

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401**

**GENERAL WASTE DISCHARGE REQUIREMENTS
ORDER NO. R3-2008-0018
for
DISCHARGES OF WINERY WASTE**

and

**CATEGORICAL WAIVER OF WASTE DISCHARGE REQUIREMENTS AND WAIVER OF
REQUIREMENT TO SUBMIT REPORT OF WASTE DICHARGE
for
CERTAIN SMALL WINERIES**

The California Regional Water Quality Control Board, Central Coast Region (hereafter "Central Coast Water Board") finds:

What is Winery Waste?

1. Winery waste is defined as any byproduct of winemaking operations. Winery waste includes, but is not limited to: pomace (e.g., grape skins, stems, and seeds), lees (wine sediment), tank/barrel/bottle/floor/crush pad wash water (which may contain sterilization and/or preservation chemicals), and water softener waste brine. Typical raw winery wastewater has the following characteristics:

Parameter	Units	Crush Season Range	Non-Crush Season Range
pH	--	2.5 - 9.5	3.5 - 11
BOD ₅	mg/L	500 - 12000	300 - 3500
Dissolved Oxygen	mg/L	0.5 - 8.5	1.0 - 10
Settleable Solids	mg/L	25 - 100	2 - 100
Total Suspended Solids	mg/L	40 - 800	10 - 400
Total Nitrogen	mg/L as N	1 - 40	1 - 40
Nitrate	mg/L as N	0.5 - 5	--
Phosphorus	mg/L	1 - 10	1 - 40
Sulfate	mg/L	10 - 75	20 - 75
Total Dissolved Solids	mg/L	80 - 2900	80 - 2900
Sodium	mg/L	35 - 200	35 - 200
Chloride	mg/L	3 - 250	3 - 250

Basis for General Waste Discharge Requirements

2. California Water Code Section 13260 requires any entity discharging waste or proposing to discharge waste, other than to a community sewer system, which could affect the quality of the waters of the State, to file a Report of Waste Discharge with the Regional Board.

3. Whether an individual discharge of winery waste may affect the quality of waters of the State depends on the quantity of waste, the quality of waste, extent of treatment, soil characteristics, distance to surface water, depth to groundwater, and other factors. Wineries range in size from small, family-run wineries to very large, commercial winemaking operations producing several million gallons of wine per year.
4. In general, waste discharges from commercial winemaking operations that discharge to other than a community sewer system (hereafter "discharger" or "winery") may affect waters of the State and are required to submit a Report of Waste Discharge to the Regional Board.
5. A completed *Notice of Intent (NOI) to Comply with the Terms of the General Waste Discharge Requirements for Discharges of Winery Waste* (Attachment B) is equivalent to a Report of Waste Discharge.
6. In accordance with California Water Code Section 13263(i), wineries covered under these *General Waste Discharge Requirements for Discharges of Winery Waste* (hereafter "General WDRs"); (1) produce waste by similar operations, (2) involve similar types of waste, (3) require similar treatment standards, and (4) are more appropriately regulated under General WDRs.

General Waiver of Waste Discharge Requirements

7. California Water Code Section 13269 authorizes the Water Board to waive reports of waste discharge and waste discharge requirements [Sections 13260(a) and (b), 13263(a), and 13264(a), summarized below] for a specific discharge or specific types of discharges if the Water Board determines that the waiver is consistent with the Basin Plan and other applicable water quality control plans and is in the public interest. A waiver may not exceed five years in duration, but may be renewed by the Water Board. A waiver must be conditional and may be terminated at any time.
 - a. California Water Code Sections 13260(a) and (b) require a report of waste discharge from any person or agency proposing to discharge waste or construct an injection well.
 - b. California Water Code Section 13263(a) provides Regional Boards with authority to issue waste discharge requirements for any proposed or existing discharge that could affect water quality.
 - c. California Water Code Section 13264(a) prohibits waste discharge without discharger submittal of a report of waste discharge and Regional Board adoption of waste discharge requirements or Regional Board issuance of a waiver.
8. Waivers may be granted for discharges to land and may not be granted for discharges to surface waters or conveyances thereto.
9. Waivers granted for discharges that do not pose a significant threat to water quality, where such waivers are not against the public interest, enable staff resources to be used effectively and avoid unnecessary expenditures of limited resources.
10. The Central Coast Water Board defines "small wineries" as those wineries crushing less than or equal to 160 tons of grapes per year, or producing less than or equal to 10,000

cases or 26,000 gallons of pressed wine per year. Small wineries disposing of wastewater to land generally do not pose a significant threat to water quality when depth to groundwater at the disposal area is greater than 50 feet, provided all other conditions of this Order are met. Small wineries reusing water for irrigation generally do not pose a significant threat to water quality when depth to groundwater at the reuse area is greater than eight feet, provided all other conditions of this Order are met. Where the discharger provides documentation of these conditions and the Executive Officer determines that the discharge will comply with the conditions of the waiver, a waiver of the requirements to provide a report of waste discharge and to obtain waste discharge requirements is in the public interest. The waiver of monitoring requirements pursuant to CWC Section 13269(a)(3) is also appropriate.

11. Issuance of a waiver does not relieve the discharger of the obligation to comply with other more stringent local, state, or federal regulations prescribed by other agencies or departments.
12. The Central Coast Water Board encourages direct regulation of small winery waste discharges by authorized and qualified local agencies where such regulation is mutually beneficial.
13. Although a discharge may qualify for waiver enrollment, the Water Board reserves the right to regulate that discharge through other programs or Water Board actions (such as enforcement orders, individual or general waste discharge requirements, general orders, etc.).

Who Must Apply? And When¹?

14. **Winery without WDRs** – Any winery not currently covered by WDRs or a waiver of WDRs must apply for coverage under these General WDRs by March 7, 2008.
15. **Winery with Individual WDRs** – For wineries currently covered by individual WDRs, the Water Board will consider whether to regulate each winery under these General WDRs at or before the time the individual WDRs are scheduled for review or renewal. The date of review is specified within the individual WDRs. If Water Board staff determines that regulation under these General WDRs is preferable to individual WDRs, staff will require the Discharger to submit a NOI.
16. **Winery with Waiver of WDRs** – Under California Water Code Section 13269, all waivers of waste discharge requirements (WDRs) expire five years after the date of issuance. The Water Board may consider whether to regulate any winery covered by an individual waiver of WDRs or by enrollment under the Categorical Waiver of Waste Discharge Requirements for Certain Small Wineries (Small Winery Waiver) or General Waiver under this Order. If Water Board staff determines that regulation under this Order is preferable to the existing waiver or waiver enrollment, staff will require the Discharger to submit a NOI.

Is a Fee Required?

17. **Annual Fee** – An annual fee is required for coverage under General WDRs. The annual fee depends on the discharge's Threat to Water Quality and Complexity Rating. A fee schedule

¹ If you have any questions about whether or not your facility must apply for coverage under these General WDRs, you may contact Regional Board staff at (805) 549-3147.

is found in California Code of Regulations Title 23, Division 3, Chapter 9, Section 2200. Small wineries enrolled under the categorical waiver of WDRs of this Order must pay a one-time application fee corresponding to a Threat to Water Quality and Complexity Rating of 3C.

Is Monitoring Required?

18. **Monitoring and Reporting** – Monitoring and Reporting Program No. R3-2008-0018 (General MRP) is part of this Order and is included as Attachment A. The General MRP requires dischargers enrolled in General WDRs to perform regular monitoring and reporting of water supply, wine production, chemical usage, effluent, septic system(s), disposal area(s), and solid waste disposal. Groundwater and/or disposal area soils monitoring may also be required. The General MRP may be modified by the Executive Officer. Notwithstanding the waiver of monitoring requirements for small wineries subject to a waiver, the Executive Officer may require any small winery to conduct monitoring and reporting.

Basis of Requirements

19. **Basin Plan** – The *Water Quality Control Plan, Central Coast Basin* (Basin Plan) incorporates State Board plans and policies by reference and contains a strategy for protecting beneficial uses of surface and ground waters throughout the Region. This Order requires dischargers to comply with all applicable provisions of the Basin Plan.
20. **Beneficial Uses** – Existing and potential beneficial uses of groundwater within the Central Coast Region include municipal and domestic supply, agricultural supply, and industrial process and service supply.

Regulatory Considerations

21. **Storm Water** – Wineries with industrial materials, equipment, or activities that are exposed to storm water shall obtain coverage under the Statewide General Storm Water Permit for Industrial Activities. Wineries should contact Regional Board storm water program staff at (805) 549-3147 for assistance in determining whether to enroll in the Storm Water Permit. Obtaining coverage under this Order does not excuse the requirement to seek Storm Water Permit coverage.
22. **Vineyards** – Dischargers that irrigate commercial vineyards must obtain coverage under the *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands* (Agricultural Waiver). Vineyards should visit our website at <http://www.waterboards.ca.gov/centralcoast/AGWaivers/Index.htm> or contact Water Board Agricultural Waiver program staff at (805) 549-3147 to determine their applicability.
23. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or other local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdiction.
24. **California Environmental Quality Act** - The adoption of these General WDRs and Waiver is intended to protect water quality. Authorization of discharges under these General WDRs and Waiver from existing facilities that have not expanded the amount of waste they discharge is categorically exempt from the provisions of the California Environmental Quality Act

("CEQA", Public Resources Code sections 21000 et seq.) pursuant to sections 15301, exemption for existing projects, and 15308, actions by regulatory agencies for the protection of the environment.

25. **California Environmental Quality Act, New and Expanded Wineries** – New wineries and expansion of existing wineries will not be covered by this Order until the Discharger submits CEQA documents adopted or certified by a local lead agency or the Water Board determines the facility is exempt from CEQA.
26. **Anti-Degradation** – The discharge complies with State Board Resolution No. 68-16 (titled "Statement of Policy with Respect to Maintaining High Quality Waters in California" and commonly referred to as the "Antidegradation Policy").
27. **Water Code Section 13267.** The monitoring and reporting requirements in these General WDRs and in Monitoring and Reporting Program No. R3-2008-0018 are necessary to determine compliance with these waste discharge requirements and to determine the facility's impacts, if any, on receiving water. The evidence in support of requiring these reports is discussed in the above findings.
28. Violations of this Order may result in enforcement actions as authorized under the California Water Code.
29. **Public Notification** – The Water Board has notified all known potential dischargers and all other known interested parties of the intent to adopt these General WDRs and Waiver.
30. **Public Meeting** – The Water Board, in a public meeting on February 8, 2008, heard and considered all comments pertaining to the revision of these General WDRs and Waiver.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to Sections 13263, 13267, and 13269 of the California Water Code, a discharger of winery waste shall comply with the following:

A. APPLICATION PROCESS

1. A discharger seeking authorization to discharge under the General Order or a waiver of WDRs shall submit a complete *Notice of Intent (NOI) to Comply with the Terms of the General Waste Discharge Requirements for Discharges of Winery Waste*. The NOI form is included as Attachment B of this Order. The information required with the NOI is equivalent to a Report of Waste Discharge.
2. Coverage under the General WDRs or Waiver will take effect when the discharger receives written notification of enrollment, or waiver, from the Executive Officer.
3. The Water Board reviews enrollments and may revoke any enrollment deemed inappropriate.
4. Wineries covered under the General WDRs or Waiver shall submit an updated NOI to the Executive Officer when there is any change in the information submitted within its original NOI, or any change in activities at the facility, that may affect the quality or quantity of the waste discharge.

5. This Order does not authorize discharges from facilities that have not submitted a NOI or that have not received a notice of enrollment from the Executive Officer.
6. The Executive Officer may require any discharger covered under the General WDRs or Waiver to apply for and obtain individual WDRs. If individual WDRs are issued for a discharge, then the applicability of the General WDRs or Waiver for the discharge is immediately terminated on the effective date of the alternative individual WDRs.
7. **Small Winery Waiver of WDRs** – Waste discharge requirements are hereby waived for small wineries if they satisfy the following:
 - a) Submit a complete NOI and application fee to the Water Board;
 - b) Provide adequate documentation that groundwater first occurs in a disposal area at least 50 feet below ground surface or 8 feet below ground surface in a reuse area;
 - c) Provide adequate documentation that the facility is designed to comply with the Prohibitions, Recommendations, and Specifications of these General WDRs;
 - d) Allow Water Board staff to visit your facility if deemed necessary by staff;
8. **Small Winery Application Waiver** - The requirement to submit an NOI is hereby waived for small wineries, provided the winery is under the jurisdiction of a local agency that the Water Board has certified has adequate ordinances and staff resources to appropriately regulate these facilities. Water Board certification may be in the form of a memorandum of agreement between the local agency and the Water Board.

B. PROHIBITIONS APPLICABLE TO GENERAL WDRs AND ALL WAIVER ENROLLEES

1. The discharge of any waste to surface waters is prohibited.
2. The discharge of winery wastewater to subsurface treatment and disposal systems is prohibited, unless specifically allowed in writing by the Executive Officer.
3. The on-site discharge of water softening brine is prohibited, unless specifically allowed in writing by the Executive Officer.
4. The discharge of waste other than winery wastewater (e.g., domestic wastewater) into a surface treatment and disposal system (e.g., ponds, spreading basins) is prohibited.
5. The discharge of waste classified as "hazardous," or "designated," as defined in California Code of Regulations, Title 22, Section 66261.3 et seq. and California Water Code Section 13173, respectively, to any part of the wastewater system is prohibited.
6. The discharge or reuse of waste on land that is not under the control of the discharger is prohibited unless specifically authorized by the Executive Officer.
7. Bypass or overflow of treated or untreated winery waste from transport, treatment, and disposal facilities are prohibited.
8. Creation of a condition of pollution, contamination, or nuisance, as defined by of California Water Code Section 13050, is prohibited.
9. The discharge of stillage is prohibited.

C. RECOMMENDATIONS FOR GENERAL WDRs AND ALL WAIVER ENROLLEES

Pollutant Source Control Guidelines

1. Water-conserving devices (e.g., pressure washers, trigger-handled spray nozzles, automatic barrel cleaners, stainless steel tanks, and smooth floors) should be used to minimize wastewater generation.
2. Use of cleaning chemicals should be minimized. Ozonated washwater is preferred for cleaning.
3. When using water-softening devices, canister-type water softeners or similar alternatives should be used to prevent the discharge of salt brine. Where self-regenerating water softeners are used, the number of connections to the water softener should be minimized.
4. Lees, bentonite, and diatomaceous earth should be excluded from treatment and disposal systems to the extent practicable.

Design Guidelines

5. Large solids should be separated from winery wastewater through redundant screening and removal systems (e.g., with screened floor drains, rotary drum screens, and/or settling basins) prior to further treatment and disposal.
6. Winery wastewater treatment and disposal systems should be designed to accommodate projected future growth in wine production.
7. Winery wastewater treatment and disposal systems should beneficially reuse (e.g., for vineyard irrigation, frost protection, dust abatement) winery wastewater wherever feasible.
8. Where the disposal area's soil buffering capacity may be insufficient, winery wastewater pH should be neutralized to between 6.0 and 8.5 prior to disposal/reuse. Otherwise, disposal area soils and/or groundwater monitoring may be required.
9. To prevent odor nuisance and impacts to groundwater where raw winery wastewater is discharged to land surface, organic loading rate should not exceed a 30-day average of 100 pounds of Biochemical Oxygen Demand (BOD₅) per acre per day.
10. To prevent failure of constructed wetland, settleable solids in winery process water should be removed in a pretreatment system prior to disposal in constructed wetland.
11. The use of septic systems, particularly subsurface absorption systems, for winery wastewater is discouraged. However, if septic systems are used, they shall be designed for the unique characteristics of winery wastewater. In particular, the following conditions should be addressed by the septic system design:
 - a. Lees, bentonite, and diatomaceous earth may clog and destroy a soil absorption system and therefore should be excluded from the septic system.

- b. Winery wastewater flow fluctuates greatly and solids (particularly lees) do not settle easily; therefore, large septic tanks and effluent filters are required to prevent solids from passing into and degrading the soil absorption system. The hydraulic detention time of septic tanks should be no less than 48 hours. Soil absorption system sizing should be based on the peak daily flow during the crush season.
 - c. Septic tank contents should be easily accessible to inspect solids levels, pump out solids, and clean/replace effluent filters.
 - d. The organic content of winery wastewater effluent from septic tanks, as measured by Biochemical Oxygen Demand (BOD₅), is generally much greater than domestic wastewater. The organic matter causes excessive slime formation that will clog a soil absorption system if the soil absorption system is not periodically rested. Dual soil absorption systems are necessary to allow alternating wastewater loading and resting.
 - e. Infiltration surface should be sized based on organic loading, or hydraulic loading, whichever is more conservative (see Environmental Protection Agency (EPA) manual and consider soil type).
 - f. Inspection risers should be installed in soil absorption systems to monitor water levels.
12. Winery wastewater treatment and disposal systems should be designed to minimize chemical addition and maintenance.
 13. Collected screenings and other solids removed from liquid wastes, including pomace and lees, should be composted at the site when possible. Compost heaps should be located adjacent and upgradient to vineyards so that compost runoff goes directly to vineyard. Composting piles should be aerated or rotated enough to aid decomposition, but not to an extent to dry out piles. Good composting practices will minimize odors and pests.

D. SPECIFICATIONS

General Specifications

1. Winery wastewater shall be captured, treated, and disposed of separately from domestic wastewater. Combined subsurface disposal shall only occur if authorized in writing by the Executive Officer.
2. Winery wastewater treatment and disposal systems shall be designed for the maximum daily flow of wastewater and organic loading generated (generally at the peak of crush season), including flows resulting from precipitation.

Specifications for Flow Metering

3. Where a monitoring and reporting program specifies metered flow rate measurement, wastewater flow rates shall be measured with an accurate flow measurement method or device.

Specifications Applicable to Winery Wastewater Treatment Ponds

4. Winery wastewater treatment ponds shall be lined with either a relatively impermeable membrane, two feet of soil with a permeability of less than 10⁻⁶ centimeters per second, or an engineered alternative approved in writing by the Executive Officer.

5. Winery wastewater treatment ponds shall be designed to contain all wastewater flows and rainfall from any 100-year, 24-hour storm event.
6. Winery wastewater treatment ponds shall have a foundation or base capable of providing support for the structures, and capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift and all effects of ground motions resulting from at least the maximum probable earthquake, as certified by a registered civil engineer or certified engineering geologist.

Specifications Applicable to Constructed wetlands

7. Constructed wetlands shall be graded to prevent accumulation of storm water in wetland.

Specifications Applicable to Subsurface Soil Absorption Systems

8. Subsurface soil absorption systems shall be designed in accordance with Section VIII.D.3 of the Basin Plan.
9. The distance between any soil absorption system's trench bottom and groundwater, including perched groundwater, shall be no less than the following:

Percolation Rate (minutes / inch)	Distance (feet)
<1	50
1 – 4	20
5 – 29	8
>30	5

10. No part of the disposal system(s) shall extend to a depth where waste may pollute groundwater.
11. New winery wastewater systems with a subsurface disposal area shall reserve sufficient land area for 100-percent replacement of the disposal area.
12. The wastewater system shall not be located where it will alter the existing drainage pattern of the site, including alteration of the course of a stream or river.

Effluent Limitations

13. Winery wastewater flow shall not exceed the design capacity of the treatment and disposal system. Wastewater flows shall be limited to the flows described in the NOI.
14. Where winery wastewater is discharged to land (such as to a spreading basin or vineyard), organic loading rate shall not exceed 300 pounds of Biochemical Oxygen Demand (BOD₅) per acre per day at any time.
15. The discharger shall not discharge salt brine from water-softening devices into winery process water stream unless approved in writing by the Executive Officer. The Executive Officer may condition approval on groundwater monitoring and/or a salts management plan for facilities discharging salt brine into winery process water streams.

Groundwater Limitations

16. The discharge shall not cause a statistically significant increase of mineral constituent concentrations in underlying groundwater.
17. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22 of the California Code of Regulations or Table 3.8 of the Basin Plan.

Operation Specifications

18. At least two feet of freeboard shall be maintained at all times in any pond or spreading basin containing winery wastewater. Staff gauges shall be installed to monitor water levels.
19. The dissolved oxygen concentration in the upper zone (one foot) of aerated or oxidation pond systems shall not be less than 1.0 mg/L at any time.
20. Where spreading basins are used for treatment and disposal, the spreading basins shall be operated in a regular rotating sequence, with a rotation frequency no less than weekly, or as agreed upon by the Executive Officer. The spreading basin bed slope shall be maintained to ensure even distribution of wastewater and prevent standing water. Wastewater contained in spreading basins shall be no deeper than four (4) inches.
21. Solids accumulation in all septic tanks shall be measured at least annually and cleaned when it appears that either the bottom of the scum layer will be within four (4) inches of the bottom of the outlet device or the sludge level will be within ten (10) inches of the outlet device before the next scheduled inspection.
22. Dual leachfield systems shall be operated in a regular rotating sequence, with a rotation frequency no less than annually.

Solids Disposal Specifications

23. Collected screenings and other solids removed from liquid wastes that will not and/or cannot be used agronomically shall be disposed of at a legal point of disposal, and in accordance with Title 27, Division 2 of the California Code of Regulations.
24. Runoff from compost areas, containing collected screenings and other solids removed from liquid wastes, shall not discharge to any surface water body.
25. In no case shall accumulated sludge from a wastewater pond be used as an agronomic addition to fields without written authorization from the Executive Officer.
26. If accumulated sludge from a wastewater pond will be used as an agronomic addition to fields, a proposal containing, at a minimum, the following information shall be submitted in writing to the Executive Officer before commencement:
 - a. The physical properties of the sludge to be removed from the pond, including the volume and percent solids.
 - b. A summary of laboratory analytical results for a composite sludge sample. At a minimum, the analyses shall include pH, cadmium, chromium, copper, lead, nickel, zinc, and total nitrogen. A leachability test of the sludge may be required if deemed necessary by the Executive Officer.

- c. Descriptions of the proposed land application areas, including a map denoting watercourses, approximate depth to groundwater, acreage and the crops to be grown thereupon.
- d. Calculations showing the sludge will be applied at reasonable agronomic rates (based on nutrient uptake of the crop).
- e. A project schedule. Sludge application shall be confined to the dry season, between April 15 and October 15 each year. Sludge shall be spread and incorporated into the soil in a manner to prevent erosion, runoff or any nuisance conditions.
- f. A statement verifying that no hazardous waste or domestic waste has been discharged to the ponds.

Wastewater Recycling/Re-Use Specifications

27. Treated winery wastewater shall not be applied to land within 24 hours of a forecasted rain event, during rainfall, 24 hours after a rainfall event, or when soils are saturated.
28. Treated winery wastewater shall be applied in such a manner so as not to exceed vegetative nutrient demand.
29. Land application of treated winery wastewater shall be managed to prevent ponding, runoff, and erosion.
30. There shall be no connection between a potable water supply and a treated winery wastewater distribution system.
31. All piping, valves, and outlets shall be marked to differentiate treated winery wastewater from other sources of water.

E. PROVISIONS

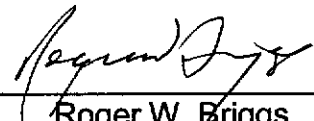
1. Order No. R3-2002-0084, adopted on November 1, 2002, is hereby rescinded except for purposes of enforcement. General Order No. R3-2008-0018 supersedes the rescinded WDRs.
2. Dischargers enrolled in the General WDRs shall comply with Monitoring and Reporting Program R3-2008-0018, included as Attachment A of this Order, and any revisions prescribed thereto by the Executive Officer.
3. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating and site management personnel shall be familiar with its contents.
4. In the event the discharger wishes to terminate authorization under this Order, the discharger shall submit a Notice of Termination (NOT). A Water Board staff inspection of the facility may be required prior to terminating coverage. Termination from coverage will occur on the date specified in the NOT, unless notified otherwise. All discharges shall cease before the date of termination, and any discharges on or after this date shall be considered in violation of this Order unless covered by other WDRs.

5. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Executive Officer.
6. The discharger shall take all reasonable steps to prevent any discharge in violation of this Order.
7. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) to achieve compliance with this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with this Order.
8. The discharger shall furnish the Water Board, within a reasonable time, any information that the Board may request to determine compliance with this Order.
9. The discharger shall allow the Water Board or its authorized representatives to:
 - a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records pertinent to this permit are kept;
 - b. Inspect and photograph any facilities, equipment (including monitoring and control equipment), practices, or operations pertinent to this Order;
 - c. Have access to and copy any records pertinent to this permit; and
 - d. Sample or monitor for the purposes of assuring permit compliance.
10. All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the discharger to enforcement action pursuant to Section 13268 of the California Water Code. The Water Board will base all enforcement actions on the date of Order adoption.
11. All reports, NOI, or other documents required by this Order, and other information requested by the Water Board shall be signed by a person described below or by a duly authorized representative of that person.
 - a. For a corporation: by a responsible corporate officer such as: (a) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (b) any other person who performs similar policy or decision-making functions for the corporation; or (c) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
12. Any person signing a document under Provision 11 makes the following certification, whether written or implied:

"I certify under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

13. The discharger shall give notice to the Water Board as soon as possible of any planned alterations to the permitted facility that may change the nature or concentration of pollutants in the discharge.
14. Winery process wastewater discharges for which provisions of California Water Code Sections 13260, 13263, or 13264 were waived under the previous General Winery WDRs may be issued individual waste discharge requirements, enrolled in general waste discharge requirements, regulated through other programs, enrolled in the Waiver adopted in this Order, or granted a waiver through other actions of the Water Board.
15. The Water Board's Executive Officer is authorized to enroll and terminate enrollment in the Waiver and General WDRs adopted by this Order.
16. This Order will be reviewed on or about **February 8, 2013**, or sooner at the discretion of the Water Board. A discharger enrolled under General WDRs will be automatically enrolled under the reissued General WDRs, unless a NOT is submitted to terminate coverage. The Waiver contained in this Order will expire on February 8, 2013, unless terminated or reissued by the Water Board before that date.
17. The Water Board may review this Order, including the General WDRs and the Waiver, at any time and may modify or terminate this Order in its entirety or for individual dischargers as appropriate.

I, Roger W. Briggs, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 8, 2008.



Roger W. Briggs,
Executive Officer

2-15-08

Date



MONITORING AND REPORTING PROGRAM NO. R3-2008-0018

for

**DISCHARGES ENROLLED UNDER
GENERAL WASTE DISCHARGE REQUIREMENTS
FOR DISCHARGES OF WINERY WASTE
CENTRAL COAST REGION**

Dischargers regulated under the General WDRs for Discharges of Winery Waste shall be subject to the following monitoring and reporting requirements, unless such requirements are modified or waived by the Executive Officer. Additional requirements may be added by the Executive Officer, as needed to adequately ensure compliance with the General WDRs.

WATER SUPPLY MONITORING

Representative samples of the winery water supply shall be collected and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis
Total Dissolved Solids	mg/L	Grab	Annually
Chloride	mg/L	Grab	" "
Sodium	mg/L	Grab	" "
Boron	mg/L	Grab	" "
pH	--	Grab	" "

PRODUCTION MONITORING

Winery production shall be reported as follows:

Parameter	Units	Sample Type	Reporting Frequency
Start and End of Crush	Dates	--	Annually
Duration of Crush	Days	--	" "
Grapes Crushed	Tons/year	Measured	" "
Wine Production	Cases/year	Measured	" "

CHEMICAL USAGE MONITORING

A summary of volumes and types of any chemicals used at the winery shall be included with each monitoring report.

EFFLUENT MONITORING

Representative samples of effluent from the treatment system, immediately prior to disposal, before the treated wastewater is blended with any other water source, shall be collected and analyzed according to the following schedule:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis		
			Wineries generating less than 3,000 gpd wastewater at all times.	Wineries generating greater than 3,000 gpd, but less than 50,000 gpd wastewater at any time	Wineries generating greater than 50,000 gpd wastewater at any time
Flow	gallons per day (gpd)	Metered	Weekly	Daily during crush, and weekly for the remainder of year	Daily
Peak Daily Flow	gpd	Calculated	Annually	Annually	Annually
Avg. Daily Flow During Crush	gpd	Calculated	Annually	Annually	Annually
pH	pH units	Grab	At least twice during crush	Weekly during crush, and monthly for the remainder of year	Daily during crush, and weekly for the remainder of year
Biochemical Oxygen Demand (BOD ₅) or Chemical Oxygen Demand (COD)	mg/L	Grab	Annually, during crush	Semiannually, at least once during crush	Quarterly, at least twice during crush
Total Dissolved Solids	mg/L	Grab	" "	" "	" "
Chloride	mg/L	Grab	" "	" "	" "
Sodium	mg/L	Grab	" "	" "	" "
Nitrate (as N)	mg/L	Grab	" "	" "	" "
Total Nitrogen	mg/L	Grab	" "	" "	" "
Sulfate	mg/L	Grab	" "	" "	" "
Dissolved Oxygen	mg/L	Grab	" "	" "	" "
In addition to the above, facilities which use any form of chlorine for cleaning and/or disinfection shall analyze effluent samples for the following:					
Total Chlorine Residual	mg/L	Grab	Annually (after equipment cleaning)	Annually (after equipment cleaning)	Annually (after equipment cleaning)
1,2 Dichloroethane	mg/L	Grab	" "	" "	" "
1,1 Dichloroethylene	mg/L	Grab	" "	" "	" "
1,1,2 Trichloroethane	mg/L	Grab	" "	" "	" "

SEPTIC SYSTEM MONITORING

Solids accumulation in all septic tanks shall be measured semiannually, before and after crush, and the tanks cleaned when it appears (a) the bottom of the scum (floating) layer will be within 4 inches of the bottom of the outlet device or (b) the sludge level will be within 10 inches of the outlet device before the next scheduled inspection. The leachfield areas shall be inspected each month to evaluate adequate system operation and compliance with this Order. Leachfields should be alternated no less than semiannually to prevent clogging and surfacing effluent. Notations shall be made in a bound log book and include observations of sludge and scum levels and dates which leachfields are alternated. A summary of the entries made in the log shall be submitted with each monitoring report.

DISPOSAL AREA MONITORING

The Discharger shall inspect and document the condition of winery wastewater disposal areas at least once per week during the crush season. Notations shall be made in a bound log book and include observations of available freeboard in ponds, algal growth in ponds, excessive ponding and soil clogging in spreading basins, odors, insects, or other potential nuisance conditions that may be present. Any problems shall be promptly corrected. A record shall be kept of the dates and nature of observations and corrective actions taken. A summary of the entries made in the log shall be submitted with each monitoring report.

DISPOSAL AREA SOILS MONITORING

The Discharger shall implement disposal area soils monitoring **if deemed necessary** by the Executive Officer. In general, large wineries that discharge concentrated wastewater that is not adequately neutralized (to between pH 6.5 and 8.4) to soils with poor buffering capacity must perform soils monitoring according to the following instructions. The Discharger shall establish a soil profile monitoring location that is representative of the disposal area. This sampling location shall be provided on a map submitted to the Regional Board for concurrence by the Executive Officer. Samples shall be collected and analyzed for the following constituents:

Constituent	Unit	Method	Sample Depths ²	Frequency
Soil pH	pH units	1:2 DI Water (soil to solution ratio)	6 inches and 2 ft.	Annually (November)
Total Acidity	meq H ⁺ / 100 g soil	Measured by BaCl ₂ – TEA (pH 8.3) ¹	6 inches and 2 ft.	Annually (November)

Notes:

1. See Methods of Soil Analysis (cosponsored by ASTM), American Society of Agronomy, Inc., Madison, WI.
2. Below base of disposal area.

Lime Application – If Soil pH is less than or equal to 6.0, the Discharger shall add lime to neutralize the disposal area soils. The amount of lime required for full neutralization is directly related to Total Acidity. For any representative sample of disposal area soils, multiply the Total Acidity value (meq of H⁺ / 100 g soil) by 2000 to get the maximum lime application rate in lbs. pure lime per acre. The amount of lime applied should not exceed the calculated value.

NOTE: Any gypsum (CaSO₄*2H₂O) applied to increase hydraulic conductivity does not neutralize acidity (gypsum is a neutral salt).

GROUNDWATER MONITORING

The Discharger shall implement groundwater monitoring if **deemed necessary** by the Executive Officer. In general, facilities which discharge winery waste that is not adequately treated (biologically stabilized and neutralized) to unlined ponds or spreading basins, in areas where depth to groundwater is shallow, are required to perform regular groundwater monitoring. Groundwater samples shall be collected from at least three representative monitoring wells, one upgradient and two downgradient of the disposal area, and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis
Depth to groundwater	Feet below ground surface	Measured	Semi-annually (May and November)
pH	pH units	Grab	Annually (November)
Total Dissolved Solids	mg/L	Grab	Annually (November)
Chloride	mg/L	Grab	Annually (November)
Sodium	mg/L	Grab	Annually (November)
Hardness	mg/L as CaCO ₃	Grab	Annually (November)
Manganese	mg/L	Grab	Annually (November)
Nitrate (as N)	mg/L	Grab	Annually (November)
Sulfate	mg/L	Grab	Annually (November)

SOLID WASTE DISPOSAL MONITORING

A summary of estimated volumes and disposal locations of screenings, tank residues, and solids shall be included with each monitoring report.

SAMPLING AND ANALYSIS PROVISIONS

1. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants". The Executive Officer may specify test methods that are more sensitive than those specified in 40 CFR Part 136.
2. Periodic samples shall be taken at regular intervals and be representative of the monitored activity. For example, where quarterly samples are required, samples shall be collected on a representative day of March, June, September, and December of each year.
3. All analytical services shall be conducted at a laboratory certified for such analyses by the State Department of Health, or at a laboratory approved by the Executive Officer.
4. All analytical data shall be reported with method detection limits (MDLs) and with identification of either practical quantitation levels (PQLs) or limits of quantitation (LOQs).
5. All monitoring instruments and devices used by the discharger to fulfill this Monitoring and Reporting Program shall be properly maintained and calibrated, as necessary to ensure their continued accuracy.

REPORTING PROVISIONS

1. Monitoring reports shall be submitted to the Water Board annually, **by February 1 of each year**. Monitoring reports shall contain all monitoring data obtained during the previous calendar year. The report shall discuss the compliance record and corrective actions taken, or which may be

needed, to bring the discharge into full compliance with the General WDRs. Monitoring reports may be required more frequently as deemed necessary by the Executive Officer, based on review of the NOI and site/facility specific information.

2. Monitoring data shall be arranged in tabular format so that the date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to clearly illustrate whether the discharge complies with effluent limitations.
3. The Discharger shall also submit monitoring data and the monitoring reports electronically. Electronic data should be formatted into a Microsoft Excel or equivalent spreadsheet. Electronic report templates are available by contacting Water Board staff at (805) 549-3147. Electronic submittal should be provided on either 3.5-inch disk, or optical compact disk, or by email. Electronic data storage media should be labeled with facility name and period of monitoring.
4. If the Discharger monitors any pollutant more frequently than is required by this monitoring program, the results of such monitoring shall be included in the monitoring reports (i.e., quarterly groundwater elevation, etc.).
5. All monitoring reports shall be signed and certified in accordance with Section E.10 and 11 of the General WDRs.
6. The Discharger shall deliver a copy of each monitoring report in the appropriate format to the Central Coast Regional Water Quality Control Board at the following address:

895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
7. The Discharger shall ensure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Executive Officer. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling, and/or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used;
 - f. All sampling and analytical results;
 - g. All monitoring equipment calibration and maintenance records.
8. The Discharger shall immediately report any non-compliance potentially endangering public health or the environment to the Water Board (805/549-3147) and/or any additional appropriate agency. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be submitted to the Executive Officer within five (5) days of the time the Discharger becomes aware of the circumstances. The written report shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

