utilizes free cooling to optimize energy use.

4 MATERIALS MANAGEMENT

4.1 Construction materials

- 4.1.1 **Y** The winery facility meets one or more of the following requirements: (1) it was constructed prior to 2008; (2) it uses a pre-existing structure; (3) it was constructed using at least 10% certified sustainable or recycled building materials. Calculate materials percentage by square footage or other appropriate metric.
- 4.1.2 **Y** A sustainability plan is created, implemented, and maintained that addresses local sourcing of materials for winery operations and future expansion of the facility. If the winery operates in a rented space, answer based on sourcing of materials for operations.

- 4.1.3 **G** Over 10% of building materials were purchased from sources within 300 miles of winery. Calculate materials percentage by square footage or other appropriate metric.

4.2 Cellar equipment

- 4.2.1 **R** Wine is only in contact with food grade material, to reduce the risk of contamination.
- 4.2.2 **G** At least 50% of wood used for barrels is sourced from third-party certified sustainably harvested sources (e.g. FSC, PEFC, SFI).
- 4.2.3 **G** At least 50% of barrels are coopered within 1000 miles of winery or are reused from a previous vintage.

4.3 Chemical handling

- 4.3.1 **R** For enological chemicals and cleaning agents identified by LIVE as high-risk, the winery has implemented procedures that at minimum address protocols as set forth on the product(s)' Safety Data Sheet(s).
- 4.3.2 **R** Safety Data Sheets for all enological chemicals and cleaning agents used in the winery are made available for inspector.
- 4.3.3 **R** Chemicals are stored appropriately in secondary containment, segregated from non-like chemicals (acids and bases not stored together), and in a flammable materials cabinet if flammable.
- 4.3.4 **R** The winery is well-ventilated (minimum openable area to outdoors must be 4% of floor area) and has free-draining floors. Wineries without adequate ventilation may compensate with exhaust fans used during caustic winery procedures.
- 4.3.5 **G** If a high-risk enological chemical or cleaning agent was used that has a lower-risk alternative, the winery has taken action toward implementing the use of the alternative.

4.4 Packaging and shipping material

- 4.4.1 **R** Containers used in bottling are recyclable, or made of recycled material.
- 4.4.2 **R** At least 50% of cardboard boxes, separations, pallets, and expandable plastic used in the cellar are biodegradable, recyclable, or made of recycled material.
- 4.4.3 **R** Packaging used for shipping is recyclable, or made from recycled material. Styrofoam is not allowed.
- 4.4.4 **G** Lightweight glass bottles or one-way kegs are used.
- 4.4.5 **G** Refillable containers are used for packaging.
- 4.4.6 **G** Packaging used for shipping is appropriate for size of shipment while still conforming to carrier's requirements

4.5 Office purchasing and policies

- 4.5.1 **R** A sustainability procurement policy is in place and communicated to those with purchasing authority as well as those with regular contact with the public (i.e. tasting room).
- 4.5.2 **G** A paperless policy has been designed and implemented that replaces traditional invoicing, correspondence, and purchasing.

4.6 Basic solid waste disposal

- 4.6.1 **R** The winery facility recycles items from daily operations where recycling service is available.
- 4.6.2 **R** Non-organic matter (bentonite, spent filter material, sludge, etc) is disposed of in accordance with applicable regulations.
- 4.6.3 **G** The winery estimates and documents the weight of solid waste generated annually at the facility.
- 4.6.4 **G** The winery has developed a recycling solution for materials not accepted by public recycling programs.
- 4.6.5 **G** The winery collects closures and capsules for recycling and/or reuse, either from within winery, or from the public.
- 4.6.6 **G** The winery collects glass bottles for recycling and/or reuse, either from within winery, or from the public.
- 4.6.7 **G** The winery collects external packaging for reuse, either from within winery, or from the public.

4.7 Disposal of organic material and potentially hazardous waste

- 4.7.1 **R** Winery has a documented program for storage and disposal of tires, batteries, oils, paints and coating. Employees are trained on this protocol.
- 4.7.2 **G** Organic matter is disposed of in a proper manner (such as on- or off-site composting, or is returned to the vineyard as fertilizer).
- 4.7.3 **G** Chemical composition of organic material is determined and recorded before it is applied to soil.

4.8 Tasting room and events

- 4.8.1 **Y** The winery uses recycled paper and / or post-consumer waste for a majority of its tasting room and event literature. Using alternative fibers instead of virgin wood fibers is also encouraged.
- 4.8.2 **Y** Winery collects glass bottles and closures from events and tasting room operations for recycling where recycling is available.

- 4.8.3 **Y** Winery collects packaging such as cardboard and plastic from events and tasting room operations for recycling, where recycling is available.
- 4.8.4 **G** The winery recycles or uses no aluminum materials for its tasting room and events.
- 4.8.5 **G** Guest restroom facilities use recycled paper, washable cloth, composting paper towels, or hand-blower.
- 4.8.6 **G** A waste-paper recycling policy is in place for events and tasting room operations.

5 WATER MANAGEMENT

5.1 Water quantity

- 5.1.1 **Y** The winery has an effective wastewater measurement system in place.
- 5.1.2 **Y** Wastewater is monitored monthly with confirming records. The winery benchmarks and maintains records of monthly water use and corresponding annual case production, and a written plan is in place to reduce water use in the winery.
- 5.1.3 **G** The winery has developed a baseline facility water balance, identifying water use associated with different winery activities and areas for improvement.

5.2 Water quality and disposal of stormwater and wastewater

- 5.2.1 **R** If the winery is within a municipality, there is a formal agreement in place for disposal of water.
- 5.2.2 **R** If irrigating with wastewater, the winery must follow the agency guidelines dealing with wastewater discharge and maintain adequate documentation of agency approvals.
- 5.2.3 **R** If irrigating with wastewater, a management plan is in place to protect soil.
- 5.2.4 **R** Stormwater and wastewater are kept separate, unless approved by the appropriate agency.
- 5.2.5 **R** If composting waste from winery operations, such as pomace and other materials, steps are taken to ensure that there is no runoff or leaching from the compost pile. This requires covering or surrounding the pile and providing a minimum distance of 300 feet from a riparian zone.

5.3 Salmon-Safe winery protocols

- 5.3.1 **R** The winery has reviewed protocols required for Salmon-Safe and has completed Control Point 5.3.
- 5.3.2 **G** Stormwater runoff from the winery site is treated and infiltrated to minimize water pollution and reduce adverse effects on stream flows.

- 5.3.3 G The property has mapped impervious areas and related stormwater management facilities as well as existing drainage patterns (e.g. depressions, natural swales).
- 5.3.4 G Proper disposal of wastewater is conducted either by connecting with a municipal system or establishing an on-site wastewater disposal system.
- 5.3.5 G The property has mapped stream channels on the property, indicating whether they are fish-bearing, potential fish-bearing, or non-fish bearing.
- 5.3.6 G All riparian areas of streams on the property are identified, mapped, and classified by width of existing buffer and general vegetation types.
- 5.3.7 G Wetlands are identified, classified, and mapped, including whether the wetland historically or currently provides fish habitat.
- 5.3.8 G The use of any pesticides on the Salmon-Safe High Hazard Pesticide List requires advance approval from Salmon-Safe.
- 5.3.9 G Fertilizer and lime use and potential for contamination of stormwater and streams is minimized through adherence to a program that uses alternative cultural and mechanical practices to maintain soil fertility, uses fertilizers with discretion based on soil fertility and plant needs, uses slow reactive fertilizers, and ensures proper application of fertilizer and lime in terms of amounts and timing.

6 WORKER HEALTH, SAFETY, AND BENEFITS

6.1 Restrooms and breaks

- 6.1.1 R Workers have access to hand washing equipment and clean toilet facilities as is described in OSHA 29 C.F.R. § 1910.141.
- 6.1.2 R Workers are given adequate meal periods and rest breaks as required by law. See External Links for references to state requirements.

6.2 Responsibilities, instructions, and training

- 6.2.1 Y A member of the management is clearly identified as the responsible person for worker safety, health and welfare issues.
- 6.2.2 Y New employees receive orientation training including Workers Right to Know, and all training is documented.

6.3 Worker safety

- 6.3.1 Y First aid boxes, eyewashes, and shower stations are available and accessible in the vicinity of the work being done.
- 6.3.2 Y Written accident and emergency procedures describe how to act in the event of an accident or emergency. They must clearly identify the contact persons, indicate the

location of the nearest phone, display an updated list of relevant phone numbers (doctor, ambulance, fire-department, hospital, police, etc) and make the phone accessible all the time.

- 6.3.3 A Hazardous Communications Plan as required by OSHA is kept and made available for inspector.
- 6.3.4 All workers operating dangerous or complex equipment or in enclosed spaces must have received the formal training as mandated by state and federal laws. This training can be performed by a winery employee authorized to do so.
- 6.3.5 Safety training records as required by OSHA are kept and made available for inspector.
- 6.3.6 An OSHA 300 Log as required by OSHA is kept and made available for inspector.
- 6.3.7 If the time-weighted average of noise in any winery task is greater than 85 dB it is designated as a noise area, and hearing protectors are available.
- 6.3.8 Permanent and legible signs must indicate potential hazards (e.g. waste pits, fuel tanks, electrical equipment, toxic material, chemical storage facilities).
- 6.3.9 The winery has undergone an independent assessment of worker health and safety and is making any recommended improvements.

6.4 Hiring, wages, and benefits

- 6.4.1 Workers are provided a written (hard copy or digital) non-discrimination policy pertaining to hiring and employment practices at the winery.
- 6.4.2 Workers are provided a written (hard copy or digital) description of terms of employment and compensation package at the time of hire.
- 6.4.3 Wages paid for regular working hours exceed legal minimums.
- 6.4.4 Agricultural exempt employees are paid overtime wages.
- 6.4.5 The winery gives workers paid time off (sick leave, vacation, and/or family leave).
- 6.4.6 The winery offers healthcare benefits and/or services to workers.
- 6.4.7 The winery offers additional benefits to workers (retirement plan, team building activities, etc.)
- 6.4.8 Worker well-being is regularly assessed and documented, and corresponding workplace improvements are made. See notes for reference materials.

7 COMMUNITY IMPACT AND EDUCATION

7.1 Impact on neighbors

- 7.1.1 The winery demonstrates awareness of and attempts to mitigate any negative impacts on its neighbors, such as noise and light pollution.
- 7.1.2 The winery attempts to positively impact its neighbors and community, through means such as educational events and philanthropic efforts.

7.2 Education of buyers and the public

- 7.2.1 The winery includes information about its sustainable practices in its literature and other communications, or relays its sustainable practices through signage.
- 7.2.2 Winery staff who educate buyers and the public are signed up to receive educational updates from LIVE.
- 7.2.3 The winery includes a sustainability certification claim on labels for wine, as applicable.