



BIOFILTRO

worm powered wastewater solutions



General Waste Discharge Requirements for Wineries: **Achieve Compliance with Worms and Regenerative Processes**

BioFiltro is a Davis, CA based firm that provides a regenerative solution for wastewater treatment. Our patented Biodynamic Aerobic (BIDA®) technology harnesses the power of worms and microbes to digest wastewater contaminants, such as BOD5, TSS, and Total Nitrogen. Within an energy-efficient four-hour process, out flows clean water compliant with the California State Water Resources Control Board (SWRCB) winery discharge requirements, allowing wineries to reduce their land application area and reuse water for irrigation. Instead of generating sludge, our co-benefit is worm castings, a nutritious soil amendment. The rich microbial activity within these castings promotes soil health, nutrient cycling, crop yield, water retention, and carbon sequestration.

What's Changing?

- On January 20, 2021, the SWRCB adopted a new general order for wineries that discharge process water to land.
- BOD5, TSS, and Total Nitrogen have new discharge requirements.
- May require pond upgrades or pretreatment to meet land application requirements:
 - Maximum BOD loading of 100lbs per acre per day.
 - Nitrogen application at crop agronomic rate
- Will likely require subsurface disposal systems (SDS) upgrades (e.g., drainfield, leachfield, infiltration, dispersal area) to meet discharge requirements:
 - 10 mg/L Total Nitrogen, 300 mg/L BOD5, and 330mg/L TSS
 - Maximum hydraulic loading limit of one gallon per square foot of discharge trench per day
- Discharge of commingled process water and domestic wastewater to a SDS is prohibited
 - May be allowed if process wastewater is pretreated separately
- Additional monitoring and reporting
- Wineries enrolled in sustainability certifications can receive annual fee reductions.

Why BioFiltro?

- ✓ Removes 90-99% of BOD5 and TSS
- ✓ Removes 70-95% of Total Nitrogen
- ✓ Up to 95% Less Energy Than The Competitors
- ✓ Reuse Water for Irrigation
- ✓ Modular and Scalable to Move and Grow with Your Business
- ✓ Virtually No Odors & Minimal Noise
- ✓ Nature-Based Technology
- ✓ Worm Castings Generated As a Healthy Soil Amendment
- ✓ Sludge-Free
- ✓ Automated

Contact BioFiltro to schedule a free consultation, achieve compliance, and boost your sustainability.

www.BioFiltro.com



Overview of Statewide General WDRs for Wineries

Who is Required to Enroll Under the New Waste Discharge Requirements?

- Wineries that discharge more than 10,000 gal per year of process wastewater to land

Tier	Facility Process Water Design Flow (gal/year)*
Exempt	<10,000
Tier 1	10,000-30,000
Tier 2	30,001-300,000
Tier 3	300,001-1,000,000
Tier 4	1,000,001-15,000,000

*Process water flow shall be measured directly via a flowmeter or, for Tier 1 and Tier 2 facilities only, may be calculated using an accurate alternative method (e.g., assumed equal to facility source water use, determined from a storage tank water balance).

Wineries not required to enroll:

- Discharge less than 10,000 gal per year.
- Discharge process wastewater directly to a community sewer
- Facilities that hold and haul all wastewater off site
- Facilities with existing individual Waste Discharge Requirements, or conditional waivers to WDRs

How to Prepare for Enrollment:

- Identify Enrollment needs:
 - Which process wastewater system do you have? (Pond, Subsurface Disposal, Other)
 - What tier do you fall under?
 - What is your current wastewater discharge quality?
 - Conduct sampling of existing water & wastewater to determine baseline data.
- Determine eligibility
 - Take SWRCB Survey:



Enrollment

- Submit Technical Report & Notice of Intent (NOI) to Regional Water Quality Control Board by January 20, 2024.
- Approval & Construction (if necessary)
 - Expect approximately 3-6 months for Board review and issuance of Notice of Applicability (NOA)
 - Full compliance with the order must occur within 5 years of the date of the NOI
- Conduct daily monitoring of system during Land Area Application (LAA) discharge
- Submit annual reports (bi-annual for Tier 4)
- See Wine Institute's compliance tools with Monitoring and Reporting Requirements:



Revised March 2023



**Contact a BioFiltro
Sales Engineer:**



Sarah Haupt
shaupt@biofiltro.com
714-496-4223



Jim Rosenbaum
jrosenbaum@biofiltro.com
916-335-6864