



# Navigating Sustainable WA Wine Grape Audits: How to Avoid Common Pitfalls

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#### **General Issues**

- Lack of documented evidence. Evidence can include:
  - Email chains, texts, photos
- → 70% overall, and in each section to pass
- You can make corrective actions, and corrective action plans continuous improvement is the goal
- Use the standard and appendices to guide practices and programs, do not just quote the standard, examples needed
- Many WSU and OSU resources for programs



#### Section 2. Human Resources



- Misconception that policies only apply to farm labour; other staff are relevant too!
- Employee Handbook and Workplace Policies must be made available to employees
- Worker Orientation and Training have training logs, APP, ERP, 1<sup>st</sup> Aid certificates/training documentation available
- ► Farm Labour Contractors license #, ensure contractor is following labour laws.



## Section 3. Vineyard Establishment & Acquisition



- Most of this section can be N/A if vineyard established when purchased.
- If and when purchasing/leasing new sites review this section
- Planting Material Invoices from suppliers, any plant passport documentation
- Irrigation System Ideally designed by a CID, invoices, websites, irrigation plans
- Irrigation Source water licenses, permits, invoices, should be able to demonstrate limits, etc. water rights documentation



#### **Section 4 - Viticulture**



- Documentation of canopy management, crop phenology, fruit quality (TA, Brix, pH etc.), harvest estimates vs actual
  - Calendars
  - Text chains
  - **■** Emails
  - Spreadsheets



## **Section 5 - Water Management**



- → H<sub>2</sub>0 Quality Testing –not just TC and EC. pH, NO<sub>3,</sub> salts, Mg, Ca, Na, Cl, B, HCO<sub>3,</sub> Mn, Dissolved solids etc.
- Water Use Total inches of water use to be documented. Calculate average per acre for all area farmed.
- Pumping efficiency
- Irrigation System DU

  evaluating the distribution of water over a given area to ensure even application



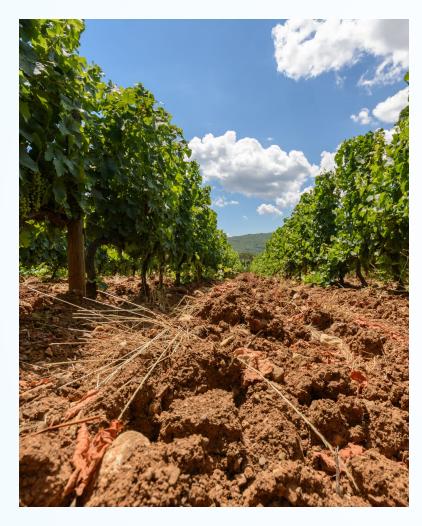
## Irrigation System DU – How to Check!

- 1. Place catch cans at regular intervals across a block to collect water.
- 2. Run the irrigation system for a set period.
- 3. Measure and document the location and amount of water in each catch can.
- 4. Arrange the volumes collected from least to greatest.
- 5. Calculate average of the lowest 25% of measurements.
- 6. Calculate overall average of all measurements.
- 7. DU % = (average of lowest 25% ÷ total average) x 100

Higher DU percentage indicates better uniformity, values generally above 80% considered acceptable, aim for 90% or above is often the goal for optimal water distribution. Maintain system, service pumps, check lines etc.



## Section 6 - Soil Management Plan



- Identify sensitive zones wind & water erosion, compaction and describe how this is mitigated – cover crops, large boom sprayer to reduce tractor use etc.
- Nutrition program soil tests, foliar tests, fruit quality goals, changes based crop estimates etc.
- Some plans are lacking site specific detail
- Refer to appendix A for requirements



#### **USDA Web Soil Survey Tool is a Great Resource To Start With!**

Soil Type	WaB
USDA Farmland Classification	Prime Farmland
Soil Texture	silt Loam
Soil Depth	>200 cm
Soil Drainage	well drained
Soil Organic Matter	1.47
Slope	Vineyard 0-1% slope. South facing slope at south edge ≤ 8%
Flooding Frequency Class	Flooding not probable
Ponding Frequency Class	None
K-Factor Whole Soil Water Erosion Index (rill and sheet erosion factor tons/acre/hour/inch of rain)	0.43
Wind Erodability Group	5 (moderate to low)





#### Section 7 – Pest, Weed, Vertebrate & Bird Management









- Do not just quote the standard
- Identify specific issues, but be aware of others that may arise
- ■WSU Field Guide for IPM Management and Appendix A has all the info you need
- Document monitoring quantitative where possible
- Need to monitor weekly and also beneficials for full marks



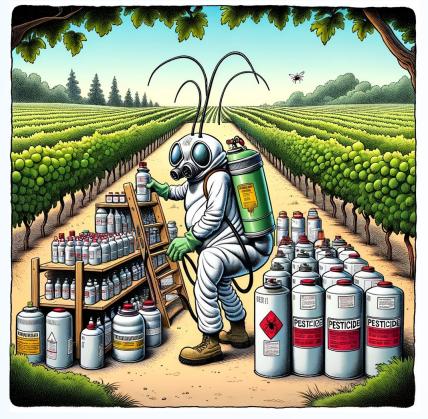
#### **Section 8 - Prohibited Materials and Watch Lists**



- Pesticide Use: Prohibited Materials and Watch Lists – cross check active ingredients with watch lists, and check for "warning" and "danger"
- These are OK WITH written justification back it up- severe problem, and evidence that you are rotating with less harmful inputs
- Ask your PCA, chemical company for less harmful inputs



### Section 8 – Materials Handling



- Even if you are organic, you must store PPP properly and follow all BMPs!
- Need documented drift management practices
  - Can be part of IPM plan
- Pesticide Application Mandatory to level 3
  - Licensed private PPP applicator or commercial PPP applicator is on premises and actively supervises all applications
  - All pesticide applications are documented, including date, time, weather and reason for application



## Section 9 - Whole Farm Ecosystem & Community



- Maps- tend to be missing PPP storage, wild habitat environmentally sensitive sites, environmental features, and neighboring properties.
- Ecosystem plan should include identification of and practices that support:
  - natural corridors/natural enemy refuges
  - biodiversity enhancement
  - management of invasive species
  - Management of sensitive areas
  - threatened/endangered species

