# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. R4-2012- XXXX

WASTE DISCHARGE REQUIREMENTS
AND
WATER RECYCLING REQUIREMENTS
FOR
SAN MIGUEL PRODUCE, INCORPORATED
SAN MIGUEL PRODUCE WASTEWATER TREATMENT PLANT
(FILE NO. 04-168)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

## **PURPOSE OF ORDER**

- 1. On May 22, 2003, San Miguel Produce, Incorporated (hereinafter Discharger) submitted a Report of Waste Discharge (RoWD) to the Regional Board for the land application of vegetable processing wastewater. The RoWD was submitted for an existing vegetable processing facility and associated wastewater treatment and land application.
- 2. The Discharger owns and operates a vegetable processing facility located at 4444 Navalair Road, Oxnard, California. The processing facility and the land application area is on Assessor's Parcel No. 232-0-041-270.

## **BACKGROUND**

- 3. The Discharger is a grower/packer/processor/shipper of fresh vegetables located on a 27-acre site that includes a single story office building, a single story refrigerated warehouse and a processing facility, vegetable cooling equipment, miscellaneous outbuildings and approximately 13 acres of vegetable row crop land.
- 4. The Discharger discharges approximately 15,000 gallons per day (gpd) of treated vegetable wash wastewater. The San Miguel Produce Wastewater Treatment Plant (San Miguel Produce WWTP) has a design treatment and disposal capacity of 25,000 gallons per day (gpd). The Discharger runs its operations six days per week.
- 5. Commercial wastewater produced from the Discharger's facility is treated at the San Miguel Produce WWTP. The final treated vegetable wash wastewater effluent is used to (1) irrigate row crops being grown on the subject site, (2) water farm roads to control dust, (3) water lawns around the plant and office complex on subject property, (4) spray vegetable crops in combination with pesticides, herbicides, etc. and (5) supply cooler buildings and cooling equipment towers/condensers situated on the subject property.
- 6. The facility uses tap water obtained from the City of Oxnard's municipal water supply distribution system. The potable tap water is used in the office building as well as the source of wash water in the vegetable washing operations. Chlorine and citric acid are added to control bacteria and pH levels. No other additives or products are involved in

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the process.

7. Domestic wastewater at the site is discharged into two septic tanks with leachfield disposal systems, under requirements from the County of Ventura Environmental Health Division for total of 1,500 gallons per day. No commercial or industrial wastes are discharge into the septic disposal systems. The septic tanks are located adjacent to the main office building and the packaging processing building. The septic tanks capacities range from 1,000-gallons to 2,000-gallons and the leachfields consists of six 90-foot long by 36 inches wide by 24 inches deep leachlines and are located approximately 5 feet northeast of the main office building.

# **FACILITY AND TREATMENT PROCESS DESCRIPTION**

- 8. The San Miguel Produce WWTP and land application area are located in and around Section 20, T1N, R21W, San Bernardino Base & Meridian (See Figure 1. Facility Area Map and Figure 2. Nearby Land Use Map). The San Miguel Produce WWTP's approximate latitude is 34° 8' 24", longitude 119° 6' 26". The irrigation fields for vegetable crops are approximate 13 acres, and are located approximately 200 feet from the facility.
- 9. The San Miguel Produce WWTP is a secondary wastewater treatment plant, which consists of a collection system, a separator, an anoxic tank, a bio-reactor, a secondary clarifier, filtration, an ultraviolet disinfection unit, and an aerobic digester.
- 10. The facility's various flows generated from the vegetable washing and rinsing processing at the facility are collected into three sumps, and then the combined flows are conveyed into a central sump.
- 11. The facility's influent collected in the central sump is pumped to a mechanical screen for primary solids removal. The screened wastewater flows by gravity into the anoxic tank selector, where it is mixed with activated sludge. During this process and in absence of oxygen, microorganisms begin to metabolize nitrogen, convert it into nitrogen gas in its de-nitrification cycle.
- 12. The mixed liquor is pumped into a bioreactor tank where the oxidation process is completed. A dissolved oxygen analyzer reads the amount of oxygen in the tank. Through a controller with a set point, the dissolved oxygen analyzer readings are used to control a variable frequency drive to speed or slow down the aeration blower motor.
- 13. The mixed liquor then passes through the clarifier tank, where in a quiescent mode, sludge separates from the treated water, settling to the bottom of the tank. The sludge is collected for later removal.
- 14. The clarified water is filtered through a multimedia type filter with a removal capacity to about 20 micron particle size. The effluent from the clarifier tank passes through the filter and the small particles of sludge and debris is collected in the filter and backflushed into the aerobic digester tank, where it is agitated and periodically allowed to settle so that the water can be decanted and the thickened sludge can be either pumped out for disposal or treated onsite.

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- 15. Following secondary treatment, the effluent wastewater is disinfected by the ultra-violet (UV) unit. Finally, the treated wastewater is diverted and used to water the crops. The treated wastewater is discharged to groundwater by irrigation through furrow and sprinkler pipes at the crop fields.
- 16. Sprinkler application of wastewater in the land application areas is acceptable if the application is in compliance with Section D, "Land Application Area Specifications" of this Order and if the land application area has been adequately prepared to receive sprinkler-applied wastewater. The Discharger may add cover crops in the rows between the trees. Other crops may be acceptable as long as the discharge complies with the Effluent Limitations.
- 17. Discharger has monitored water quality of the effluent wastewater before it is recycled and/or used for irrigation since February 2004. Constituents quarterly monitored include pH, oil and grease, total dissolved solids (TDS), total suspended solids (TSS), chloride, sulfate, biochemical oxygen demand (BOD), and nitrate. To date, there was only one elevated concentration of BOD at 117 milligrams per liter (mg/L) observed in the sample collected on December 31, 2007.
- 18. Five nested wells were installed by Southern California Edison (SCE) (State Well 1N21W19L010-14S), located approximately three-quarter miles from San Miguel Produce, Incorporated. The shallowest well to the surface was screened from 18 feet to 38 feet. Measurements made in the shallow screened well (SCE-38) identified groundwater levels fluctuating from 4.83 feet below grade to 8.52 feet below grade during the period of record (1991 and 1994). The following water quality parameters were measured in this shallow zone:

Constituents	Units	State Well 1N21W19L0 10-14S	WWTP Effluent <sup>2</sup>
Specific Conductance	μS/cm	8,820	NA <sup>3</sup>
рН	pH units	7.3	7.95
BOD <sub>5</sub> 20°C	mg/L	NA <sup>3</sup>	23.2
Total suspended solids (TSS)	mg/L	NA <sup>3</sup>	39
Oil and Grease	mg/L	NA <sup>3</sup>	$ND^4$
Calcium	mg/L	1,000	NA <sup>3</sup>
Magnesium	mg/L	250	NA <sup>3</sup>
Sodium	mg/L	950	NA <sup>3</sup>
Potassium as CaCO₃	mg/L	14	NA <sup>3</sup>
Sulfate as SO <sub>4</sub>	mg/L	2,500	500
Chloride	mg/L	2,300	98
Total dissolved solids (TDS)	mg/L	NA <sup>3</sup>	1,130
Residue Solids	mg/L	7,430	NA <sup>3</sup>
Nitrite as N	mg/L	0.07	NA <sup>3</sup>
Nitrate as N	mg/L	NA <sup>3</sup>	16.6
Total Nitrogen as N (NO <sub>2</sub> + NO <sub>3</sub> )	mg/L	0.091	NA <sup>3</sup>
Ammonia as N	mg/L	4.0	NA <sup>3</sup>

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<sup>1</sup>Based on analyses performed between 1991 and 1994

<sup>2</sup>Based on analyses on June 20, 2008

<sup>3</sup>NA: Not Available <sup>4</sup>ND= Not Detected

## SITE-SPECIFIC CONDITIONS

- 19. The San Miguel Produce WWTP and the septic disposal systems are located within the Oxnard Plain Subbasin of the Santa Clara River Valley Groundwater Basin. The Oxnard Subbasin is bounded on the north by the Oak Ridge fault and on the south by the contact of permeable alluvium with the semi-permeable rocks of the Santa Monica Mountains, on the east by the Pleasant Valley and Las Posas Valley Basins, and on the west by the Pacific Ocean.
- 20. Five aquifers are recognized in this subbasin, with the Oxnard Aquifer and the Fox Canyon Aquifer as the two primary fresh water-bearing units.
- 21. The Oxnard Aquifer consists of late Pleistocene to Holocene age sands and gravels that were deposited in a coalescing alluvial fan setting that forms the Oxnard alluvial plain. These sediments are coarse and very permeable within the forebay, but include thicker deposits of fine material toward the coast.
- 22. The silt and clay deposits form a low permeability cap over the high permeability sand and gravel. These confining clays are absent in the Point Mugu area, allowing direct recharge to the gravel deposits in the southern part of the subbasin. Sand and gravel layers overlie the silt and clay deposits forming a semi-perched aquifer of poor quality water. The upper Pleistocene alluvial gravels lie unconformably over folded lower Pleistocene San Pedro Formation.
- 23. The San Pedro Formation contains relatively thin sand and gravel deposits in its upper portion, a thick silt and clay dominated middle section, and a widespread thick permeable gravel member at the base of the formation called the Fox Canyon Aguifer.
- 24. The Fox Canyon Aquifer deposits are in contact with the upper Pleistocene gravels in the forebay, but separated from them throughout most of the subbasin by silts and clays within the San Pedro Formation.
- 25. The Oxnard Subbasin is replenished by percolation of surface flow from the Santa Clara River, into the Oxnard Forebay. The subbasin is also recharged by precipitation and floodwater from the Calleguas Creek drainage, which percolate into the unconfined gravels near Mugu Lagoon. Subsurface flow from Santa Paula Subbasin makes its way over or across the Oak Ridge fault, and some underflow may come from the Las Posas and Pleasant Valley Basins on the east.
- 26. Land use in the San Miguel Produce WWTP vicinity is primarily agricultural. The topography of the surrounding area is level.
- 27. Depth to groundwater at the San Miguel Produce WWTP site ranges from a depth of 5 feet to 10 feet below ground surface (bgs). Groundwater flows in a southwesterly direction towards the Pacific Ocean.

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# **APPLICABLE PLANS, POLICIES AND REGULATIONS**

- 28. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994, and amended by various Regional Board resolutions. This updated and consolidated plan represents the Board's master quality control planning document and regulations. The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical water quality objectives that must be attained or maintained to protect the designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.
- 29. State Water Resources Control Board (State Board) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation" Policy) requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives). Resolution 68-16 requires that any discharge that could degrade the waters of the State be regulated to assure use of best practicable treatment or control (BPTC) of the discharge to assure that pollution or nuisance will not occur, and the highest water quality consistent with maximum benefit to the people of the State will be maintained.
- 30. This Order establishes limitations that will not unreasonably threaten present and anticipated beneficial uses or result in receiving quality that exceeds water quality objectives set forth in the Basin Plan. This means that where the stringency of the limitations for the same waste constituent differs according to beneficial use, the most stringent applies as the governing limitation for that waste constituent. This Order contains tasks for assuring that BPTC and the highest water quality consistent with the maximum benefit to the people of the State will be achieved. Accordingly, the discharge is consistent with the antidegradation provisions of Resolution 68-16. Based on the results of the scheduled tasks, the Regional Board may reopen this Order to reconsider groundwater limitations and other requirements to comply with Resolution 68-16.
- 31. Excessive application of food processing wastewater to land application areas can create objectionable odors, soil conditions that are harmful to crops and degradation of underlying groundwater by overloading the shallow soil profile and causing waste or soil constituents (organic carbon, nitrate, dissolved solids, and metals) to percolate below the root zone. If sufficient information becomes available, this Order may be revised to increase or further reduce loading rates as appropriate. If the Discharger is unable to modify its waste stream or application methods such that groundwater quality will not be impacted, then the Regional Board would be required to classify the waste as a designated waste and require full containment under Title 27 of the California Code of Regulations (CCR), Division 2, Subdivision 1, beginning with Section 20005 (hereafter

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Title 27).

32. The San Miguel Produce WWTP and septic disposal systems are located in the Oxnard Plain Hydrologic area and overlies the Ventura Central Groundwater Basin. The Basin Plan designates beneficial uses and water quality objectives for the Oxnard Plain—unconfined and perched aquifers and Ventura Central Groundwater Basin waterbody as following:

## Groundwater (unconfined and perched aguifer):

Existing: Municipal and Domestic Supply and Agricultural Supply.

Potential: Industrial Service Supply

- 33. The use of recycled washwater for the irrigation of crops could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with section 13523 of the California Water Code.
- 34. The California Department of Public Health adopted Water Recycling Criteria that became effective on January 2009. Applicable criteria to the recycling project are prescribed in this Order.
- 35. This project involves an existing facility and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 2100 et seq.) in accordance with title 14, California Code of Regulations, Chapter 3, section 15301.
- 36. The Discharger will be able to achieve compliance with all the effluent limitations listed in this Order and will not discharge any wastewater to surface water from the treatment plant and septic disposal systems.
- 37. Pursuant to California Code Section 13263(g), discharges is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
- 38. The Regional Water Board will review this Order periodically and will revise requirements when necessary.
- 39. In 2005, the Los Angeles Regional Water Quality Control Board adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region, also known as the "Ag Waiver" program. The Ag Waiver requires the owners of irrigated farmland to measure and control discharges from their property, including irrigation return flows, flows from tile drains, and stormwater runoff. The San Miguel Produce, Incorporated is one of the members of the Ventura County Agricultural Irrigated Lands Group (VCAILG). On December 18, 2006, the VCAILG was effectively enrolled on the Ag Waiver Program. As a member of the VCAILG, San Miguel Produce, Incorporated was so enrolled for its irrigated lands.
- 40. The Ag Waiver does not cover waste discharge resulting from washing, packing and/or processing vegetables, nor the usage of recycled washwater is a discharge of industrial waste even though the treated vegetable wash wastewater effluent generated at San Miguel Produce WWTP is used to irrigate row crops being grown on the subject site, to water farm roads for dust control, to water lawns around the plant and office complex on

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subject property, and to spray vegetable crops in combination with pesticides, herbicides, etc.

- 41. Section 13267(b) of the California Water Code (CWC) states, in part, that "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports." The reports required by Monitoring and Reporting Program CI No. 9784 are necessary to assure compliance with these waste discharge requirements. The Discharger operates facilities that discharge wastes subject to this Order.
- 42. The technical reports required by this Order No. R4-2012-XXXX and the attached Monitoring and Reporting Program CI No. 9784 are necessary to assure compliance with these waste discharge requirements. The Discharger operates the Facility that discharges the waste subject to this Order.

## **ELECTRONIC SUBMITTAL OF INFORMATION**

43. Dischargers are directed to submit all reports required under the waste discharge requirements (WDR) adopted by the Regional Board, including groundwater monitoring data in Electronic Data Format, well and discharge location data, and searchable pdf reports and correspondence, to the State Water Resources Control Board GeoTracker database under Global ID WDR100002214.

# CALIFORNIA ENVIRONMENTAL QUALITY ACT AND NOTIFICATION

- 44. This project involves the issuance of WDRs for an existing facility with no expansion of use; as such the action to adopt WDRs is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 2100 et seq.) in accordance with California Code of Regulations, title 14, Chapter 3, section 15301.
- 45. The Regional Board has notified the Discharger and interested agencies and persons of the intent to issue WDRs for this discharge, and has provided them with an opportunity to submit written comments for the requirements.
- 46. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

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47. Pursuant to CWC section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be received by the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of the date this Order is adopted.

**IT IS HEREBY ORDERED** that the Discharger, San Miguel Produce, Incorporated, shall be responsible for and shall comply with the following requirements in all operations and activities at the San Miguel Produce WWTP:

#### A. EFFLUENT LIMITATIONS

- 1. Effluent (wastewater discharged from the San Miguel Produce WWTP and septic disposal systems) shall not contain heavy metals, arsenic, or cyanide, or other pollutants designated Priority Pollutants (Appendix A to 40 CFR, Part 423--126 Priority Pollutants) by the USEPA in concentrations exceeding the limits contained in the California Drinking Water Standards, CCR title 22, section 64431 (Attachment A-1).
- 2. Radioactivity shall not exceed the limits specified in the California Code of Regulations (CCR) title 22, chapter 15, section 64441 et seq., or subsequent revisions (Attachment A-2).
- 3. Effluent shall not contain organic chemicals in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR title 22, section 64444 or subsequent revisions (Attachment A-3).
- 4. Effluent shall not contain disinfectant byproducts in concentrations exceeding the limits contained in the current California Drinking Water Standards, CCR title 22, section 64533, Chapter 15.5 or subsequent revisions (Attachment A-4).
- 5. The discharge flow shall not exceed a maximum flow of 25,000 gpd.
- 6. The pH in the effluent shall at all times be from 6.5 to 8.5 pH units.
- 7. Waste discharged through spray disposal or for spray irrigation of fodder crops shall not contain constituents in excess of the following limits:

Constituent	Units <sup>1</sup>	Daily Maximum	Monthly Average
BOD₅20°C	mg/L	80	40
Total suspended solids	mg/L	30	
Total nitrogen <sup>2</sup>	mg/L	10	
Nitrite as N	mg/L	1	
Oil and grease	mg/L	15	10
Total dissolved solids	mg/L	3,000	
Chloride	mg/L	500	
Sulfate	mg/L	1,000	
MBAS (Surfactants)	mg/L	0.5	

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Total residual chlorine	mg/L	0.01	
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<sup>&</sup>lt;sup>1</sup>mg/L=milligrams per liter; μg/L= micrograms per liter; MPN/100mL = most probable number (MPN) per 100 milliliters

- 8. <u>Turbidity Limits:</u> The turbidity of the recycled water used for surface irrigation shall not exceed any of the following:
  - a) A daily average of 2 Nephelometric turbidity units (NTUs).
  - b) 5 NTUs more than 5 percent of the time (72 minutes) during any 24 hour period, and
  - c) 10 NTU at any time.
- 9. Total coliform Limits: The total coliform of the recycled water used for surface irrigation of food crops shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 MPN per 100 ml, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 MPN per 100 ml in any two consecutive samples

#### B. GROUNDWATER LIMITATIONS

- 1. "Receiving water" is defined as groundwater underlying the wastewater treatment plant, and the discharge areas described in Finding 31.
- 2. The effluent discharged from the San Miguel Produce WWTP and septic disposal systems shall not cause the receiving water to contain waste constituents greater than the limits in B.3.

3.

Constituent	Units <sup>1</sup>	Maximum Limitation
Total dissolved solids (TDS)	mg/L	3,000
Sulfate	mg/L	1,000
Chloride	mg/L	500
Total Nitrogen <sup>2</sup>	mg/L	10
Nitrate as N	mg/L	10
Nitrite as N	mg/L	1
Total coliform	MPN/100mL	<1.1
Fecal coliform	MPN/100mL	<1.1
Enterococcus	MPN/100mL	<1.1

mg/L= milligrams per liter; MPN/100mL= most probable number (MPN) per 100 milliliters

#### C. GENERAL REQUIREMENTS

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<sup>&</sup>lt;sup>2</sup>Total nitrogen= nitrate-N + nitrite-N + ammonia-N + Organic Nitrogen

<sup>&</sup>lt;sup>2</sup>Total nitrogen = nitrate-N + nitrite-N + ammonia-N + Organic Nitrogen

- 1. Standby or emergency power facilities and/or sufficient capacity shall be provided for treated wastewater storage during rainfall or in the event of plant upsets or outages.
- 2. Adequate facilities shall be provided to protect the San Miguel Produce WWTP, treatment system devices, and wastewater collection system from damage by storm flows and runoff or runoff generated by a 100-year storm.
- 3. The Discharger's wastewater treatment system and land application system shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 4. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge.
- 5. The treatment system, including the collection system that is a part of the treatment system and the disposal system, shall be maintained in such a manner that prevents wastewater from surfacing or overflowing at any location.
- 6. Sludge and other solids shall be removed from wastewater shall be disposed of in a manner that is consistent with Title 27, Division 2, Subdivision 1 of the CCR and approved by the Executive Officer.
- 7. Sludge and other solids shall be removed from wastewater treatment equipment, sumps, ponds, etc. as needed to ensure optimal plant operation and adequate hydraulic capacity. Drying operations shall take place such that leachate does not impact the quality of groundwater or surface water.
- 8. Wastewater discharged to the seepage pits/leachfields shall not result in concentrations of salts, heavy metals, or organic pollutants from being present in the receiving water at levels that would impact the designated beneficial uses of groundwater or, in the event that groundwater is in hydraulic connection with surface waters, the designated beneficial uses of surface water.
- 9. The disposal of wastes shall not impart tastes, odors, color, forming, or other objectionable characteristics to the receiving water.
- 10. Any wastes that do not meet the foregoing requirements shall be held in impervious containers and discharged at a legal point of disposal.
- 11. Storage and disposal of domestic wastewater shall comply with existing Federal, State, and local laws and regulations, including permitting requirements and technical standards.
- 12. Any proposed change in solids use or disposal practice from a previously approved practice shall be reported to the Executive Officer at least 60 days in advance of the change.

13. Dischargers are directed to submit all reports required under the waste Discharger requirements (WDRs) adopted by the Regional Board including groundwater monitoring analytical data and discharge location data, to the State Water Resources Control Board GeoTracker database under Global ID WDR100002214. The GeoTracker training video is available at:

https://waterboards.webex.com/waterboards/ldr.php?AT=pb&SP=MC&rID=44145287&rKey=7dad4352c990334b

#### D. LAND APPLICATION AREA SPECIFICATIONS

- 1. The discharge shall be distributed uniformly on adequate acreage in compliance with the Discharge Specifications.
- 2. Vegetation shall be grown on the application area. Vegetation shall be selected based on nutrient uptake capacity, tolerance to anticipated soil moisture conditions, and consumptive use of water and irrigation requirements. Cropping activities shall be sufficient to take up all the nitrogen applied. Vegetation shall be harvested, or mowed, and removed from the land application area.
- 3. Hydraulic loading of wastewater and irrigation water shall be at reasonable agronomic rates designed to minimize the percolation of process wastewater and irrigation water below the root zone (i.e., deep percolation).
- 4. The discharge of effluent, including runoff, spray or droplets from the irrigation system, shall not occur outside the boundaries of the land application area.
- 5. The Discharger may not discharge effluent to the land application area 24 hours before a predicted storm event of 0.5 inches (or greater), or during periods of precipitation, nor shall effluent be discharged when the soil is saturated.
- 6. Wastewater conveyance lines shall be clearly marked as such. Wastewater controllers, valves, etc. shall be posted with advisory signs; all equipment shall be of a type, or secured in such a manner, that permits operation by authorized personnel only.
- 7. No domestic water from the septic systems is allowed for land application.
- 8. No physical connection shall exist between wastewater piping and any domestic water supply or other domestic/industrial supply well without an air gap or approved reduced pressure device.
- 9. The land application area shall be managed to prevent breeding of mosquitoes. More specifically:
  - a) All applied irrigation water must infiltrate completely within 24 hours.
  - b) Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.

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- c) Low pressure pipelines, unpressurized pipelines, and ditches that are accessible to mosquitoes shall not be used to store wastewater.
- 10. Discharges to the land application area shall be managed to minimize erosion, runoff, and overspray from the land application area.
- 11. Application of wastewater to the land application areas via flood irrigation shall only occur on contours, furrows, or checks graded so as to achieve uniform distribution, minimize ponding and provide for tailwater control. Furrow runs shall be no longer and slopes shall be no greater than what permits reasonably uniform infiltration and maximum practical irrigation efficiency. The minimum furrow slope shall not be less than 0.2 percent.
- 12. There shall be no standing water in the land application area 24 hours after wastewater is applied.
- 13. Wastewater discharge shall not occur within a 50-foot wide buffer zone along any property lines adjacent to properties developed with residences.
- 14. The perimeter of the land application areas shall be bermed or graded to prevent ponding along public roads or other public areas.
- 15. The resulting effect of the wastewater discharge on the soil pH shall not exceed the buffering capacity of the soil profile.

### E. RECYCLED WATER SPECIFICATIONS FOR IRRIGATION

- 1. Recycled washwater used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow.
- 2. Recycled washwater shall be applied at such a rate and volume as not to exceed vegetation demand and soil moisture conditions. Special precautions shall be taken to prevent clogging of drip tubes, to prevent over-watering and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.
- 3. The use of the recycled washwater shall not cause the concentration of organic and inorganic chemicals (i.e., heavy metals, arsenic, or cyanide) in the receiving water to exceed the limits contained in title 22 of the California Code of Regulations, sections 64431 (Inorganic chemical) and 64444 (Organic chemical).
- 4. Recycled washwater shall not be used for irrigation during periods of rainfall and/or runoff.
- 5. Recycled washwater reuse shall not result in breeding of mosquitoes, gnats, or other pests.
- 6. Recycled washwater used for crop irrigation or on-site field access road dust control shall not result in earth movement in geologically unstable areas.

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- 7. Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.
- 8. All areas where recycled washwater is used shall be posted with conspicuous signs that include the following wording in a size no less than 4 inches high by 8 inches wide: "ATTENTION: NON-POTABLE WATER DO NOT DRINK" or "WASHWATER USED FOR IRRIGATION DO NOT DRINK." Perimeter warning signs indicating that the treated washwater is in use shall be posted at least every 500 feet, with a minimum of at least one sign on each corner of each irrigation area at access road entrances.
- 9. The portions of the washwater piping system that are in areas subject to access by the general public shall not include any hose bibbs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the washwater piping system in areas subject to public access.
- 10. Drinking water fountains shall be protected against contact with washwater spray, mist, or runoff.

## F. PROHIBITIONS

- 1. The direct or indirect of any waste and/or wastewater to surface waters or surface water drainage courses is prohibited.
- 2. Ponding caused by discharge of wastewater or the use of recycled water is prohibited at any time.
- 3. Bypass, discharger or overflow of untreated wastes, except as allowed by Section F. 13 of this Order, is prohibited.
- 4. Discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, California Code of Regulations, Section 2510 et seq., is prohibited. Discharge of waste classified as 'designated,' as defined in California Water Code Section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
- 5. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.
- 6. Wastes discharged shall not impart tastes, odors, color, foaming or other objectionable characteristics to the receiving water.
- 7. There shall be no onsite permanent disposal of sludge. Sludge-drying activities are allowed, but only as an intermediate treatment prior to off-site disposal. Any offsite disposal of wastewater or sludge shall be made only to a legal point of disposal. For purposes of this Order, a legal disposal site is one for which requirements have been established by a California Regional Water Quality Control Board or comparable regulatory entity, and which is in full compliance therewith. Any wastewater or sludge handling shall be in such a manner as to

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prevent its reaching surface waters or watercourses.

- 8. Odors originating at this facility shall not be perceivable beyond the limits of the property owned by the Discharger.
- 9. Wastes discharged from the wastewater treatment plant shall at no time contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- 10. The discharge of waste shall not create a condition of pollution, contamination, or nuisance. No new connections may be made without notification to the Regional Board.
- 11. The holding tanks containing treated washwater shall not have beggiatoa or other indications of anaerobic conditions.
- 12. The discharge of any wastewater to surface waters or surface water drainage courses is prohibited without a NPDES permit.
- 13. The holding tanks shall not contain floating materials, including solids, foams or scum in concentrations that cause nuisance, adversely affect beneficial uses, or serve as a substrate for undesirable bacterial or algae growth or insect vectors.
- 14. Bypass (the intentional diversion of waste stream from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the Discharger for bypass unless:
  - a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that cause them to become inoperable, or substantial and permanent loss in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production);
  - b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and
  - c) The Discharger submitted a notice at least 48 hours in advance of the need for a bypass to the Regional Board.
- 15. Any discharge of wastewater from the treatment system (including the wastewater collection system) at any point other than specifically described in this Order is prohibited and constitutes a violation of this Order.

#### G. PROVISIONS

1. By August 7, 2012, the Discharger shall submit a workplan for an installation of

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monitoring wells that adequately assess impacts to the quality of the receiving groundwater. The workplan shall specify the number of wells, well locations, and well design, and shall summarize the rationale upon which the proposed monitoring well network is based. The workplan shall also include construction details for the monitoring wells. The proposed workplan shall be prepared by or under the direction of a geologist registered in the State of California or civil engineer registered in the State of California and experienced in the field of hydrogeology, and is subject to the approval of the Executive Officer of this Regional Board.

- 2. A copy of this Order shall be maintained at the wastewater treatment plant so as to be available at all times to operating personnel.
- 3. The Discharger shall file with the Regional Board technical reports on self-monitoring work performed according to the detailed specifications contained in Monitoring and Reporting Program CI No. 9784 attached hereto and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done more frequently than required at the location and/or times specified in the Monitoring and Reporting Program shall be reported to the Regional Board. The Discharger shall comply with all of the provisions and requirements of the Monitoring and Reporting Program.
- 4. The Discharger shall comply with all applicable requirements of chapter 4.5 (commencing with section 13290) of division 7 of the California Water Code.
- 5. Monitoring and Reporting Program CI No. 9784 contains requirements, among others, a groundwater monitoring program for the San Miguel Produce WWTP so that the groundwater downgradient and upgradient from the discharge/disposal area can be measured, sampled, and analyzed to determine if discharges from the disposal system are impacting water quality.
- 6. The Discharger shall monitor the background of the receiving groundwater quality as it relates to its effluent discharges. Should the constituent concentrations in any downgradient monitoring well exceed the receiving water quality objectives in the Basin Plan and the increase in constituents is attributable to the Discharge's San Miguel Produce WWTP effluent disposal practices, the Discharger must develop a source control plan including a detailed source identification and pollution minimization plan, together with the time schedule of implementation, and must be submitted within 90 days of recording the exceedance.
- 7. Should effluent monitoring data indicate possible degradation of groundwater attributable to Discharger's effluent, the Discharger shall submit, within 90 days after discovery of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that may result from the discharge(s).
- 8. Should the nitrate and nitrite-nitrogen concentration in effluent of San Miguel Produce WWTP exceed 15 mg/L in three (monthly sampling plus two additional sampling events for result verification) consecutive samples taken within one

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month, the Discharger must submit an investigation plan (Plan) to the Executive Officer for approval within 90 days from the occurrence. The Plan must contain a detailed description of pollutant minimization strategies and prevention measures proposed, together with the time schedule of implementation.

- 9. Wastewater treatment and discharge at the discharge/disposal area shall not cause pollution or nuisance as defined in CWC section 13050.
- 10. In accordance with CWC section 13260(c), the Discharger shall file a report of any material change or proposed change in the character, location, or volume of the discharge.
- 11. The Discharger shall operate and maintain its wastewater collection, treatment and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's responsibilities. Anyone employed in the operation of the wastewater treatment plant must be certified pursuant to CWC sections 13625-13633.
- 12. The Discharger shall submit to the Regional Board an Operations and Maintenance Manual (O & M Manual) for the entire updated San Miguel Produce WWTP and disposal facilities for the San Miguel Produce WWTP facility. The Discharger shall maintain the O & M Manual in useable condition, and available for reference and use by all applicable personnel. The Discharger shall regularly review, and revise or update as necessary, the O & M Manual(s) in order for the document(s) to remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary and submitted to the Regional Board.
- 13. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
- 14. For any violation of requirements in this Order, the Discharger shall notify the Regional Board within 24 hours of knowledge of the violation either by telephone or electronic mail. The notification shall be followed by a written report within one week. The Discharger in the next monitoring report shall also confirm this information. In addition, the report shall include the reasons for the violations or adverse conditions, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.
- 15. This Order does not relieve the Discharger from the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
- 16. After notice and opportunity for a hearing, this Order may be terminated or modified for causes including, but not limited, to:

- a) Violation of any term or condition contained in this Order;
- b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
- c) A change in any condition, or the discovery of any information, that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 17. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
- 18. This Order includes the attached Standard Provisions Applicable to Waste Discharge Requirements which are incorporated herein by reference. If there is any conflict between provisions stated herein and the Standard Provisions Applicable to Waste Discharge Requirements, the provisions stated herein will prevail.
- 19. The Discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - a) Enter upon the Discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the CWC, any substances or parameters at any locations.
- 20. The WDRs contained in this Order will remain in effect and will be reviewed after five (5) years. Should the Discharger wish to continue discharging to groundwater for a period of time in excess of 5 years, the Discharger must file an updated Report of Waste Discharge with the Regional Board no later than 120 days in advance of the fifth-year anniversary date of the Order for consideration of issuance of new or revised waste discharge requirements. Any discharge of waste ten years after the date of adoption of this Order, without filing an updated Report of Waste Discharge with the Regional Board, is a violation of CWC section 13264. The Regional Board is authorized to take appropriate

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enforcement action for any noncompliance with this provision including assessment of penalties.

- 21. All discharges of waste into the waters of the State are privileges, not rights. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification.
- 22. Failure to comply with this Order and MRP No. 9784, could subject the Discharger to monetary civil liability pursuant to California Water Code, including sections 13268 and 13350. Person's failing to furnish monitoring reports or falsifying any information provided therein is guilty of a misdemeanor.

#### H. REOPENER

- 1. The Regional Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- 2. This Order may be reopened to include additional or modified requirements to address Discharger's expansion or mitigation plans, TMDL or Basin Plan mandates, or groundwater limitation compliance with Resolution 68-16.

I, Samuel Unger, 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, Los Angeles Region, on June 7, 2012.

Samuel Unger, P. E. Executive Officer T

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