#### ATTACHMENTS A THROUGH D

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTER VALLY REGION

RESOLUTION R5-2020-0002 WAIVER OF WASTE DISCHARGE REQUIREMENTS

FOR

SMALL FOOD PROCESSORS, WINERIES AND RELATED AGRICULTURAL PROCESSORS WITHIN THE CENTRAL VALLEY REGION

#### ATTACHMENT A

## CONDITIONS OF DISCHARGE RESOLUTION R5-2020-0002

WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
SMALL FOOD PROCESSORS, WINERIES AND
RELATED AGRICULTURAL PROCESSORS
WITHIN THE CENTRAL VALLEY REGION

- A. Applicability—This Waiver shall only apply to small food processors and wineries meeting the criteria listed below. Coverage under this Waiver will only be granted to dischargers who meet the criteria, submit a complete Report of Waste Discharge (RWD) or Notice of Intent (NOI), as applicable, and receive a Notice of Applicability (NOA) signed by the Executive Officer.
  - 1. The Waiver applies to all small food processors<sup>1</sup> that land apply less than 1,000,000 gallons of process wastewater per year<sup>2</sup> at reasonable agronomic loading rates for nutrients and reasonable hydraulic loading rates for water. Wineries may land apply all wastewater generated by processing less than 800 tons of grapes per year.
  - 2. The Waiver applies to small food processors that land apply residual solids associated with processing that results in generation of less than 1,000,000 gallons of wastewater per year. Wineries may land apply residual solids associated with processing up to 800 tons of grapes per year in compliance with the conditions specified herein.
  - 3. Wastewater and residual solids storage and land application methods must comply with the Specific and General Conditions listed herein.
- **B.** Regulatory Tiers and Application Requirements—Discharges authorized under this Waiver are grouped into three regulatory tiers based on the wastewater management practices employed and the amount of waste discharged to land. The application requirements, fees (if any), and monitoring and reporting requirements are linked to and commensurate with the complexity of the discharge regulated

For the purposes of this Waiver, the term "food processor" includes wineries, nut hulling operators, crop seed processors, and any other agricultural commodity processing operator generating waste substantially similar in character to the wastes described in the Initial Study dated 31 October 2014. "Food processor" does not include meat processors, slaughterhouses, and pistachio nut hullers, as such operators not eligible for enrollment under this Waiver.

For a typical small winery, processing 800 tons of grapes to produce wine will typically yield no more than 1,000,000 gallons of process wastewater. For other food processors the volume of wastewater per ton of commodity processed will vary.

under each tier. The Waiver tiers are summarized in the following table and application requirements are discussed further below the table.

**Table 1—Summary of Waiver Tiers** 

Waiver Tier	Allowed Management Practices and Discharge Amounts	Application Requirements and Fees
1	<ul> <li>Land application of up to 10,000 gallons of process wastewater per year for irrigation of landscaping or crops.</li> <li>Land application of residual solids associated with generation of up to 10,000 gallons of process wastewater per year as a soil amendment for landscaped or cropped areas.</li> </ul>	<ul> <li>Submit RWD (completed Form 200³ and NOI form⁴).</li> <li>No fee is required.</li> <li>Coverage is subject to approval by the Executive Officer, who will issue a NOA granting coverage.</li> </ul>
2	<ul> <li>Land application of up to 100,000 gallons of process wastewater per year for irrigation of landscaping or crops.</li> <li>Land application of residual solids associated with generation of up to 100,000 gallons of process wastewater per year as a soil amendment for landscaped or cropped areas.</li> </ul>	<ul> <li>Submit a RWD (completed Form 200³ and Technical Information Form⁵).</li> <li>Submit a one-time application fee for a threat and complexity rating of 3C⁶.</li> <li>Coverage is subject to approval by the Executive Officer, who will issue a NOA granting coverage.</li> </ul>

Form 200 can be downloaded from the <u>State Board website</u> at (http://www.waterboards.ca.gov/publications\_forms/forms/docs/form200.pdf)

<sup>&</sup>lt;sup>4</sup> A blank Notice of Intent form to apply for coverage under Tier 1 is in Attachment C.

<sup>&</sup>lt;sup>5</sup> A blank Technical Information Form to apply for coverage under Tiers 2 and 3 is included in Attachment C.

The annual fee is subject to review and revision by the State Water Resources Control Board each year. Any rate changes adopted by the State Water Board will become effective in the first annual billing cycle after adoption.

Waiver Tier	Allowed Management Practices and Discharge Amounts	Application Requirements and Fees
3	<ul> <li>Land application of up to 1,000,000 gallons of process wastewater per year for irrigation of landscaping or crops with a minimum of 1.0 acres of land application area per 100,000 gallons of wastewater.</li> <li>Land application of residual solids associated with generation of up to 1,000,000 gallons of process wastewater per year as a soil amendment for landscaped or cropped areas with a minimum of 1.0 acres of land application area per 100,000 gallons of wastewater.</li> </ul>	<ul> <li>Submit a RWD (completed Form 200³ and Technical Information Form⁵).</li> <li>Submit an application fee for a threat and complexity rating of 3C⁶. An annual fee will be billed at the same rate for each subsequent year of coverage up to a maximum of 5 years following adoption of this Resolution.</li> <li>Coverage is subject to approval by the Executive Officer, who will issue a NOA granting coverage.</li> </ul>

Each Discharger must submit a RWD to apply for coverage under the Waiver as follows:

- 1. Existing dischargers, regardless of whether coverage was granted under the previous Waiver (Resolution R5-2015-0005) shall submit a RWD and fee as applicable to apply for coverage under the Waiver within **90 days** of adoption of this Waiver<sup>7, 8</sup>.
- 2. Existing dischargers who received a NOA under Resolution R5-2015-0005 dated between 1 January 2019 and 31 December 2019, and whose discharge still qualifies for enrollment in Tiers 1 or 2, shall reaffirm their intent to comply with the requirements of this Resolution in writing within 90 days of adoption of this Waiver. A Revised NOA will be issued, but no additional fee will be required.

If an existing Discharger does not meet the applicability criteria above, the Discharger must cease any discharge to land or submit a Report of Waste Discharge to apply for individual WDRs within 120 days of adoption of this Waiver.

This requirement does not apply to nut hulling operations. However, nut hulling facility operators may voluntarily apply for coverage.

- New small food processors that have not begun operation as of the date of adoption of this Waiver shall submit a RWD at least 120 days before the anticipated date of first discharge.
- 4. Any discharger issued a NOA under this Waiver whose facilities or operations subsequently expand such that coverage under a higher tier of the Waiver is appropriate shall submit a new RWD for the appropriate tier at least **120 days** before the anticipated date of increased discharge volume. For discharges that move from Tier 2 to Tier 3, a new fee is not required to apply for coverage under Tier 3, but the discharger will become subject to the annual fee beginning in the first State fiscal year<sup>9</sup> in which the tier change takes place.
- 5. To apply for coverage under this Waiver, the Discharger shall submit a RWD consisting of the following:
  - a. **For Tier 1:** A completed Form 200, Notice of Intent (NOI) Form, and a scaled map depicting land application areas and nearby surface waters<sup>10</sup>.

The Form 200 and relevant instructions are available online on the State Water Board website

(http://www.waterboards.ca.gov/publications\_forms/forms/docs/form200.pdf). The NOI Form is included in **Attachment C**.

b. **For Tiers 2 and 3**: A completed Form 200, Technical Information Form, and a scaled map depicting land application areas and nearby surface waters<sup>10</sup>.

The Form 200 and relevant instructions are available online on the State Water Board website

(http://www.waterboards.ca.gov/publications\_forms/forms/docs/form200.pdf). The NOI Form is included in **Attachment C**.

c. For Tiers 2 and 3 only, a fee for a threat and complexity of "3C" as described in Section 2200 of Title 23 of the California Code of Regulations. The fee shall be submitted in the form of a check made payable to State Water Resources Control Board. The current fee schedule can be downloaded from the <u>State</u> <u>Water Boards' Fees website</u>:

(http://www.waterboards.ca.gov/resources/fees/#wdr)

Applicants are encouraged to contact Central Valley Water Board staff for assistance in determining the fee.

The State fiscal year is 1 July through 30 June. Invoices for annual fees for a given fiscal year are typically issued by the State Water Board in the first four months of that fiscal year (i.e., in the fall).

Guidance for map development is provided in the Tier 2/3 Technical Information Form included in Attachment C.

- d. For all tiers, evidence that the operation is already covered or specifically excluded from obtaining coverage under NPDES General Permit CAS000001 specifying waste discharge requirements for discharges of storm water associated with industrial activities (State Water Resources Control Board Order 2014-0057-DWQ or subsequent Order)<sup>11</sup>. One of the following is acceptable:
  - A copy of the Notice of Intent that has been submitted to apply for coverage under Order 2014-0057-DWQ or subsequent revision thereto; or
  - ii. A Notice of Non-Applicability (NONA); or
  - iii. A No Exposure Certification (NEC).
- e. **For all tiers**, a copy of any draft and final environmental review documents prepared to comply with the California Environmental Quality Act (CEQA) must be submitted unless:
  - The application is for an existing discharge and the discharge will not expand or otherwise change significantly during the term of the Waiver; or
  - ii. The local planning agency (city or county, as applicable) or another public agency has determined that the project, including the waste discharge (or expansion, changes, etc.) is exempt from CEQA review. In this case, submit a copy of the Notice of Exemption or other relevant correspondence issued by the planning agency.
- f. **For all tiers,** if requested by Central Valley Water Board staff, chemical analysis of the waste for key waste constituents, which typically include biochemical oxygen demand (BOD), total nitrogen, pH, and fixed dissolved solids (FDS).
- **C. Specific Conditions**—Dischargers regulated under all Waiver tiers shall comply with the following Specific Conditions:
  - 1. The discharge shall not create or threaten to create a condition of pollution, contamination, or nuisance as defined by Water Code section 13050.
  - The discharge of waste classified as "hazardous" under Title 23 of the California Code of Regulations section 2521 or as "designated" under Water Code section 13173 is prohibited.

<sup>&</sup>lt;sup>11</sup> Order 2014-0057-DWQ will expire on 30 June 2020.

- 3. The discharge of waste to wetlands, surface waters or surface water drainage courses is prohibited<sup>12</sup>.
- The use of ponds for wastewater treatment, storage, or disposal, except for seasonal temporary use of shallow storage ponds used for nut hulling wash water is prohibited.
- 5. Ponds may be used only for temporary storage of nut hulling wash water between 1st August and 31st December each year if all the following conditions are met:
  - a. Ponds shall be operated and maintained to ensure compliance with Specific Condition C.3, above.
  - b. The water table shall be at least 5 feet below the base of any pond.
  - c. The pond water depth shall be no greater than 5 feet at any time in any pond.
  - d. A minimum of one feet of freeboard as measured from the water surface in any pond to the surrounding grade shall be maintained at all times.
  - e. The discharger shall begin land applying wastewater from each pond as soon as practical to minimize the duration of pond use and depth of water.
  - f. Discharge to any pond shall cease and all ponds shall be completely drained by **31st December each year**. Draining includes removal of all water, visible residual solids and other organic matter.
  - g. Ponds shall be backfilled with soil, or runoff controls shall be installed to prevent storm water runoff from entering the pond **between 1st January and 30th June of the following year**.
- 6. Process wastewater and residual solids shall not be discharged to any septic system or subsurface disposal systems such as a leach field.
- 7. Process wastewater and residual solids applied to land shall not contain stillage waste, water softener regeneration brine, boiler blowdown, or other high salinity waste.

Surface waters include, but are not limited to, natural streams, lakes, wetlands, creeks, constructed agricultural drains, agricultural dominated waterways, irrigation and flood control channels, or other non-stream tributaries. Surface waters include all waters of the United States and their tributaries, interstate waters and their tributaries, intrastate waters, and all impoundments of these waters. For the purposes of this Waiver, surface waters do not include water in agricultural fields.

- 8. **For Tier 2 and Tier 3**, wastewater and residual solids land application areas shall be limited to those expressly described and mapped in the Report of Waste Discharge.
- 9. For Tier 3 only, the Discharger shall maintain and use at least one acre of cropland and/or landscaped area for each 100,000 gallons of wastewater and/or equivalent mass of residual solids applied to land each year. Land application areas for wastewater and residual solids may have a combined use (for example, a one-acre land application area may receive 100,000 gallons of wastewater plus the associated residual solids per year, etc.).
- 10. Objectionable odors due to the storage and/or land application of process wastewater or residual solids shall not be perceivable beyond the limits of the property owned by the Discharger.
- 11. The Discharger shall take all reasonable steps to reduce the salinity of the wastewater that is applied to land. These steps shall include, at a minimum:
  - a. Minimize the use of salt-containing additives in the process water and minimize the discharge of chemicals into the wastewater stream;
  - b. Minimize the use of non-biodegradable cleaners and other chemicals; and
  - c. When feasible, remove dry or solid wastes from equipment and floors before washing to prevent introduction of soluble waste constituents into the wastewater conveyance system.
- 12. If wastewater is stored on-site prior to land application or off-site for disposal:
  - Wastewater shall be fully contained in one or more tanks so that the waste does not contact the ground.
  - Wastewater shall be removed from storage tanks before capacity is reached and land applied or transported off-site for disposal immediately upon removal.
- 13. If wastewater is applied to land:
  - a. Wastewater shall not be applied to land during rainfall or when the ground is saturated.
  - b. Wastewater shall be applied to cropland or landscaped areas at a rate consistent with the water needs of the crop or vegetation grown in the land application area and at rates that do not exceed crop demand for nitrogen, including nitrogen loads from all sources (e.g., wastewater, residual solids, manure, and commercial fertilizer).

- c. Wastewater shall not be applied within 25 feet of a water supply well.
- d. Wastewater shall not be applied within 25 feet of a surface water or surface water drainage course unless the land application area is graded or bermed to prevent discharge of runoff into the drainage course.
- e. Wastewater shall be evenly applied across the entire land application area.
- 14. If residual solids are temporarily stored on-site prior to land application or off-site for disposal:
  - Residual solids shall be fully contained so that the waste does not contact the ground.
  - b. Residual solids shall be stored such that any leachate or storm water that contacts the waste is managed as wastewater in accordance with the conditions of this Waiver.
  - c. Residual solids drying and/or storage areas shall be designed, constructed, operated, and maintained to prevent the washout or inundation due to floods with a 100-year return frequency.
- 15. Residual solids shall be removed from storage tanks or areas before capacity is reached and land-applied or transported off-site for disposal immediately upon removal.
- 16. If residual solids are applied to land:
  - a. Land application methods, rates, and management practices shall be in accordance with those proposed in the RWD unless the Discharger finds that specific changes are necessary to ensure continued compliance with the conditions of the Waiver.
  - b. If residual solids that contain free liquids are applied to land, the Discharger shall ensure that all liquid is absorbed into the soil within 12 hours of application and that no liquid runs off the application area.
  - c. Residual solids shall be applied to land at rates that do not exceed crop demand for plant nutrients based on the nutrient content of the solids, the nutrient requirements of the crops or other vegetation grown on the land application area, and the amount of other forms of fertilizer used.
  - d. Residual solids shall be evenly applied across the entire land application area.

- e. Grape stems or other dry, nonputrescible<sup>13</sup> matter (e.g., dry nut hulls) may be segregated from the rest of the residual solids and applied to the Discharger's property, including dirt roads, for erosion or dust control. However, such waste must be applied in a manner that prevents displacement by runoff into surface waters during storm events.
- f. On-site composting is not authorized by this Waiver. Any on-site composting shall comply with the composting regulations found in Title 14 of the California Code of Regulations, Division 7, Chapter 3.1 and is subject to regulation by the Central Valley Water Board under a separate permit or waiver, as applicable.
- 17. Land application of putrescible solids<sup>13</sup> shall be conducted in accordance with the following requirements, which are in addition to those in Specific Condition C.16 above:
  - a. Residual solids shall not be applied within 25 feet of a surface water drainage course unless the land application area is graded or bermed to prevent discharge of runoff into the drainage course.
  - b. Residual solids shall not be applied within 25 feet of a water supply well.
  - c. Residual solids shall not be applied to land during rainfall or when the land application area is saturated.
  - d. The total annual loading rate for putrescible residual solids shall not exceed the rate specified in Specific Condition C.16.c, or a total thickness of two inches, whichever is more restrictive.
- **D. General Conditions**—Dischargers regulated under all Waiver tiers shall comply with the following General Conditions.
  - The Discharger shall comply with Monitoring and Reporting Program R5-2020-0002 in Attachment B, and with any revisions thereto as ordered by the Executive Officer.
  - The discharge of any waste not specifically regulated by this Waiver is prohibited unless the Discharger obtains WDRs, qualifies for coverage under another waiver, or obtains other permission from the Central Valley Water Board for the discharge of that waste.

For the purpose of this Waiver, putrescible solids are residual solids that contain readily decomposable organic matter and moisture such that they are likely to create objectionable odors and attract insects under ambient outdoor conditions.

- 3. Before making a material change in the character, location, or volume of discharge, the Discharger shall submit a new RWD to the Central Valley Water Board. A material change includes, but is not limited to, the following:
  - a. An increase in area to be used for land application of wastewater or residual solids beyond that specified in the original RWD.
  - A significant change in disposal method, location of discharge or volume of waste discharged.
  - c. The addition of a new process or product by an industrial facility resulting in a change in the character or volume of waste.
- 4. A copy of the Waiver (including its attachments) and the NOA shall be kept at the facility for reference by operating personnel. Key operating and site management personnel must be familiar with the documents.
- 5. The Report of Waste Discharge, monitoring reports, and any other information requested by the Central Valley Water Board shall be signed as follows:
  - a. For a corporation: by a principal executive officer of at least the level of senior vice-president or a duly authorized representative of that person.
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor or a duly authorized representative of that person.
  - c. For a municipality or public agency: by either a principal executive officer or ranking elected or appointed official or a duly authorized representative of that person.
- 6. Any person signing a RWD, monitoring report, or other technical report makes the following certification, whether written or implied:
  - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- 7. All technical and monitoring reports submitted pursuant to this Waiver are required pursuant to Water Code section 13267. Failure to submit reports in

- accordance with schedules established by this Waiver, the attachments of this Waiver, or failure to submit a report of sufficient technical quality, may subject the Discharger to enforcement action pursuant to Water Code section 13268.
- 8. This waiver is not transferable. 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 Waiver by letter and shall inform the new owner or operator of the requirement to submit a RWD at least **120 days** before commencing operation of the facility. A copy of the letter shall be immediately forwarded to the Executive Officer.
- 9. In the event that the Discharger does not comply, or will be unable to comply, with any conditions of this Waiver, the Discharger shall notify Central Valley Water Board staff by telephone as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time, and cause of noncompliance, shall describe the measures being taken to prevent recurrences, and shall include a timeline for corrective actions.
- 10. The Discharger shall permit Central Valley Water Board representatives to (a) enter premises where wastes are stored or disposed of, (b) copy any records required to be kept under the terms of this Waiver, (c) inspect monitoring equipment required by this Waiver, and (d) sample, photograph, and video tape any discharge, waste, waste management unit, or monitoring device.
- 11. The Discharger shall comply with all federal, state, county, and local laws and regulations pertaining to the discharge.
- 12. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce its activity in order to maintain compliance with conditions of this Waiver.
- 13. The Discharger must comply with all conditions of this Waiver, including timely submittal of all monitoring reports as applicable. Violations may result in enforcement action as described in the Waiver Resolution.
- 14. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Waiver will be available for public inspection at the Central Valley Water Board offices. Data on waste discharges, water quality, geology, and hydrogeology will not be considered confidential.

## ATTACHMENT B MONITORING AND REPORTING PROGRAM

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION

#### **RESOLUTION R5-2020-0002**

WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR SMALL FOOD PROCESSORS, WINERIES, AND RELATED AGRICULTURAL PROCESSORS WITHIN THE CENTRAL VALLEY REGION

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#### **MONITORING AND REPORTING PROGRAM R5-2020-0002**

FOR
WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
SMALL FOOD PROCESSORS,
WINERIES, AND RELATED AGRICULTURAL PROCESSORS
WITHIN THE CENTRAL VALLEY REGION

This Monitoring and Reporting Program (MRP) describes requirements for monitoring discharges from small food processors and wineries that are regulated under Resolution R5-2020-0002 Waiver of Waste Discharge Requirements for Small Food Processors and Small Wineries within the Central Valley Region (the Waiver).

This MRP is issued pursuant to Section 13267 of the California Water Code. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Each Discharger granted coverage under the Waiver shall submit an annual monitoring report no later than **1 February** of each year. The report shall describe process waste management activities during the previous calendar year, and shall contain the following information. Dischargers are encouraged to use the attached *Annual Monitoring Report* form for this purpose, but are not required to do so.

#### TIER 1 – Annual Monitoring and Information Requirements

- A. A statement verifying that no more than 10,000 gallons of wastewater and associated residual solids were applied to land.
- B. A statement verifying compliance with the discharge conditions and specifications of the Waiver.
- C. For any nut huller that used a wash water storage pond, a statement verifying compliance with Specific Conditions C.5.a through C.5.f. in Attachment A.
- D. A discussion of any violations of the Waiver conditions during the reporting period and actions taken or planned for correcting noted violations, such as operational or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.
- E. The Statement of Certification in this document.

#### TIER 2 – Annual Monitoring Report Requirements

- A. A statement verifying that no more than 100,000 gallons of wastewater and associated residual solids were applied to land.
- B. A statement verifying compliance with the discharge conditions and specifications of the Waiver.

- C. A discussion of any violations of the Waiver conditions during the reporting period and actions taken or planned for correcting noted violations, such as operational or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.
- D. Commodity processing: Data table showing the monthly amount (weight or volume) of commodities processed during the calendar year (e.g., a winery would report tons of grapes crushed).
- E. Wastewater management and land application:
  - 1. A data table showing the total gallons of wastewater produced each month during the calendar year.
  - 2. A statement specifying how flow measurements were made.
  - A description of how wastewater was fully contained such that waste did not contact the ground (except for nut huller wash water ponds) during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.
  - 4. An estimate of the total nitrogen loading to the land application area for the calendar year, with calculations showing the contribution from each nitrogen source in lb/ac/year.
  - 5. A discussion of actions taken to reduce the salinity of the wastewater applied to land.
- F. Residual solids management and land application:
  - 1. An estimation of the amount of residual solids generated each month.
  - 2. A description of how and where residual solids were stored.
  - 3. The amount of residual solids disposed of on-site and the amount of residual solids removed for disposal off-site.
  - 4. A description of how residual solids were fully contained such that waste did not contact the ground during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.

#### G. Land application area:

- 1. The total acreage that wastewater and/or residual solids were applied and whether they were applied to the same area.
- 2. A data table showing the volume of wastewater and amount of residual solids land applied each month during the calendar year.
- 3. The crop(s) or vegetation grown.
- 4. A description of how wastewater and residual solids were applied evenly over the entire acreage and how runoff was kept out of surface waters.

- H. Wastewater ponds (nut hullers only):
  - 1. Approximate maximum pond water depth that occurred during the monitoring year.
  - 2. Date that ponds were either backfilled or controls were installed to prevent storm water runoff into the ponds.
  - 3. Description of controls installed to prevent storm water runoff into the ponds.
- I. The Statement of Certification in this document.

#### **TIER 3 – Annual Monitoring Report Requirements**

- A. A statement verifying that no more than 1,000,000 gallons of wastewater and associated residual solids were applied to land.
- B. A statement verifying that all waste applied to land was applied evenly to at least one acre of land per 100,000 gallons of wastewater.
- C. A statement verifying compliance with the discharge conditions and specifications of the Waiver.
- D. A discussion of any violations of the Waiver conditions during the reporting period and actions taken or planned for correcting noted violations, such as operational or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.
- E. Commodity processing: Data table showing the monthly amount (weight or volume) of commodities processed during the calendar year (e.g., wineries would report tons of grapes crushed).
- F. Wastewater management and land application:
  - 1. A data table showing the total gallons of wastewater produced each month during the calendar year.
  - 2. A statement specifying how flow measurements were made.
  - A description of how wastewater was fully contained such that waste did not contact the ground (except for nut huller wash water ponds) during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.
  - 4. An estimate of the total nitrogen loading to the land application area for the calendar year, with calculations showing the contribution from each nitrogen source in lb/ac/year.
  - 5. A discussion of all actions taken to reduce the salinity of the wastewater applied to land.

- G. Residual solids management and land application:
  - 1. An estimation of the amount of residual solids generated.
  - 2. A description of how and where residual solids were stored prior to land application or off-site disposal.
  - 3. The amount of residual solids applied on-site and the amount of residual solids removed for disposal off-site.
  - 4. A description of how residual solids were fully contained such that waste did not contact the ground during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.

#### H. Land application area:

- 1. A satellite aerial photo or scaled map marked to show the boundaries of wastewater and residual solids application.
- A data table showing the monthly volume of wastewater and amount of residual solids applied per one acre. Describe how the volume of wastewater flow and amount of residual solids were measured or estimated.
- 3. The total acreage that wastewater and/or residual solids were applied and whether they were applied to the same area.
- 4. The crop(s) or vegetation grown in the land application area, dates of planting and dates of harvest (as applicable).
- A description of how wastewater and residual solids were applied to ensure even application over the entire acreage and how tailwater runoff was kept out of surface waters.
- I. Wastewater ponds (nut hullers only):
  - 1. Approximate maximum pond water depth that occurred during the monitoring year.
  - 2. Date that ponds were either backfilled or controls were installed to prevent storm water runoff into the ponds.
  - 3. Description of controls installed to prevent storm water runoff into the ponds.
- J. The Statement of Certification in this document.

#### FOR ALL TIERS:

If the Discharger elects not to use the attached monitoring report form, a transmittal letter shall accompany each Annual Monitoring Report. The letter shall clearly identify the Discharger name, facility name, mailing address, and county. The transmittal letter shall contain the following certification statement and the signature of the Discharger or the Discharger's authorized representative.

#### Statement of Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Discharger shall implement the above monitoring program as of the date of the Notice of Applicability granting coverage under the Waiver.

Annual Monitoring Reports shall be converted to searchable Portable Document Format (pdf) and submitted electronically in accordance with the document submittal procedures as provided in the Notice of Applicability.

I, PATRICK PULUPA, Executive Officer, do hereby certify that the foregoing is a full and correct copy of a Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region on 20 February 2020.

Original Digitally Signed By Patrick Pulupa Date: 2020.03.23 10:00:11 – 07:'00'

PATRICK PULUPA, Executive Officer

## MONITORING AND REPORTING PROGRAM R5-2020-0002 ANNUAL MONITORING REPORT FORM

Note: The following is an Annual Monitoring Report form that complies with the reporting requirements set forth in the Waiver and the MRP. Dischargers are not required to use this form, but are encouraged to do so. Any monitoring report forms developed by a discharger must contain the same information and comply with the Waiver and the MRP. The Annual Monitoring Report is due no later than **1 February** of the following year.

Annual Monitoring Reports shall be converted to searchable Portable Document Format (pdf) and submitted electronically in accordance with the document submittal procedures as provided in the Notice of Applicability.

# RESOLUTION R5-2020-0002 CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR SMALL FOOD PROCESSORS, WINERIES AND RELATED AGRICULTURAL PROCESSORS WITHIN THE CENTRAL VALLEY REGION

ANNUAL MONITOR	IG REPORT FOR	
	year	
Facility Owner:		_
Facility Name:		_
Facility Address:		_
County:		_
the information su upon my inquiry o information, I beli	by of law that I have personally examined and am familicated in this document and all attachments, and that those individuals immediately responsible for obtaining that the information is true, accurate, and complete significant penalties for submitting false information, income.	based ing the e. I am
Signature	Date	
Printed Name	Phone	

#### **INSTRUCTIONS**

TIE	ER 2	facilities of	complete :	Sections A – C Sections A – H Sections A – I
A.	TYF	PE OF OP	ERATION	l (check all appropriate boxes)
		Winery		☐ Cannery
		Brewery		□ Nut Huller
		Olive Oil	Processin	g 🗆 Seed Washing
		Seed Oil	Processin	g
		OTHER -	- describe	:
В.	VEF	RIFY COM	IPLIANCI	E WITH THE CONDITIONS OF DISCHARGE
	1.a	□ Yes	□ No	For TIER 1 facilities – Was more than 10,000 gallons of wastewater or associated residual solids applied to land?
	1.b	☐ Yes	□ No	For TIER 2 facilities – Was more than 100,000 gallons of wastewater or associated residual solids applied to land?
	1.c	□ Yes	□ No	For TIER 3 facilities – Was more than 1,000,000 gallons of wastewater or associated residual solids applied to land or applied at a rate greater than 100,000 gallons per acre?
	2.	☐ Yes	□ No	Was wastewater or residual solids associated with slaughterhouses (or other meat processing) discharged to land?
	3.	□ Yes	□ No	Was stillage, water softener regeneration brine, reverse osmosis brine, boiler blowdown, or other high salinity wastes discharged to land?
	4.	☐ Yes	□ No	Was wastewater discharged to a septic system?
	5.	□ Yes	□ No	Was a pond used for treatment, storage, or disposal of wastewater (other than a pond used for nut hulling wash water)?
	6.	☐ Yes	$\square$ No	Was process waste applied to land not owned by the Discharger?
	7.	☐ Yes	□ No	Did temporarily stored process waste contact the ground prior to land application (other than nut hulling wash water in a pond)?
	8.	□ Yes	□ No	Was process waste applied to land during rainfall or when the land application area was saturated?
	9.	□ Yes	□ No	Did process waste application occur such that it was not evenly distributed over the land application area?
	10.	□ Yes	□ No	Was process waste applied in such a way that the water or nutrient needs of the crop or vegetation in the land application area were exceeded?

11.	□ Yes	□ No	Was process waste applied less than 25 feet from surface water or a surface water drainage course without a berm or an uphill grade in place?
Were	residual	solids sto	ored on site prior to land application or off-site disposal?
If YES	, answer	questions	12 and 13.
12.	☐ Yes	□ No	Did residual solids or the run-off from residual solids contact the ground during storage?
13.	□ Yes	□ No	Were residual solids stored in an area that may experience washout or inundation due to floods with a 100-year return frequency?
Were	residual	solids ap	plied to land?
If YES	, answer	questions	14 through 22.
14.	□ Yes	□ No	Did land application methods, rates, or management practices differ than what was described in the Report of Waste Discharge?
15.	☐ Yes	□ No	Did residual solid application occur such that it was not evenly distributed over the land application area?
<ul><li>16.</li><li>17.</li></ul>	□ Yes		Did the residual solids contain free liquid that took more than 12 hours to absorb into the soil after application?  Did free liquid from the residual solids run off the application area?
18.	□ Yes	□ No	Were residual solids, process wastewater, and fertilizers applied at agronomic rates greater than the nutrient needs of the crop or vegetation on the land application area?
19.	□ Yes	□ No	Did segregated dry, nonputrescible matter (e.g., grape stems or dry nut hulls) used for erosion or dust control enter surface waters during storm events?
20.	□ Yes	□ No	Were putrescible solids applied less than 25 feet from a surface water drainage course without a berm or an uphill grade in-place?
21.	☐ Yes	□ No	Were putrescible solids applied to land during rainfall or when the land application area is saturated?
22.	□ Yes	□ No	Did the total annual loading rate for putrescible solids exceed the nitrogen agronomic rate for crops or vegetation on the land application area, or a total thickness of two inches, whichever was more restrictive?

I	For Nu	ıt Huller	s Using P	onds
	23.	□ Yes	□ No	Did ponds contain process waste between 1st January and 31st July?
	24.	□ Yes	□ No	Was the pond water depth greater than five feet deep at any time?
	25.	☐ Yes	□ No	Was the freeboard measured from the water surface in any pond to the surrounding grade less than one foot at any time?
C.	VIOL	ATION F	REPORTI	NG
	answ	ered "YE	ES," explai	stions in section B (i.e., questions 1 through 25) that were n the reason(s) for the potential violation and steps that will urrence. Insert additional pages as needed.

#### **TIER 2 AND TIER 3 – ADDITIONAL INFORMATION**

#### D. COMMODITY PROCESSING

	Amount of Processed Commodities						
	Commod	dity 1	Commod	dity 2	Commod	dity 3	
	name:		name:		name:		
Month	(units:	)	(units:	)	(units:	)	
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

#### E. WASTEWATER DISPOSAL

1. Volume of produced wastewater.

-	
	Wastewater Production
Month	(gallons)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
Total	

2. Describe how the above wastewater volumes were measured.

3. Describe how wastewater was contained such that waste did not contact the ground (except for nut huller wash water ponds) during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.

4. Describe actions taken to reduce the salinity of the wastewater applied to land.

#### F. RESIDUAL SOLIDS DISPOSAL

	1.	Estimated	amount	of	generated	residual	solids.
--	----	-----------	--------	----	-----------	----------	---------

Month	Residual Solids Generation  □ pounds or □ tons
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
Total	

- 2. Describe how and where residual solids were stored prior to land application or off-site disposal.
- 3. Provide the amount of residual solids that were land applied on-site and the amount of residual solids removed for disposal off-site.

On-site land application:		pounds or
		tons
Off-site disposal:		pounds or
		tons

4. Describe how residual solids were contained such that waste did not contact the ground during periods of storage and so that application to land did not occur during periods of precipitation or when the ground was saturated.

#### **G. LAND APPLICATION AREA**

1.	Provide the total area that wastewater and residual solids were applied.				
	Wastewater land applie	ed area:	$\square$ pounds or $\square$	tons	
	Residual solids land application	on area:	$\square$ pounds or $\square$	tons	
2.	·· ———				
	Date or Date Range	Type of Applic	cation		
		Wastewater or $\Box$	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or $\Box$	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or $\Box$	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or	Residual Solids		
		Wastewater or $\Box$	Residual Solids		
		Wastewater or $\Box$	Residual Solids		
		Wastewater or	Residual Solids		
3.	Describe crop(s) or vegetation grobetween crops irrigated with wast residual solids).	• •	` •		
4.	Describe how wastewater and resacreage of the land application arwaters.	• •	-	ntire	

#### H. WASTEWATER PONDS (NUT HULLERS ONLY)

1. Provide the date that the ponds were backfilled or describe the controls installed to prevent storm water runoff into the ponds.

#### **TIER 3 - ADDITIONAL INFORMATION**

#### I. LAND APPLICATION AREA

- 1. Provide a satellite or scaled map showing the boundaries of wastewater and residual solids application.
- 2. Provide the volume of wastewater and amount of residual solids land applied per acre during the calendar year.

	Wastewater Ap	oplied to Land	Residual Solids Applied to Land		
Month	(acres)	(gallons)	(acres)	( □ pounds or □ tons)	
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
	Total		Total		

3. Describe how the above measurements of wastewater volume and amount of residual solids were made.

## ATTACHMENT C APPLICATION FORMS

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION

#### **RESOLUTION R5-2020-0002**

#### WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR SMALL FOOD PROCESSORS, WINERIES AND RELATED AGRICULTURAL PROCESSORS

Table of Contents	
Tier 1 Notice of Intent	C-1
Tier 2 and 3 Report of Waste Discharge Technical Info Form	C-2

applicable regulations.

#### **TIER 1 NOTICE OF INTENT**

Resolution R5-2020-0002 Waiver of Waste Discharge Requirements for Small Food Processors, Wineries, and Related Agricultural Processors

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION

Facility Name
Facility Owner
am hereby submitting to the Central Valley Water Board the following information:
Discharge Description  am applying for coverage under Tier 1 of Resolution R5-2020-0002 (Waiver). I have read the Waiver and understand the discharge requirements and tier structure applicability of the Waiver. I will comply with all conditions of the Waiver as set forth in Waiver Attachment A. I operate the facility that generates the waste that will be discharged and I own the land where the discharge will occur. In order to show compliance with NPDES General Permit CAS000001, which specifies waste discharge requirements for discharges of storm water associated with industrial activities, I am submitting (check one):
□ A copy of the Notice of Intent that has been submitted to apply for coverage under Order 2014-0057-DWQ or subsequent revision thereto; or
☐ A Notice of Non-Applicability (NONA); or
☐ A No Exposure Certification (NEC).
n accordance with the Tier 1 requirements of the Waiver, I will (check all that apply):
☐ Land apply no more than 10,000 gallons of wastewater to my land application area per year.
☐ Use storage tanks and dispose of wastewater at a permitted treatment facility (tank and haul) for any wastewater in excess of 10,000 gallons per year.
□ Land apply residual solids associated with the generation of no more than 10,000 gallons of wastewater to my land application area per year.
☐ Dispose of any excess residual solids off-site in compliance with the Waiver and

C-2

#### **Certification Statement**

"I certify under penalty of law that I have personally examined and am familiar with the
information submitted in this document and all attachments and that, based on my
inquiry of those individuals immediately responsible for obtaining the information, I
believe that the information is true, accurate, and complete. I am aware that there are
significant penalties for submitting false information, including the possibility of fine and
imprisonment."

Signature	Date	
Printed Name	Phone	

## REPORT OF WASTE DISCHARGE TECHNICAL INFORMATION FORM FOR TIER 2 AND TIER 3 FACILITIES

RESOLUTION R5-2020-0002 WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR SMALL FOOD PROCESSORS, WINERIES, AND RELATED AGRICULTURAL PROCESSORS

#### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION

Complete all applicable sections of this form. The Executive Officer will not issue a Notice of Applicability unless the Report of Waste Discharge is complete and demonstrates that the Waiver (Resolution R5-2020-0002) is applicable to the proposed discharge.

diconargo.	
	Facility Name
	Facility Owner
information submitted inquiry of those indivi believe that the infort	of law that I have personally examined and am familiar with the in this document and all attachments, and that based upon my duals immediately responsible for obtaining the information, I nation is true, accurate, and complete. I am aware that there are or submitting false information, including the possibility of fine.
Signature	Date
Printed Name	Phone

#### A. FACILITY MAPS/PLANS

- 1. Site Location Map: Provide a scaled topographical map that depicts the location of the facility, property lines, land application area, on-site wells, streets, and nearby surface waters and wetlands.
- 2. Processing Facility and Discharge Area Plan: Provide a scaled plan that depicts the processing facility, wastewater pipelines, wastewater storage

structures, residual solids storage areas, storm water drainage features, and all land application areas.

3. Other Maps or Plans (Optional): Provide other maps, plans, or sketches as desired to illustrate typical design features to supplement your response to the questions below.

Note: There are several online tools that are useful to develop the required maps and plans:

- Many Internet search engines provide scaled street maps and/or aerial photos that can be adapted for use.
- <u>TopoQuest</u> (http://www.topoquest.com/find.php) allows you to download portions of United States Geological Survey topographic maps that show topography and surface waters. These can be printed directly or imported into most software applications.
- Legible hand drawn maps are acceptable.

TYPE	OF C	PERATION (c	heck all that apply)
		Winery Brewery Olive Oil Proces	<ul><li>☐ Cannery</li><li>☐ Nut Huller</li></ul>
		Seed Oil Proces	3
found FACIL	on th	e internet at <u>SI</u>	Classification (SIC) codes for all industries can be C Codes (http://www.osha.gov/pls/imis/sicsearch.html).
		•	tions to date by current owner)
_l a.		l Yes □ No	<ul><li>☐ Planned or</li><li>☐ Actual</li><li>(select one) construction completion date.</li></ul>
b.			Planned operations start date
C.			Planned date of first discharge to land

		If Y	ES, ind	clude	e a co	ppy of either (check the submitted item):
						A Notice of Exemption or letter stating the project is not subject to CEQA review, or
						A copy of the certified CEQA document (Negative Declaration, Mitigated Negative Declaration or Final Environmental Impact Report, as applicable)
2.		_	acility on R5			d under the previous waiver 05)
	a.					Date of Notice of Applicability
	b.		Yes		No	Did you discharge process wastewater to land under the previous waiver?
	C.		Yes		No	Did you discharge residual solids to land under the previous waiver?
	d.		Yes		No	Did you comply with all of the requirements of the previous waiver?
	e.		Yes		No	Has this facility expanded since the Notice of Applicability was issued?
	f.		Yes		No	Do you plan to expand within the next five years?
	g.		Yes		No	Do you plan to discharge process wastewater to land under the current waiver?
	h.		Yes		No	Do you plan to discharge residual solids to land under the current waiver?
	i.		Yes		No	Will you be able to comply with the conditions of the current waiver, including after any planned expansion in the next five years?
	j.					If NO, when do you plan to submit a Report of Waste Discharge to apply for individual Waste Discharge Requirements?
3.		_	acility on R5			ered under the previous waiver 05)
1	a.					How long have you operated this facility?
	b.		Yes		No	Do you plan to expand within the next five years?
	C.		Yes		No	Will you be able to comply with the conditions of the current waiver, including after any planned expansion?
		If No	O, whe	en de	o you	plan to submit a Report of Waste Discharge to apply

for individual Waste Discharge Requirements?

	d.	How do you currently manage the disposal of process wastewater and residual solids? (A brief description is sufficient).				
D.	STORM	WATER PE	RMIT COVERAGE			
	1. 🗆 Y	∕es □ No	Is the facility covered under NPDES General Permit CAS000001 specifying waste discharge requirements for discharges of storm water associated with industrial activities (State Water Resources Control Board Order 2014-0057-DWQ or subsequent Order, whichever is in effect on the date of the Report of Waste Discharge)?			
		•	WDID number assigned to the facility (from the tter issued by the State Water Board).			
	If NO, include a copy of either (check the item included with your application):					
			A copy of the Notice of Intent that has been submitted to apply for coverage under Order 2014-0057-DWQ or subsequent revision thereto.			
			A copy of the submitted Notice of Non-Applicability (NONA).			
			A copy of the submitted No Exposure Certification (NEC).			
E.	OPERA	TIONAL INF	ORMATION			
		nany tons of pates are acce	produce or commodity will be processed per year? eptable)			
		Tons in 2020				
		Tons in	2021			
		Tons in	2022			
		Tons in	2023			
		Tons in	2024			
		Tons in	2025			

F.

2.	When is the primar (Example: June thr	ry processing season for this facility? rough October)
3.	□ Yes □ No	Does this facility have operations that generate process wastewater or residual solids at other times of the year?
Г	If YES, describe:	
4.	Describe all operat	ions and activities that generate process wastewater.
V	VASTEWATER INF	ORMATION
1.	☐ Yes ☐ No	Does this facility have a self-regenerating water softener (one that you add salt to)?
2.	□ Yes □ No	Does this facility have a boiler?
3.	☐ Yes ☐ No	Does this facility have evaporative cooling systems that are periodically flushed and refreshed with fresh water?
4.	□ Yes □ No	Does this facility discharge stillage wastes?
5.	-	ES to any of the above questions (F.1 – 4), describe how you se high strength/high salinity wastes and dispose of them

RESULUTION R5-2020-0002	2	
	Does this facility utilize acid or sanitizing solutions such as so	
If YES, list by chemi	ical formulation, concentration,	and volume used per year.
Chemical Formulation	Concentration and Units	Volume (gallons per year)
	Does this facility use other che he wastewater?	micals that will be present in
If YES, list by chemi	ical formulation, concentration,	and volume used per year.
Chemical Formulation	Volume (gallons per year)	
		_
		_

Provide estimated monthly wastewater flows for each month of the year. (Exclude saline waste streams that will be segregated for separate disposal.)

	Volume (gallons)	Month	
		January	
		February	
		March	
		April	
		May	
		June	
		July	
		August	
		September	
		October	
		November	
		December	
		Annual Total	
9.		expect that your wastewater floor time that your wastewater floor that years?	ows will increase over
	If YES, what is the expect	ed maximum annual volume in	gallons?
10.		otal volume of wastewater in F	.8 or F.9 greater than
	generated wastewater vol	enrolled under Tier 3 or have a ume (excluding saline waste st lisposal) and discharge no mor	reams that will be
	☐ Yes ☐ No Will the	e facility use a flow meter?	

If YES, describe the type and location of the flow meter that will be used:

	If NO, describe method to estimate the volume generated per month (e.g., monitoring tank levels or other means):		
11.	☐ Yes ☐ No Is your process area covered in a way that prevents storm water from commingling with wastewater?		
12.	Describe the wastewater collection system and how it is routed to the storage system (runoff protection, floor drains, pumps, gravity flow pipe, etc.)		
13.	Describe the wastewater storage system (number, size, and type of tanks; secondary containment systems; pump systems; spillage/overflow prevention features, etc.)		
R	ESIDUAL SOLIDS INFORMATION		
1.	☐ Yes ☐ No Does the facility generate residual organic solids, such as pulp, skins, stems, and/or seeds?		
	If NO, advance to Section H.		
2.	Describe the types of solids generated:		

G.

4.

3. Provide an estimate of the weight of residual solids generated each month

We	eight (Tons)		
☐ Dry or	□ Wet	Month	
		January	
		February	
		March	
		April	
		May	
		June	
		July	
		August	
		September	
		October	
		November	
		December	
		Annual Total	
How do you propo provide required in		esidual solids? (check all that app	

	you propose to required informa	•	residual solids? (check all that apply and
a.	Waste landfill		
	Disposal Site:	name:	
		contact info:	
	Hauler:	name:	
		contact info:	
b.	Animal feed		
	Disposal Site:	name:	
		contact info:	
	Hauler:	name:	
		contact info:	

	C.	Ш	Off-site compo	osting or other r	ecycling
			Disposal Site:	name:	
				contact info:	
			Hauler:	name:	
				contact info:	
	d.		On-site land a	pplication as a	soil amendment
5.			e how residual e land applicat		ollected and stored prior to off-site disposal
6.			e the measures torage of residu		nt nuisance conditions (odor and flies)
L	AND A	API	PLICATION AF	REA INFORMA	TION
1.			Wha	at is the size of  ☐ acres or  ☐ square feet	the land application area?
	Provi	ide	Assessor's Pa	rcel Numbers (A	APN) for each land application area:

Н.

2.	☐ Yes ☐ No	Will wastewater and residual solids be applied to the same area?
	If NO, provide the area used to apply	size of the area used to apply wastewater and the size of the residual solids.
		Size of wastewater land application area  ☐ acres or ☐ square feet
		Size of residual solids land application area  ☐ acres or ☐ square feet
	•	s 3 & 4 below, distinguish between the wastewater land rea and residual solids land application area.
3.		s or type of vegetation grown on the land application area(s), on, and harvesting practices.
4.		land application area(s) will be designed, operated and vent off-site discharge of process wastewater.

# **Information Regarding Wastewater Applied to Land**

5. Provide estimated volume of wastewater (gallons) applied to land for each month of the year. (Saline waste streams are not allowed to be discharged to land.)

Volume (gallons)	Month
	January
	February
	March
	April
	May
	June
	July
	August
	September
	October
	November
	December
	Annual Total

	October	
	November	
	December	
	Annual Total	
6.	What is the estimated average total niwastewater in (mg/L)?	trogen content of the
	Winery and food processing industry associations typicall nitrogen values based on the processed commodity. Examples of such organizations are:  The Wine Institute (http://www.wineinstitute.org), and The California League of Food Processors (http://www.clf	
7.	Describe how the salinity of the wastewater applied to lan	d will be minimized.

8.	Describe the irrigation system and how wastewater will be applied evenly over the land application area.				
Answe	er the remaining questi	ons only if residual solids	will be applied to land		
9.	Provide the amount of	residual solids applied to land	d for each month of the year.		
	Month	Amount (tons/acre)	Amount (inches)		
	January				
	February				
	March				
	April				
	May				
	June				
	July				
	August				
	September				
	October				
	November				
	December				
	Annual Total:				
10.		at is the moisture content of t  weight percent	he solids?		
11.		at is the nitrogen content of th	ne solids?		
	[	☐ mg/kg as dry weight basis	<b>,</b>		

12.	Describe how the evenly spread ou	e solids will be transported to the land application area and ut.
	/A OTENATED D	
	ASIEWAIER PO	OND INFORMATION (nut hullers only)
1.	☐ Yes ☐ No	Is the groundwater water table greater than 5 feet below the base of all ponds?
2.		What is the maximum water depth that will be in any pond a any time (feet)?
3.	□ Yes □ No	Will the freeboard, as measured from the water surface in the ponds to the surrounding grade, be less than one foot at an time?
4.	☐ Yes ☐ No	Will the pond be completely drained, including removal of visible residual solids and organic matter, by 31st December of each year?
5.		ntrols that will be in place to prevent storm water runoff from d between 1st January and 30th June of the following year.

#### ATTACHMENT D

#### **INFORMATION SHEET**

Waiver of Waste Discharge Requirements for Small Food Processors, Wineries and Related Agricultural Processors Within the Central Valley Region

## **Waiver Background**

Resolution R5-2015-0005, Waiver of Waste Discharge Requirements for Small Food Processors, Wineries and Related Agricultural Processors (2015 Waiver), regulates the discharge of wastewater and residual solids from small food processing operations. small wineries, and small related agricultural operations throughout the Central Valley Region. Small food processors and agricultural processors include small olive mills. seed research facilities, nut hullers (not including pistachio nut hullers), fruit dehydrators, and breweries. The 2015 Waiver authorizes entities to irrigate crops and landscaped areas with up to 1,000,000 gallons of wastewater per year. This limit is an increase from the previous Waiver, Order R5-2009-0097, which expired on 8 October 2014. An Initial Study was prepared in conjunction with the development of the 2015 Waiver to evaluate any potential environmental impacts that would occur as a result of expanding the applicability to larger discharges and certain agricultural processors that meet the discharge conditions of the waiver. The Central Valley Water Board accepted comments on the Initial Study and on 5 February 2015 adopted a Mitigated Negative Declaration and the 2015 Waiver. A copy of the Initial Study and Mitigated Negative Declaration can be found on the Water Board Website. (https://www.waterboards.ca.gov/centralvalley/board decisions/adopted orders/waivers /sfp\_waiver\_is.pdf)

Facilities seeking coverage under the 2015 Waiver are typically small with a limited operating season or will generate limited amounts of wastewater. These facilities are located in areas that are not served by a municipal sewer system and land application of their process waste is the least costly disposal option. Land application of process waste is a common practice in the Central Valley.

Under the 2015 Waiver, 108 Notices of Applicability (NOA) have been issued. The number of NOAs issued to each discharge type is presented below.

Discharge Type	NOAs Issued
Winery	79
Olive Mill	4
Brewery	10
Nut Hulling	7
Fruit Dehydrator	5
Seed Research	3

### **Waiver Proposal**

The 2015 Waiver will expire on 5 February 2020. Water Board staff proposes to renew the 2015 Waiver with no changes to the tiered regulatory approach based on volume of waste discharged.

**Tier 1** – allows land application of up to 10,000 gallons of wastewater per year to irrigate crops or landscaped areas and associated residual solids as a soil amendment on cropped or landscaped areas.

**Tier 2** – allows land application of up to 100,000 gallons of wastewater per year to irrigate crops or landscaped areas and associated residual solids as a soil amendment on cropped or landscaped areas.

**Tier 3** – allows land application of up to a maximum of 1,000,000 gallons of wastewater per year to irrigate crops or landscaped areas and associated residual solids as a soil amendment on cropped or landscaped areas, with a minimum of 1.0 acres of land application area per 100,000 gallons of wastewater.

These tiers were established to accomplish three objectives:

- Provide a no-fee regulatory system for discharges that pose essentially no threat to water quality – those that discharge no more than 10,000 gallons of wastewater and associated residual solids per year.
- Expand the applicability of the waiver to provide regulatory coverage for larger facilities by increasing the annual wastewater flow limit to 1,000,000 gallons of wastewater and associated residual solids per year, provided that the water and waste constituent loadings are consistent with the requirements of previous waivers on a per-acre basis.
- Expand the applicability of the waiver to seasonal nut hulling operations that use shallow, unlined ponds to temporarily store wash water prior to land application.
   Use of such ponds would be allowed only during the harvest season (typically August through December).

In addition to limited land discharges of wastewater and residual solids, the holding and hauling of wastewater for offsite disposal at a permitted wastewater treatment facility is not subject to regulation by the Central Valley Water Board.

The waste streams regulated under the 2015 Waiver are similar in chemical character and present a low threat to water quality when discharged to land. The basis and waste character for the 2015 Waiver was provided in the Initial Study (https://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/waivers/sfp\_waiver\_is.pdf) and summarized below.

- Waste streams may contain high concentrations of biodegradable organic matter (measured as biochemical oxygen demand or BOD) on the order of 1,000 to 3,000 mg/L.
- Waste streams may contain high concentrations of total nitrogen on the order of 100 mg/L. Initially most of the nitrogen is in organic form, but much of that will readily convert to ammonia and then nitrate when adequate oxygen is present. This is the case with a well-managed land application system.
- Waste streams may contain other salts that are taken up by the crop from the soil and irrigation water used to grow the crop. These typically include sodium, chloride, potassium, phosphorus, carbonate, sulfate, and bicarbonate. Some additional salinity may be added by processing equipment cleaning and sanitation solutions. In order to differentiate between true salts and dissolved organic matter, fixed dissolved solids (FDS) is used as the best salinity indicator for wastewaters with significant BOD.
- Waste streams may contain minor amounts of other cleaning solution chemicals but are unlikely to significant concentrations of toxic constituents.

More recent data characterizing wineries, small food processors, and related agricultural processors are discussed below:

Winery Waste. Typical winery wastewater characteristics, specifically wineries that do not operate a distiller, are presented in Table 1. The data presented are from "A California Winery Wastewater Survey: Assessing the Salinity Challenge for Wastewater Reuse" available on the <u>American Journal of Enology and Viticulture website</u>. (http://www.ajevonline.org/content/early/2015/06/12/ajev.2015.14110). Wastewater samples were collected from eighteen wineries for consecutives months from November 2010 through June 2012. All data are shown as a mean with the maximum concentration shown in parentheses, with the exception of pH, which is shown as a pH range. Concentrations for pH, widely fluctuate and may not be representative of typical winery waste due to variations in sample collection and screening. Wastewater sample analysis data presented below was from laboratory analysis, however pH readings are typically collected in the field due to analytical method hold time criteria. TDS is a calculated value based on an EC to TDS conversion (1.56 μmhos/cm EC = 1.0 mg/L TDS).

**Table 1. Winery Process Wastewater Quality** 

		Non-Crush Season (January - August)	Crush Season (September – December)	
Constituent	Units	<b>Untreated Process Water</b>	Untreated Process Water	
BOD	mg/L	1,390 (41,000)	1,790 (15,400)	
рН	standard units	7.1 (3.6 - 11.3)	6.9 (3.6 - 12.9)	
EC	µmhos/cm	970 (3,260)	1,320 (9,700)	
Calc. TDS	mg/L	621 (2,090)	845 (6,210)	
Nitrate	mg/L	0.48 (6.4)	3.0 (15.8)	

**Nut Hulling Wastewater.** Nut hulling wastewater characteristics are presented in Table 2. Wastewater data represent wastewater quality for multiple nut processing facilities operating within the Central Valley. Pistachio wastewater data represent 2015 and 2016 monitoring data from eight facilities regulated under site-specific WDRs. Walnut wastewater data were provided by Western Agricultural Processors Association (WAPA), who conducted a voluntary sampling program from four facilities during the 2014 and 2015 processing season. Almond wastewater data represent 2015 and 2016 monitoring data from three facilities regulated under site-specific WDRs. All data are shown as mean data with maximum concentration shown in parentheses, with the exception of pH, which shows a pH range.

 Table 2. Nut Hulling Process Wastewater Characteristics

Constituents	Units	Pistachio Process Water	Walnut Process Water	Almond Process Water
BOD	mg/L	4,144 (9,670)	2,564 (10,080)	874 (3,400)
pН	standard units	5.5 (4.5 – 6.8)	Not Available	6.9 (4.2 – 10.9)
EC	µmhos/cm	3,147 (5,670)	Not Available	1,277 (4,000)
FDS	mg/L	1,641 (3,200)	171 (402)	790 (2,200)
TDS	mg/L	4,677 (10,200)	Not Available	1,586 (4,200)
Nitrate as N	mg/L	3.2 (18)	10 (115)	0.3 (1.6)

Water Board staff anticipates some resistance from the nut hulling industry based on comments received during the 2015 Waiver adoption process. Expanding the conditions of discharge to accommodate a broader range of nut facilities is not being proposed at this time. Evaluation of available data and operational practices associated with the nut hulling industry is currently in progress. A separate general order that would better suit the nut industry is in the developing stages.

All Other Food Process Waste. All other food process wastewater characteristics are presented in Table 3. Wastewater data represent 81 food processing facilities (not including wineries and nut facilities) operating in the Central Valley under site-specific WDRs. Food processors include the following activities: canning, citrus packing and processing, dehydrators, fruit packing and processing, juice processing, and vegetable processing. All data are shown as mean data with maximum concentration shown in parentheses.

Table 3. All Other Food Process Wastewater Characteristics

Constituents Units		Other Process Wastewater	
BOD	mg/L	1,891 (26,925)	
рН	standard units	Not Available	
EC	µmhos/cm	1,370 (7,740)	
FDS	mg/L	736 (3,165)	
TDS mg/L		1,407 (12,800)	
Nitrate as N	mg/L	3.3 (63)	

The Central Valley Water Board has determined that the threat to groundwater quality posed by wastewater and solid waste from small food processors, wineries, and related agricultural processors that meet the conditions of the proposed Waiver is low based on the effectiveness of land treatment and the appropriate management and controls of the discharge application. Land application provides treatment of the organic portion of the waste and has the additional benefits of reusing water and providing a low-cost organic soil amendment and a low-cost organic crop fertilizer. Hydraulic loading in the land application areas are typically a small fraction of the water needs of typical crops grown in the Central Valley. Spreading the waste over a large enough area and use of higher supplemental water quality to meet the crop or vegetation demands help minimize the threat to water quality. The proposed Waiver imposes conditions of discharge that require dischargers to minimize or eliminate discharges of pollutants that could affect beneficial uses and manage the discharge to prevent and minimize a threat to water quality.

Tier 1 and Tier 2 discharges are not expected to exceed the hydraulic or nutrient loading capacity of the lands that the wastewater is applied to, because the volumes of wastewater are relatively small, and the proposed Waiver prohibits the discharge of high-strength wastewater. Tier 3 discharges might still pose a threat to water quality if wastewater is not applied to sufficient acreage to prevent hydraulic overloading. Therefore, based on typical winery and food processing wastewater character, the allowable hydraulic and waste constituent mass loadings for Tier 3 discharges are as follows:

Annual Wastewater Volume: 1,000,000 gallons/year

Land Application Area: 1 acre per 100,000 gallons

Wastewater Hydraulic Loading: 3.7 inches/year

**Wastewater Mass Loading:** 

BOD: 1,700 lb/ac/year FDS: 830 lb/ac/year Total Nitrogen: 83 lb/ac/year

Professional publications, including The California League of Food Processors' "Manual of Good Practice for Land Application of Food Processing/Rinse Water" (2007) and The Wine Institute's "Draft Sustainable Winery Practices for Process Water Management" (2007) provides best management practices related to land application treatment and disposal processes for wineries and similar industries. The Manual of Good Practice for Land Application of Food Processing/Rinse Water has not been subject to a scientific peer review process but provides science-based guidance to minimize the threat to water quality when applying process waste to land.