CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2018-XXXX

WASTE DISCHARGE REQUIREMENTS

FOR
PACIFIC COAST PRODUCERS AND CITY OF WOODLAND
WOODLAND TOMATO CANNERY
YOLO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) finds that:

1. On 14 June 2017, Pacific Coast Producers (PCP) submitted a Report of Waste Discharge (RWD) that describes an existing tomato processing and canning factory that generates process wastewater and residual solids which are discharged to land in Woodland, California.

2. PCP (referred to as "Discharger") owns and operates the processing plant that generates the waste. The Land Application Area (LAA) is owned by the City of Woodland and leased to PCP. PCP and the City of Woodland are responsible for compliance with these Waste Discharge Requirements (WDRs).

3. The processing plant is located at 1376 Lemen Avenue in Woodland, California. The 900-acre LAA is approximately three miles east and one mile south of the processing plant, as shown on Attachment A, which is attached hereto and made part of this Order by reference. Assessor's Parcel Numbers (APNs) for the processing plant and the LAA are listed in the table below.

Property	Latitude	Longitude	APN	Township, Range, Section
Processing Plant	38º 40' 46" N	121º 45' 30" W	063-050-0091 063-060-071	Sections 1, and 36, T10N, R2E
LAA	38º 40' 03" N	121º 41' 52" W	27-390-20-1 27-390-22-1 27-390-23-1	Section 6 and 31, T10N, R3E, MDB&M

4. WDRs Order R5-2002-0122, adopted by the Central Valley Water Board on 7 June 2002, prescribes requirements for the discharge. Order R5-2002-0122 allows a monthly average wastewater flow of up to 4.0 million gallons per day (mgd) to the LAA, with a peak daily flow rate of 5.0 mgd. Since the adoption of Order R5-2002-0122, the Discharger has improved wastewater handling, irrigation, and reuse practices. The current WDRs do not reflect the upgraded treatment system. Therefore, Order R5-2002-0122 will be rescinded and replaced with this Order.

Existing Facility and Discharge

5. The processing plant has been used for tomato processing and canning and the LAA has received wastewater from processing operations since 1958. Previous owners that discharged to the LAA include the City of Woodland for former cannery waste, Contadina Foods, and Del Monte Food. PCP purchased the tomato processing cannery in August 2001 and began discharging to the LAA.

6. Process wastewater is generated at the processing facility from washing bulk fresh tomatoes to remove solids and the paste and canning processes. Some wastewater is generated in evaporation and condensation systems, can cooling, and boiler blowdown. Water from the cooling towers is recycled and accounts for approximately 30 percent of the daily wash water. The facility operates seasonally, generally July through September, and processes approximately 495,000 tons of tomatoes annually.

7. The current wastewater treatment system consists of mud settling tanks, screens, a suspended air flotation (SAF) treatment unit, an equalization tank, an equalization pond, and the LAA. The wastewater is discharged to 900 acres of LAA via sprinkler irrigation. Since adoption of Order R5-2002-1222, several changes and upgrades to the wastewater system have been made. Changes to the system are summarized below.

Wastewater Related Upgrades [1]

Year(s)	Change	Outcome
2006	Permanently switched to potassium hydroxide for peeling, completed lye recovery system	Nutrient with benign soil effects compared to sodium
2009	Equalization pond, turbine pumps, and sprinkler irrigation installed	Reduced ponding, improved field oxygen transfer and solids distribution
2010	Began phasing out lye peelers for steam peelers	Reduced peel waste, potassium hydroxide usage
2010-2016	Water conservation improvements	Reduced flow rates and hydraulic loading
2012	Began sending wet waste screenings offsite for cattle feed	Reduced residual solid loading at the LAA
2012	Started calcium hypochlorite addition for irrigation odor prevention	Oxidizes volatile compounds; no odor complaints since 2012
2013	SAF treatment unit installed	Reduced TSS and BOD in wastewater
2014	Mud settling enhancements	Improved mud removal from wastewater at factory

[1] Source: Table 1-2 of the RWD, dated June 2017.
BOD = biochemical oxygen demand
TSS = total suspended solids

8. Most of the supply water used at the plant for tomato processing is from a deep well, referred to as the East Well, located in the southeast part of the plant, as shown on Attachment B, which is attached hereto and made part of this Order by reference. In 2015, PCP started using the intermediate-depth North Well to provide additional supplemental water. Emergency water can be obtained through a connection with the City of Woodland water system. Water samples are collected from the wells every three years. Concentrations of select constituents for the wells and city supply water are shown below.

Source Water Quality

Constituent	Units	East Well sampled 9/21/17	North Well sampled 9/21/17	City of Woodland Water Supply (Emergency Water) [1]	Concentrations Protective of Beneficial Uses
pH	pH unit	8.3	8.0	8	--
EC	µmhos/cm	670	1,200	NA	700 [3] - 1,600 [4]
TDS	mg/L	440	670	583	450 [3] - 1,000 [4]
Nitrate as N	mg/L	<0.23 [2]	6	5.1	10 [5]
Alkalinity	mg/L	260	440	362	--
Bicarbonate	mg/L	260	440	362	--
Calcium	mg/L	11	76	76	--
Magnesium	mg/L	5.7	**66**	54	--
Sodium	mg/L	**140**	**100**	67	69 [3]
Arsenic	mg/L	**20**	2.7	NA	10 [5]
Iron	mg/L	<0.03 [2]	<0.03 [2]	NA	0.3 [6]
Manganese	mg/L	**0.06**	<0.01 [2]	NA	0.05 [6]

Concentrations in **bold** exceed concentrations protective of beneficial uses.
EC = electrical conductivity
mg/L = milligrams per liter
N = nitrogen
NA = not available
TDS = total dissolved solids
µmhos/cm = micromhos per centimeter
[1] From City of Woodland Annual Water Quality Report, 2015. Average concentrations are presented.
[2] The reporting limit was used for non-detect values when available.
[3] Lowest agricultural water quality goal
[4] Secondary Maximum Contaminant Upper Level
[5] Primary Maximum Contaminant Level
[6] Secondary Maximum Contaminant Recommended Level

9. Various chemicals are used at the processing plant for tomato processing, peeling, sanitation, and mold and odor control. Some salts and flavorings are added to processed tomatoes, a small portion of which could impact the wastewater quality. Potassium hydroxide is used for two lye peelers at the plant, but lye peeling is being phased out for steam peeling. A complete list of chemicals and quantities used is included in the Information Sheet attached to these WDRs.

10. In 2016, the average wastewater flow during the peak processing month of August was 1.72 mgd. Average annual wastewater flow rates for 2012 to 2016 were:

Average Wastewater Flow [1]

Year	MGD	
2012	2.03	
2013	1.48	Permitted
2014	1.53	Flow [2] = 4 mgd
2015	1.54	
2016	1.43	

mgd = million gallons per day
[1] Average flow rates are when the plant is operating during the processing season. Wastewater from tomato processing is not generated during the off-season.
[2] As required in the 2002 WDRs.

11. Wastewater is first generated as the tomatoes move through the mud settling tanks to remove solids consisting of mud and tomato plants from the fields, as shown on Attachment C, which is attached hereto and made part of this Order by reference. Mud from the setting tanks is land applied at the LAA. Tomatoes are then sent through flumes where additional solids are removed. Some of the wastewater from the flumes is recycled and reused until it becomes unsuitable for continued use. Wastewater from the setting tanks and flumes is sent through rotary screens, along with any wastewater generated from evaporation/condensation systems, canning processing, and boiler blowdown, where additional solids are removed and sent offsite for use as cattle feed or land applied at the LAA.

12. All wastewater is sent to the SAF, which was installed in 2013, to reduce solids and BOD concentrations in the wastewater. The SAF removes solids and some mud from the effluent by coagulation/flocculation followed by surfactant assisted dissolved air flotation. The SAF is designed for a flow rate of 2.8 mgd, but can be increased to 3.1 mgd with an upsized foam generator. This change would not increase the total flow volume to the equalization pond.

13. Two flow meters are located at the processing plant, as shown on Attachment C. Meter one (M1) measures flow rates to the SAF. Meter two (M2), located at the effluent from the equalization tank, measures flow rates to the equalization pond, as shown on Attachment C.

14. After the wastewater passes through the SAF, it collects in an equalization tank to remove additional solids before it is pumped through a lined pipeline to a lined equalization pond at the LAA. The equalization pond and LAA are located approximately 4 miles southeast of the processing plant, as shown on Attachment D, which is attached hereto and made part of this Order by reference.

15. The equalization pond is in the northern portion of the LAA and provides equalization storage for operation of the sprinkler distribution system. The equalization pond has an area of approximately 30,000 square feet with a depth of 5 feet (not including 2 feet of freeboard). The pond capacity is designed to accept 3 mgd. The pond is lined

with an 80-mil single high-density polyethylene (HDPE) liner over compacted clay to prevent erosion and minimize percolation. In March 2017, an electronic leak survey on the pond was conducted. The wastewater was pumped out of the pond and a visual inspection of the liner was conducted. Several small holes were identified and patched. The electronic leak test identified an additional hole in the liner that was then repaired. This Order requires regular liner inspections and leak testing.

16. The pond is equipped with brush aerators that run continuously during the processing season and backup aerators that can be used as needed. The brush aerators circulate water and break up any surface solids that may accumulate. Along with the cascade aeration at the inlet, the aerators add oxygen to the pond to help prevent anaerobic conditions. A gravel road is located on the top of the berm.

17. An automated motorized valve operates whenever the equalization pond level reaches the maximum water level. After the installation of the sprinkler system, the equalization pond would reach the maximum water level and the motorized valve would engage. Approximately four years ago, PCP began manually adjusting the sprinkler lines to keep the equalization pond at the lowest practical levels, and since then, high water levels are very rare.

18. A spillway is located in the equalization pond liner in the northwest portion of the pond that allows wastewater to spill over the levee road and into the southwest (SW) tailwater pond when maximum water levels in the equalization pond are reached. Any spill over is pumped back into the equalization pond as soon as possible. The spillway has concrete pavers for erosion protection on the top surface and stone riprap for protection of the slope into the adjacent clay bottom tailwater pond. The capacity of the SW tailwater pond is estimated at 0.5 MG. The spillway is 10 feet wide, 14 feet long, and 0.5 feet deep, relative to the berm top roadway, with a capacity of approximately 4.4 mgd. The spillway is shown on Attachment D.

19. Current wastewater effluent quality is represented by samples collected during 2016 processing season. Composite samples are collected from the equalization pond effluent prior to entering the sprinkler distribution system, as shown on Attachment C. Analytical data presented in the 2017 RWD are shown below.

Average Wastewater Quality for 2016 [1]

Constituent	Units	Concentration
BOD	mg/L	1,621
COD	mg/L	2,861
FDS	mg/L	600
TSS	mg/L	876
TDS	mg/L	**1,447**
EC	µmhos/cm	**1,550**
Nitrite-N	mg/L	22.2
Nitrate-N	mg/L	ND
TKN	mg/L	338

Average Wastewater Quality for 2016 [1]

Constituent	Units	Concentration
pH	pH units	5.11
Alkalinity	mg/L	35
Bicarbonate	mg/L	35
Carbonate	mg/L	ND
Magnesium	mg/L	37
Chloride	mg/L	140
Potassium	mg/L	126
Sodium	mg/L	**170**
Sulfate	mg/L	48
Copper	mg/L	0.08
Iron	mg/L	**29**
Manganese	mg/L	**0.76**

Concentrations in **bold** exceed concentrations protective of beneficial uses.
[1] Wastewater quality for 2016 is considered representative of wastewater quality and is not expected to change from current conditions.

20. The LAA currently consists of 900 acres, of which 690 acres are cropped with grasses or used to for solids application. The LAA is divided into eight fields, referred to as Fields A through H, as shown on Attachment D. Each field is further divided into thirds (east, middle, and west) for operations, monitoring, and reporting purposes.

21. The fields in the LAA are separated by roads and surrounded by berms to keep irrigation water and storm water on the fields. Mainline pipelines convey wastewater for irrigation from the equalization pond to the wheel line sprinkler irrigation system submains located on each field. Each wheel line operates for part of the day and is then moved to the next set location for irrigation, depending on wastewater flows and equalization pond levels. Irrigation generally rotates back to the same location on a field approximately every eight days. The sprinkler system enables a more uniform application of wastewater and suspended solids both within each field and between all the fields.

22. Most of the fields are planted with grasses, including Giant Bermuda grass which has a high nitrogen uptake. Grass crops are harvested two to four times annually and sold for off-site animal feed. Although the fields are typically planted with grasses, other crops may be grown on the LAA.

23. An agricultural well is located near the equalization pond at the LAA. The well water is used to irrigate the fields and maintain the crops when process water effluent and precipitation are not enough to meet crop demand. The agricultural well is typically used in the late spring for germinating new crops. The well can also be used during low rainfall periods to irrigate crops as needed to maintain crop health. This water is non-potable. The sprinkler pump system allows blending of wastewater and irrigation

well water but the water streams are not commingled. Typically, irrigation well water is only used in the spring for crop irrigation.

24. Three clay lined ponds, referred to as the northwest (MW), northeast (NE), and SW ponds, are located west of the equalization pond. These ponds were originally used as tailwater ponds when flood irrigation was used. Currently, the ponds are used to collect excess storm water. (The SW pond can also be used to collect excess wastewater from the equalization pond, as described in Finding 18.) If storm water is present in the NW and NE ponds, the system can be opened to divert storm water directly to Reclamation District 2035's drainage system. If water is present in the SW pond, which may have received overflow wastewater from the equalization pond, the water may be discharged to the reclamation district once the SW pond has gone 30 days without receiving any wastewater. PCP recently installed a plug to block gravity flows into and out of the tailwater/storm water ponds, and intends to pump storm water out of the ponds if excess accumulates. Storm water pumped from the site eventually mixes with other drainage water into a toe drain on the west side of the Yolo Bypass approximately five miles south-southeast of the LAA.

25. Two water balances, average precipitation and 100-year return period, were included in the June 2017 RWD to demonstrate capacity of the LAA and equalization pond after the proposed flow limits. Calculations were based on measured wastewater flows from 2016, total crop irrigation needs, and 580 acres for wastewater application. The full 690 acres of LAA acreage were not used in the water balance because some acreage was used for solids application. For the 100-year return period, the water balance demonstrated that the total crop demand of approximately 22,239 acre-inches per month exceeds the amount of wastewater generated (4,846 acre-inches per month); therefore, supplemental irrigation water is needed to sustain the crops.

26. The 2002 WDRs prescribe a 100 pound per acres per day (lb/ac/day) BOD loading limit as an irrigation cycle average. Calculated BOD loadings, as reported in the 2014, 2015, and 2016 Annual Monitoring Reports, were less than 100 lbs/ac/day.

27. Annual nitrogen loading rates per field, as reported in the 2014, 2015, and 2016 Annual Monitoring Reports, are shown below.

Cumulative Total Nitrogen Loading (lb/ac)

Year	Average	Range
2014	167	46 – 308
2015	174	113 – 219
2016	144	88 – 178

28. As discussed in the *Water Quality Protection Standard Report* (Brown and Caldwell, 2005), Bermuda grass has a nitrogen uptake range of 350 to 600 pounds per acre per year (lb/ac/yr). This indicates the crop available nitrogen appears to be deficient in

many fields. Supplemental nitrogen fertilizer may be needed to supply adequate nitrogen for crop growth.

29. As described in the 2017 RWD, solid wastes are derived from several sources, as described below:
    - Solid waste: tomato processing, including tomatoes that spill prior to canning and vines and leaves that come in from the field. The majority of solids are sent off-site and used for animal feed as market conditions allow; otherwise, it is land applied.
    - Peeler waste: tomato skins from steam peeling are land applied.
    - Mud: Mud comes in with the tomatoes from the fields. As the tomatoes are washed, mud is removed from the water in settling tanks and land applied.
    - Pomace: Pomace is a by-product of the tomato paste portion of the operations. As the tomatoes are processed, they pass through a series of screens which remove all the skins and seeds. Pomace is used as animal feed as market conditions allow; otherwise, it is land applied.
    - The SAF unit removes tomato solids and some mud from the effluent by injecting polymers and coagulants into the water stream. The material floats to the surface and is skimmed off and collected in a tanker truck, together with peeler waste, and is then transported to the LAA.

30. The *Revised PCP Solids Plan* (Brown and Caldwell, 2016), dated 16 March 2016, describes the solid waste management practices for the LAA. Solids are collected in a truck bed, hauled to the LAA, spread with a tractor, and disked into the soil to prevent nuisance conditions. Solids are also sent off-site and used for animal feed, depending on market conditions.

    This Order allows solids to be land applied to any field within the LAA that is not scheduled to receive wastewater during the same processing season.

31. Storm water at the processing plant is discharged to the City of Woodland's storm water system under industrial storm water permit WDID 5S5I016697.

32. Domestic wastewater collected at the processing plant is discharged to the City of Woodland's sewage system regulated by the Central Valley Water Board under a separate National Pollution Discharge Elimination System (NPDES) permit.

33. A Notice of Violation (NOV) was issued to the Discharger on 27 September 2016. Violations included operational and processing changes to the wastewater treatment system since the adoption of Order R5-2002-0122 and deficiencies in monitoring reports. The Discharger was required to submit a wastewater schematic diagram, a Monitoring and Reporting Program Compliance Plan, amended monitoring reports, updated Solids Waste Management Plan, updated Operation and Maintenance Plan, a schedule for conducting an electronic leak survey on the equalization pond, and a

Report of Waste Discharge. All requirements of the NOV have been met by the Discharger.

34. Odor issues at the LAA have been reported in the past (pre-2012). To monitor odors, the Discharger participated with the City of Woodland in the installation of an Odowatch eNose sensor near the northwest corner of the LAA. The sensor has not reliably distinguished odors between the LAA, agricultural odors in the area, or wastewater ponds operated by the City of Woodland. However, all detected odors and potential sources are documented by type, characteristics, and wind speed and direction. Monitoring data are kept for reference. Improvements to the wastewater system, such as the installation of the SAF unit to reduce organics in the wastewater, the use of a sprinkler system instead of flood irrigation, and the addition of calcium hypochlorite to the wastewater, have reduced odors at the LAA. No odor complaints have been received since 2012.

Planned Changes in the Facility

35. Planned changes for the wastewater system include bypassing wastewater with suspended mud from the settling tanks around the flumes and SAF system, as shown on Attachment C. The SAF system is much more effective at removing organic solids than mud. Bypassing the muddy wastewater around the SAF will improve the efficiency of the SAF at removing organic solids. Mud from the settling tanks will continue to be sent to the LAA. Wastewater that bypasses the flumes and SAF will be sent to the equalization tank prior to being pumped to the equalization pond.

36. Flow pacing control for flocculation chemicals in the SAF is scheduled to begin in 2018. The plant has begun to phase out the lye peelers to convert to steam peeling.

Site-Specific Conditions

37. The processing plant location, the LAA, and the surrounding lands are relatively flat. The processing plant is not located in a flood floodplain. A Federal Emergency Management Agency (FEMA) map identified the LAA as being within the 100-year flood plain.

38. Surface waters in the area consist of drainage ditches and Willow Slough, located south and east of the LAA, and predominately flow east. Willow Slough is approximately 0.8 miles east of the LAA. Surface waters generally drain to the Tule Canal, a tributary to the Yolo Bypass.

39. Soils at the LAA consist of clay from the ground surface to 7 to 10 feet below ground surface (bgs); fine soil with clay from 7 to 15 feet bgs; and gravelly sand from 15 to 30 feet bgs, based on the *Natural Background Quality Report* (Brown and Caldwell, 2005). Alternating clay, sand, and gravel layers exist down to approximately 180 feet bgs.

40. United States Department of Agriculture Soil Conservation Service conducted a survey in the late 1960s and classified approximately one third of the LAA as saline-alkali and another 15 percent as alkali, as reported in the Water Quality Protection Standard report (Brown and Caldwell, 2003). The most saline soils were in Fields G, H, the northern portion of Field A, and the eastern portions of Fields C and D. As a result of the saline-alkali soil conditions, salinity constituents have degraded groundwater. The soil survey findings are further support by the Discharger's extensive monitoring of shallow soils, as discussed below.

41. Results of previous soil investigations provide information on nutrients available for crops. Sample results indicate soils in the LAA have high levels of salinity and are considered alkaline soils, specifically Fields G and H. Fields E and F were nitrogen deficient while Field H has excess nitrate. In historical aerial photographs (included in previous documents), soil discoloration and lack of vegetation can be seen in areas where high salinity conditions have been identified. Based on discussions with PCP during a site visit conducted by Central Valley Water Board staff on 15 August 2017, crops have failed to grow on Field H due to saline-alkali soil.

42. The mean rainfall for an average year for the area is 18.5 inches per year and 41 inches for a 100-year precipitation event, based on the Woodland 1 WNW (Station 049781) from the Western Regional Climate Center.

43. The LAA is surrounded by agricultural land to the north, east, and south. Just west of the LAA is the City of Woodland's Water Pollution Control Facility (sanitary sewer treatment system), which consists of lined and unlined wastewater ponds and a tertiary treatment system that discharges the treated wastewater to Tule Canal in the Yolo Bypass (approximately 5 miles from the pollution control facility). The City of Woodland's unlined ponds could potentially be impacting groundwater quality. Groundwater monitoring is regularly conducted by the Water Pollution Control Facility, as required in Order 2012-0010-DWQ-RB5S-0005, adopted on 10 February 2017.

Groundwater Conditions

44. Groundwater data has been collected at the LAA from twenty-nine groundwater monitoring wells, and lysimeters and piezometers, as shown on Attachments D and E. The piezometers have been abandoned and ten of the monitoring wells are not sampled regularly; however, data from the wells have been used in previous groundwater studies, including determining groundwater background concentrations. Eleven of the monitoring wells are sampled regularly as part of the Monitoring and Reporting Program and well details are shown below.

Monitoring Well Details

Monitoring Well ID [1]	Type of Monitoring Well	Screen Interval (feet bgs)	Year Installed
IMW1 [2]	Upgradient	20-35	2015
IMW2	Downgradient	15-30	1990-1992
IMW4	Downgradient	8-18	1990-1992
IMW5	On-site	8-18	1990-1992

Monitoring Well Details

Monitoring Well ID [1]	Type of Monitoring Well	Screen Interval (feet bgs)	Year Installed
IMW6 [2]	Upgradient	18.75-33.75	2015
IMW7	On-site	10-20	1990-1992
IMW8	On-site	33-48	2003
IMW9	Downgradient	21-41	2003
IMW10 [3]	Upgradient	20-35	2003
IMW11	Upgradient	20-35	2003
WWTPMW5 [4]	Upgradient	15-25	1998

[1] Wells are owned and maintained by PCP, unless noted otherwise
[2] Well located upgradient of the LAA but downgradient from the wastewater ponds at the City of Woodland's Water Pollution Control Facility.
[3] As documented in the Third Quarter 2016 Monitoring Report, IMW10 is damaged and can no longer be sampled. This Order requires a replacement well to be installed to replace IMW10.
[4] Well is owned by the City of Woodland as part of the City of Woodland Water Pollution Control Facility and is sampled by PCP.

45. Between 2010 and 2016, depths to groundwater ranged from 2 to 19 feet bgs, with an average depth of approximately 10 feet bgs. Groundwater is shallowest in the southwestern portion of the LAA and approximately 5 to 8 feet deeper at the northeastern portion of the LAA. Shallow groundwater levels and relatively flat gradients in the area are influenced by drainage ditches, rice fields, ponds, and other hydraulic features in the area around the LAA. Regional groundwater levels are typically highest in the late winter and early spring and lowest in the late fall. Groundwater generally flows to the north-northeast, as shown on Attachment E.

46. A *Natural Background Quality Report,* prepared in 2005 to evaluate background groundwater quality at the LAA. Three background evaluations were conducted to determine background groundwater conditions, referred to as Background Limits 1, 2, and 3. The monitoring wells used in each background scenario varies. The first scenario includes wells that are upgradient or side-gradient of the City of Woodland Water Pollution Control Facility; the second scenario added two wells that are between the Water Pollution Control Facility and the LAA; and the third scenario adds IMW8. Based on reviews of the *Natural Background Quality Report* by Central Valley Water Board staff, the wells used for Background Limit 2 were determined by staff to be the most representative of background conditions. Therefore, Background Limit 2 concentrations were used for evaluation purposes in this Order. It should be noted that several of the wells used for the background evaluation are not part of the wells regularly sampled in the Monitoring and Reporting Program. Recent data from these wells are not available. Therefore, a comparison between background conditions in 2005 and current conditions was not conducted. For purposes of this evaluation, Background Limit 2 was used to represent background conditions.

47. Results of the background evaluation showed high levels of salinity in groundwater in the area, particularly south of Interstate 5 (approximately 1,600 feet north of the LAA) to Willow Slough Bypass (approximately 4.5 miles south and upgradient of the LAA).

High levels of salinity in soil in the general area of the LAA existed prior to the application of wastewater on the LAA by PCP, as discussed in Findings 40 and 41. Poor quality groundwater upgradient of the LAA has the potential to impact groundwater quality beneath the LAA.

48. To help determine if the application of wastewater at the LAA has impacted groundwater, a tritium study was conducted to determine the rough age of the groundwater. Samples were collected in 2005 and 2008 and analyzed for tritium from six wells. The results from IMW8 indicate that groundwater from this well is considered premodern water (older than 50 years and pre-war) and has not been impacted by wastewater discharges. However, the concentrations of salinity constituents in this well in samples collected between 2002 and 2005 are high. Maximum concentrations of select constituents include EC at 15,000 µhmos/cm, TDS at 14,000 mg/L, and chloride at 4,600 mg/L. IMW8 is screened in a deeper zone than all other monitoring wells. While the tritium results for IMW8 indicate groundwater has not been impacted from recent discharges, the data from this well are not comparable to the rest of the monitoring wells and does not represent groundwater conditions for first encountered groundwater. Therefore, this well was not used in evaluating groundwater conditions at the site.

49. Analytical data from on-site and downgradient groundwater monitoring wells, as presented in the 2014 through 2016 Annual Groundwater Monitoring Reports, are summarized below. Two on-site monitoring wells (IMW5 and IMW7) and three downgradient wells (IMW2, IMW4, and IMW9) were identified as locations that best represent areas that could be impacted by discharges at the LAA. Background concentrations were established in the *Natural Background Quality Report* (Brown and Caldwell, 2005).

Groundwater Quality

Constituent (mg/L)	Bkgd [1]		2014	2015	2016	Concentrations Protective of Beneficial Uses
pH	NE	On-site [6]	8	7.7	7.9	NE
		Downgradient [7]	8.2	8.1	8.3	
EC (µmhos/cm)	**5,700**	On-site [6]	4,500	4,400	4,400	700 [2] – 1,600 [3]
		Downgradient [7]	4,200	4,000	4,100	
TDS	**4,300**	On-site [6]	2,900	2,600	2,600	450 [2] - 1,000 [3]
		Downgradient [7]	2,800	4,000	2,500	
FDS	NE	On-site	2,200	2,100	2,200	NE
		Downgradient	2,100	2,200	2,000	
Nitrate as N	**13**	On-site [6]	9.9	12	9.8	10 [4]
		Downgradient [7]	11	2.2	19	
Total Nitrogen	NE	On-site [6] [6]	9.9	12	9.8	NE
		Downgradient [7]	11	2.2	19	
Chloride	**1,125**	On-site [6]	940	910	870	106 [2] – 500 [3]
		Downgradient [7]	960	920	871	
Sodium	**1,400**	On-site [6]	600	590	590	69 [2]
		Downgradient [7]	590	920	560	

Groundwater Quality

Constituent (mg/L)	Bkgd [1]		2014	2015	2016	Concentrations Protective of Beneficial Uses
Iron	NE	On-site [6]	1.9	1.7	1.3	0.3 [3]
		Downgradient [7]	0.05	0.04	0.1	
Manganese	NE	On-site [6]	1	0.78	0.83	0.05 [3]
		Downgradient [7]	ND	0.06	0.6	
Sulfate	780	On-site [6]	600	610	560	250 [5] – 500 [3]
		Downgradient [7]	550	550	510	

Concentrations in bold exceed concentrations protective of beneficial use.
[1] Background concentrations were determined in the *Natural Background Quality Report* (Brown and Caldwell, 2005) using data from wells IMW1, IMW10, IMW11, PPMW, WWTPMW1, WWTPMW2, and WWTPMW3 (Background Limit 2).
[2] Lowest agricultural water quality goal
[3] Secondary Maximum Contaminant Upper Level
[4] Primary Maximum Contaminant Level
[5] Secondary Maximum Contaminant Recommended Level
[6] On-site wells include IMW5 and IMW7. The maximum concentration from the 2 wells is reported for 2016.
[7] Downgradient wells include IMW2, IMW4, and IMW9. The maximum concentration from the 3 wells is reported for 2016.

Bkgd = background
EC = electrical conductivity
mg/L = milligrams per liter
ND = not detected at concentrations greater than reporting limits
NE = not established
µmhos/cm = micromhos per centimeter

50. As shown in Finding 49, the *Natural Background Quality Report* indicates that background quality is poor. Groundwater quality in on-site and downgradient wells is better than background but generally exceed concentrations protective of beneficial use. On-site and downgradient monitoring well results are within the same order of magnitude. The poor background groundwater quality is likely the result of nearby, long-term agricultural practices and naturally occurring conditions. While background groundwater quality is poor, the discharge of wastewater from PCP does not appear to be further degrading groundwater beyond existing conditions, based on data provided in the 2014 through 2016 Annual Monitoring Reports. The poor-quality background conditions will likely continue to impact the groundwater beneath the LAA.

Basin Plan, Beneficial Uses, and Regulatory Considerations

51. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, revised June 2015* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Water Code section 13263(a), waste discharge requirements must implement the Basin Plan.

52. Local drainage is to Tule Canal, a tributary to the Yolo Bypass. The beneficial uses, as stated in the Basin Plan, are agricultural irrigation and stock watering, contact and other non-contact recreation, canoeing and rafting, warm and cold freshwater habitat, warm and cold migration, warm spawning, and wildlife habitat.

53. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.

54. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets a numeric objective for total coliform organisms.

55. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.

56. The Basin Plan's narrative water quality objectives for chemical constituents, at a minimum, require waters designated as domestic or municipal supply to meet the MCLs specified in Title 22 of the California Code of Regulations (hereafter Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

57. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.

58. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.

59. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 µmhos/cm. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 µmhos/cm if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop. The list of crops in Finding 22 is not intended as a definitive inventory of crops that are or could be grown in the area affected by the discharge.

60. The Central Valley Water Board is developing amendments to the Basin Plan to incorporate new strategies for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley. Strategies currently under consideration may:

    a. Alter the way the Board calculates available assimilative capacity for nitrate, which could result in new or modified requirements for nitrate management;

    b. Require dischargers to implement actions identified under an interim salinity permitting approach; and/or

    c. Establish alternate compliance approaches that would allow dischargers to participate in efforts to provide drinking water to local communities in consideration for longer compliance time schedules.

    Should the Board adopt amendments to the Basin Plan to effectuate such strategies, these waste discharge requirements may be amended or modified to incorporate any newly-applicable requirements.

61. The stakeholder-led Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has been coordinating efforts to implement new salt and nitrate management strategies. The Board expects dischargers that may be affected by new salt and nitrate management policies to coordinate with the CV-SALTS initiative.

Special Considerations for High Strength Waste

62. For this Order, high strength waste is defined as wastewater that contains concentrations of readily degradable organic matter that exceed typical concentrations for domestic sewage. Such wastes contain greater than 500 mg/L BOD and often contain commensurately high levels of total Kjeldahl nitrogen (TKN), which is a measure of organic nitrogen and ammonia nitrogen. Typical high strength wastewaters include septage, some food processing wastes, winery wastes, and rendering plant wastes.

63. Excessive application of high organic strength wastewater to land can create objectionable odors, soil conditions that are harmful to crops, and degradation of underlying groundwater with nitrogen species and metals, as discussed below. Such groundwater degradation can be prevented or minimized through implementation of best management practices which include planting crops to take up plant nutrients and maximizing oxidation of BOD to prevent nuisance conditions.

64. Unless groundwater is very shallow, groundwater degradation with nitrogen species such as ammonia and nitrate can be prevented by managing loading and minimizing percolation below the root zone of the crops and ensuring that the total nitrogen load does not exceed crop needs over the course of a typical year. Where there is sufficient unsaturated soil in the vadose zone, excess nitrogen can be mineralized and denitrified by soil microorganisms.

65. With regard to BOD, excessive application can deplete oxygen in the vadose zone and lead to anoxic conditions. At the ground surface, this can result in nuisance odors and fly-breeding. When insufficient oxygen is present below the ground surface, anaerobic decay of the organic matter can create reducing conditions that convert metals that are naturally present in the soil as relatively insoluble (oxidized) forms to more soluble reduced forms. This condition can be exacerbated by acidic soils and/or acidic wastewater. If the reducing conditions do not reverse as the percolate travels down through the vadose zone, these dissolved metals (primarily iron, manganese, and arsenic) can degrade shallow groundwater quality. Many aquifers contain enough dissolved oxygen to reverse the process, but excessive BOD loading over extended periods may cause beneficial use impacts associated with these metals.

66. Typically, irrigation with high strength wastewater results in high BOD loading on the day of application. It is reasonable to expect some oxidation of BOD at the ground surface, within the evapotranspiration zone and below the root zone within the vadose (unsaturated) zone. The maximum BOD loading rate that can be applied to land without creating nuisance conditions or leaching of metals can vary significantly depending on soil conditions and operation of the land application system.

67. *Pollution Abatement in the Fruit and Vegetable Industry*, published by the United States Environmental Protection Agency, cites BOD loading rates in the range of 36 to 600 lb/acre-day to prevent nuisance, but indicates the loading rates can be even higher under certain conditions. The studies that supported this report did not evaluate actual or potential groundwater degradation associated with those rates. There are few studies that have attempted to determine maximum BOD loading rates for protection of groundwater quality. Those that have been done are not readily adapted to the varying soil, groundwater, and climate conditions that are prevalent throughout the region.

68. The California League of Food Processors' *Manual of Good Practice for Land Application of Food Processing/Rinse Water* proposes risk categories associated with particular BOD loading rate ranges as follows:

    a. Risk Category 1: (less than 50 lb/ac/day; depth to groundwater greater than 5 feet) Indistinguishable from good farming operations with good distribution important.

    b. Risk Category 2: (less than 100 lb/ac/day; depth to groundwater greater than 5 feet) Minimal risk of unreasonable groundwater degradation with good distribution more important.

    c. Risk Category 3: (greater than 100 lb/ac/day; depth to groundwater greater than 2 feet) Requires detailed planning and good operation with good distribution very important to prevent unreasonable degradation, as well as use of oxygen transfer design equations that consider site-specific application cycles and soil properties and special monitoring.

The *Manual of Good Practice* recommends allowing a 50 percent increase in the BOD loading rates in cases where sprinkler irrigation is used is well drained soils, but recommends that additional safety factors be used for sites with heavy and/or compacted soils.

69. Although it has not been subject to a scientific peer review process, the *Manual of Good Practice* provides science-based guidance for BOD loading rates that, if fully implemented, are considered a best management practice to prevent groundwater degradation due to reduced metals.

70. This Order sets an irrigation cycle average BOD loading rate for the LAA of 100 lb/acre/day consistent with Risk Category 2 in the *Manual of Good Practice* for discharges using sprinkler application in areas with poorly drained soils, such as clay, which is present at the LAA from the surface to approximately 7 feet bgs, as described in Finding 39.

Antidegradation Analysis

71. State Water Resources Control Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:

    a. The degradation is consistent with the maximum benefit to the people of the state.

    b. The degradation will not unreasonably affect present and anticipated future beneficial uses.

    c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and

    d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.

72. Degradation of groundwater by some of the typical waste constituents associated with discharges from a small food processor, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The Discharger's operation provides 95 full time jobs and 1,050 seasonal jobs to process tomatoes and produce tomato products. In addition, the Discharger provides a needed service for local growers, trucking services, and equipment manufactures as well as provides a tax base for local and county governments. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

73. The Discharger has been monitoring groundwater quality at the LAA since 2001 when PCP began using the LAA for wastewater discharge. Based on the data available, it is not possible to determine pre-1968 groundwater quality for first encountered groundwater. Therefore, determination of compliance with Resolution 68-16 for the LAA must be based on background groundwater quality. Background concentrations established in the *Natural Background Quality Report* (Brown and Caldwell, 2005) (Background Limit 2) are used in this Order.

74. Constituents of concern associated with the Discharger's operations which have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), nitrate as nitrogen, iron, and manganese, as shown below:

Constituent	Wastewater Effluent [1]	Groundwater Quality [3]	Background Groundwater [2]	Concentrations Protective of Beneficial Uses
TDS	1,540	1,000 – 2,600	**4,300**	1,000 [4]
FDS	845	790 – 2,200	NE	NE
Nitrate as N	ND	ND - 19	**13**	10 [5]
Total Nitrogen	--	ND - 19	NE	10 [5]
Sodium	198	160 – 590	**1,400**	69 [6]
Chloride	109	140 – 871	**1,125**	500 [4]
Iron	21	ND – 1.3	NE	0.3 [7]
Mn	0.7	ND – 0.83	NE	0.05 [7]

Concentrations are in mg/L.
Concentrations in **bold** exceed concentrations protective of beneficial uses.
ND = not detected at concentrations greater than the reporting limit
NE = not established
[1] Flow weighted average for the processing season (July, August, and September 2016)
[2] Background concentrations were determined in the *Natural Background Quality Report* (Brown and Caldwell, 2005) using data from wells IMW1, IMW10, IMW11, PPMW, WWTPMW1, WWTPMW2, and WWTPMW3.
[3] Groundwater quality is defined as the maximum and minimum concentrations from the four quarters sampled in 2016 for each well (IMW2, IMW4, and IMW5, IMW7, and IMW9).
[4] Secondary Maximum Contaminant Upper Level.
[5] Primary Maximum Contaminant Level
[6] Lowest agricultural water quality goal
[7] Secondary Maximum Contaminant Recommended Level

a. **TDS.** FDS is the inorganic fraction of TDS that has the potential to percolate or leach into the shallow groundwater. Therefore, the best measure for salinity of process wastewater is FDS while TDS is representative of groundwater salinity. The background groundwater TDS concentration at the LAA is 4,300 mg/L. The average TDS concentration reported in 2016 from on-site and downgradient groundwater monitoring wells ranged from 1,150 to 2,575 mg/L. The discharge has not caused exceedance of the background quality, but concentrations of TDS in monitoring wells exceed the upper secondary MCL for TDS. On-site and downgradient concentrations are relatively the same, within the same order of magnitude. The discharge is not degrading groundwater above background concentrations. Groundwater quality has been degraded (background concentrations of TDS in groundwater are greater the secondary maximum

contaminant upper level) by agricultural land use of the area, the use of the LAA by previous owners, and pre-existing soil conditions (high saline-alkaline soils) at the LAA.

TDS concentrations in groundwater wells at the LAA have remained relatively stable between the 2014 and 2016. To protect groundwater from further degradation, this Order establishes a performance-based FDS effluent limit as a flow-weighted annual average to prevent a statistically significant increase in current groundwater TDS concentrations. Continued groundwater monitoring will also serve as a means of assessing whether the discharge has impacted groundwater quality. This Order prohibits a statistically significant increase of groundwater TDS concentrations in compliance groundwater monitoring wells. The Discharger shall justify concentration increases in compliance wells that may be attributed to impacts from upgradient groundwater quality.

b. **Nitrate**. For nutrients such as nitrate, the potential for groundwater degradation depends on wastewater quality; crop uptake, and the ability of the vadose zone below the LAA to support nitrification and denitrification to convert the nitrogen to nitrogen gas before it reaches the water table. Most of the nitrogen in the process wastewater is present as TKN, which can readily mineralize and convert to nitrate (with some loss via ammonia volatilization) in the LAA. Background groundwater quality is poor with respect to nitrogen and exceeds the primary MCL of 10 mg/L in background monitoring wells. The poor-quality background groundwater is likely due to the predominantly agricultural land use in the area. In contrast, nitrate concentrations in groundwater downgradient of the current equalization pond and LAA are less than the primary MCL. Therefore, this Order requires that nutrients associated with the wastewater and other sources be applied to the LAA at rates consistent with crop demand, and the Groundwater Limitations of this Order does not allow an exceedance of the primary maximum contaminant level in on-site and downgradient groundwater monitoring wells.

c. **Sodium**. Sodium is a key salinity constituent in food processing wastewater. Current sodium concentrations in groundwater exceed the agricultural water quality goal. In the absence of a locale-specific determination of agricultural water quality goals, this Order requires continued groundwater monitoring for sodium. In addition, compliance with the FDS effluent limits will ensure sodium concentrations in the wastewater do not increase significantly. To serve as a means of assessing whether the discharge might potentially cause further groundwater degradation, this Order does not allow a statistically significant increase of sodium concentrations from current conditions, as compared to concentrations reported in the 2016 Annual Monitoring Report. Continued groundwater monitoring will serve as a means of assessing whether the discharge has impacted groundwater quality. Compliance well sodium concentrations may be the result of changing background conditions upgradient of the LAA.

d. **Chloride.** Chloride is known to be a key salinity constituent in food processing wastewater. Current concentrations in groundwater range from 148 to 648 mg/L. Background groundwater concentration for chloride is 1,125 mg/L, greater than the concentration protective of beneficial use. Poor quality background groundwater is likely due to the predominantly agricultural land use in the area. Therefore, this Order does not allow a statistically significant increase in concentrations from current conditions for wells IMW2, and IMW7 because concentrations already exceed concentrations protective of beneficial use. For IMW4, IWM5, and IMW9, the groundwater limitations of this Order does not allow an exceedance of the secondary maximum contaminant upper level for chloride. Continued groundwater monitoring will serve as a means of assessing whether the discharge has impacted groundwater quality. Compliance well chloride concentrations may be the result of changing background conditions upgradient of the LAA.

e. **Iron.** Background groundwater quality has not been established for iron. However, concentrations of iron in on-site wells exceed the concentration protective of beneficial use but are less than the concentration protective of beneficial use in downgradient wells. Excessive BOD loading rates can deplete oxygen, resulting in anoxic conditions that can solubilize naturally occurring metals in soil. Organic loading rates are prescribed to minimize wastewater discharges from causing reducing conditions below the LAA. Based on the available groundwater data, lined pipeline from the processing plant, lined pond, and routine pond maintenance, the Discharger has not degraded groundwater quality with respect to iron. This Order does not allow a statistically significant increase in iron groundwater concentrations in IMW7, and for wells IMW2, IMW4, IMW5, and IMW9, this Oder does not allow an exceedance of the secondary maximum contaminant recommended level.

f. **Manganese.** Background groundwater quality has not been established for manganese. However, concentrations of manganese in wells exceed the concentration protective of beneficial use. Excessive BOD loading rates can deplete oxygen, resulting in anoxic conditions that can solubilize naturally occurring metals in soil. Organic loading rates are prescribed to minimize wastewater discharges from causing reducing conditions below the LAA. This Order does not allow a statistically significant increase of groundwater quality with respect to manganese for wells IMW2, IMW5, IMW7, and IMW9. This Order does not allow the discharge of waste to cause an exceedance of the secondary maximum contaminant recommended level for manganese for well IMW4.

75. This Order establishes groundwater limitations for the LAA that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds concentrations protective of beneficial uses set forth in the Basin Plan. It should be noted that poor quality groundwater upgradient of the LAA will likely continue impacting groundwater beneath the LAA.

76. The Discharger provides treatment and control of the discharge. Since the adoption of the WDRs in 2002, the Discharger has:

    a. Begun phasing out lye peelers for steam peelers;
    b. Cropped 580 acres of LAA with grasses which take up nutrients found in the wastewater if application rates are carefully controlled;
    c. Installed a SAF treatment unit which has reduced BOD concentrations in the wastewater;
    d. Repaired leaks identified during a liner integrity inspection;
    e. Implemented sprinkler irrigation;
    f. Begun monitoring for odors in conjunction with the City of Woodland;
    g. Started using calcium hypochlorite to prevent odors at the LAA; and
    h. Implemented numerous upgrades to the wastewater system, including installation of new flow meters, drainage improvements at the LAA, and storm water management improvements, as documented in the *Water Quality Standard Report*, dated 8 August 2005.

    The implementation of the measures listed above have resulted in improved wastewater quality, reduction in odor issues at the LAA, improved wastewater management at the LAA, and reduced the potential for groundwater degradation from the discharge.

77. With respect to TDS, sodium, chloride, iron, and manganese, an unacceptable degree of groundwater degradation has occurred, likely the result of long term agricultural use of the area and naturally occurring conditions and not the result of discharges to the LAA by the Discharger. The Groundwater Limitations are effective immediately and allow no degradation beyond existing groundwater quality (as defined as conditions reported in the 2016 Annual Monitoring Report) in any compliance monitoring well and this Order requires analysis of well groundwater monitoring data, including background and upgradient data, to determine compliance with the Groundwater Limitations.

Other Regulatory Considerations

78. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

79. Based on the threat and complexity of the discharge, the PCP is determined to be classified as 2B as defined below:

    a. Category 2 threat to water quality: “Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations

of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance."

b. Category B complexity, defined as: "Any discharger not included [as Category A] that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal) or any Class 2 or Class 3 waste management units."

80. Title 27 of the California Code of Regulations (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt domestic sewage, wastewater, and reuse. Title 27, section 20090 states in part:

> The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:
>
> (…)(b) Wastewater - Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:
>
> (1) the applicable RWQCB has issued WDRs, reclamation requirements, or waived such issuance;
>
> (2) the discharge is in compliance with the applicable water quality control plan; and
>
> (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.(…)

81. The discharge authorized herein, and the treatment and storage facilities associated with the discharge, are exempt from the requirements of Title 27 as follows:

a. Discharges to the Equalization Pond and the LAA are exempt pursuant to Title 27, section 20090(b) because they are discharge of wastewater to land and:

i. The Central Valley Water Board is issuing WDRs.

ii. The discharge is in compliance with the Basin Plan, and;

iii. The treated effluent discharged to the ponds does not need to be managed as hazardous waste.

b. Discharge of food processing residual solids to the LAA is exempt pursuant to Title 27, section 20090(b) because it constitutes use of nonhazardous decomposable waste as a soil amendment and this Order requires implementation of applicable best management practices.

82. The U.S. EPA published *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (hereafter "Unified Guidance") in 2009. As stated in the Unified Guidance, the document:

> …is tailored to the context of the RCRA groundwater monitoring regulations … [however, t]here are enough commonalities with other regulatory groundwater monitoring programs … to allow for more general use of the tests and methods in the Unified Guidance… Groundwater detection monitoring involves either a comparison between different monitoring stations … or a contrast between past and present data within a given station… The Unified Guidance also details methods to compare background data against measurements from regulatory compliance points … [as well as] techniques for comparing datasets against fixed numerical standards … [such as those] encountered in many regulatory programs.

The statistical data analysis methods in the Unified Guidance are appropriate for determining whether the discharge complies with Groundwater Limitations of this Order.

83. The State Water Board adopted Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The Discharger is covered under NPDES General Permit CAS000001.

84. Water Code section 13267(b)(1) states:

> 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 waste within its region … shall furnish, under penalty of perjury, technical or monitoring program reports which the 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 technical reports required by this Order and the attached Monitoring and Reporting Program R5-XXXX-XXXX are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the processing plant that discharges the waste subject to this Order.

85. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section

13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.

86. The Yolo County Planning Division has previously determined that the operation of this processing plant does not require the County to undertake a discretionary approval under the California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 21000 et seq.). All wastewater management systems at the plant have already been installed and are currently in use. This Order places additional requirements on the continued operation of the plant in order to ensure the protection of waters of the state. The issuance of this Order is therefore exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15301, which exempts the "operation, repair, maintenance, [and] permitting … of existing public or private structures, facilities, mechanical equipment, or topographical features" from environmental review.

87. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

88. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

89. The Discharger(s) and interested agencies and persons have been notified of the Central Valley Water Board's intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.

90. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that Order R5-2002-0122 is rescinded and pursuant to Water Code sections 13263 and 13267, PCP, the City of Woodland, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.

3. Except for wastewater with mud that passes through the settling tanks, treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*.

4. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.

5. Discharge of toxic substances into any wastewater treatment system or land application area such that biological treatment mechanisms are disrupted is prohibited.

6. Discharge of domestic wastewater to the process wastewater treatment system is prohibited.

7. Discharge of domestic wastewater to the process wastewater ponds, land application area or any surface waters is prohibited.

8. Discharge of industrial wastewater to septic systems is prohibited.

B. Flow Limitations

1. **Effectively immediately**, wastewater flows shall not exceed the following limits:

During Processing Season (generally July through September) [1]	
Flow Measurements	**Flow Limits**
Average Daily Flow to Equalization Pond [2,3]	4 mgd
Maximum Daily Flow to Equalization Pond [3]	5 mgd
Off Season Flows [4]	
Peak Daily Flow to Pond	1.0 mgd
Average Monthly Flow to Pond	0.5 mgd

[1] When tomatoes are processed.
[2] As determined by the total flow during the calendar month divided by the number of days in that month.
[3] Includes flows to the SAF and any wastewater that bypasses the SAF.
[4] Any wastewater flows to the equalization pond conducted off season, generally October to June.

C. Effluent and Mass Loading Limitations

1. The treated wastewater and storm water applied to the LAA shall not exceed the following effluent and mass loading limits:

Constituent	Units	Irrigation Cycle Average	Annual Maximum
BOD Mass Loading	lb/ac/day	100	--
Average FDS Concentration	mg/L	--	1,000 [1]
Total Nitrogen Mass Loading	lb/ac/year	--	Crop Demand

[1] Flow-weighted average based on total flow and concentration for each source of water discharged.

Compliance with the above requirements shall be determined as specified in the Monitoring and Reporting Program

D. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.

2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

3. The wastewater discharge shall remain within the permitted waste treatment/containment structures and land application areas at all times.

4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.

5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

6. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.

7. As a means of ensuring compliance with Discharge Specification D.8, the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in the pond is below 1.0 mg/L for three consecutive

days, the Discharger shall report the findings to the Regional Water Board in accordance with General Reporting Requirement B.1 of the Standard Provisions and Reporting Requirements. The written notification shall include a specific plan to resolve the low DO results within 30 days of the first date of violation.

8. The Discharger shall operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping (not including the spillway at the equalization pond) and/or structural failure. The operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow, which is the spillway). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

9. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

10. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications D.8 and D.9.

11. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:

    a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.

    b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.

    c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

    d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

12. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.

13. The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least **every five years** beginning in **2023**, and shall

periodically remove sludge as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of sludge in the reservoir **exceeds five percent** of the permitted reservoir capacity, the Discharger shall complete sludge cleanout within **12 months** after the date of the estimate.

14. The Discharger shall test the integrity of the pond liner and repair all significant leaks in accordance with an approved workplan pursuant to Provision H.1.a.

15. Storage of residual solids, including pomace and/or diatomaceous earth on areas not equipped with means to prevent storm water infiltration, or a paved leachate collection system is prohibited.

E. Groundwater Limitations

Release of waste constituents from any portion of the LAA shall not cause groundwater to:

1. Contain any of the specified constituents in a concentration greater than the maximum allowable concentration tabulated below. The wells to which these requirements apply are specified in the Monitoring and Reporting Program.

Constituent	Maximum Allowable Concentration [1]
TDS	No Statistically Significant Increase from Current Groundwater Quality [2]
Nitrate as N	Concentration Protective of Beneficial Uses
Sodium	No Statistically Significant Increase from Current Groundwater Quality [2] or Concentration Protective of Beneficial Uses
Chloride	No Statistically Significant Increase from Current Groundwater Quality [2]
Iron (dissolved)	No Statistically Significant Increase from Current Groundwater Quality [2] or Concentration Protective of Beneficial Uses
Manganese (dissolved)	No Statistically Significant Increase from Current Groundwater Quality [2] or Concentration Protective of Beneficial Uses

[1] Maximum allowable numeric concentrations and their applicability to compliance wells are defined in the Monitoring and Reporting Program. The Discharger must justify when concentration increases in compliance wells are attributed to impacts from upgradient groundwater quality.

[2] "Current groundwater quality" is groundwater conditions as presented in the 2016 Annual Monitoring Report but may be redefined by the Discharger using approved statistical methods described in the *Groundwater Limitations Compliance Assessment Plan*.

2. For all constituents, except as specified in E.1 above, contain concentrations that exceed the associated Primary or Secondary MCLs established in Title 22 of the

California Code of Regulations or the background groundwater quality, whichever is greater.

3. For all compliance monitoring wells, contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

Compliance with these limitations shall be determined annually as specified in the Monitoring and Reporting Program using approved statistical methods, including an evaluation of background/upgradient conditions to determine if constituent concentration increases in compliance wells are the result of poor quality upgradient groundwater impacting the groundwater beneath the LAA.

If additional wells are designated as compliance wells in the future, the Executive Officer will issue a revised MRP specifying the applicability of subparagraphs 1 and 2 to those wells.

F. Land Application Area Specifications

1. Crops or other vegetation (which may include pasture grasses, native grasses, and trees, and/or ornamental landscaping) shall be grown in the LAA.

2. Wastewater and solids shall not be applied to the same fields during a processing season.

3. Land application of wastewater shall be managed to minimize erosion.

4. The LAA shall be managed to prevent breeding of mosquitoes or other vectors.

5. LAA shall be designed, maintained, and operated to comply with the following setback requirements:

Setback Definition	**Minimum Irrigation Setback (feet)**
Edge of LAA to property boundary	20
Edge of LAA to manmade or natural surface water drainage course	25
Edge of LAA to domestic water supply well	100

6. LAA shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Discharger shall temporarily stop recycled water use immediately and implement corrective actions to ensure compliance with this Order.

7. Sprinkler heads shall be designed, operated and maintained to create a minimum amount of mist.

8. Any irrigation runoff (tailwater) shall be confined to the LAA.

9. Discharge to the LAA shall not be initiated when the ground is saturated.

10. Discharge of storm water runoff from the LAA to off-site land or surface water drainage courses is prohibited, except as specified in Finding 24.

11. Grazing of animals on the land application areas is prohibited.

G. Solids Disposal Specifications

Sludge, as used in this document, means the solid, semisolid, and liquid organic matter removed from wastewater treatment, settling, and storage vessels or ponds. Solid waste refers to solid inorganic matter removed by screens and soil sediments from washing of unprocessed fruit or vegetables. Except for waste solids originating from meat processing, residual solids means organic food processing byproducts such as culls, pulp, stems, leaves, and seeds that will not be subject to treatment prior to disposal or land application.

1. Accumulated sludge and sediments shall be removed from the Equalization Pond, factory sumps, and ditches and disposed of as needed to prevent nuisance conditions.

2. Sludge and solid waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal operation and adequate storage capacity.

3. Any handling and storage of sludge, solid waste, and residual solids shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.

4. Sludge and residual solids may be discharged to land in accordance with the Land Application Area Specifications of this Order.

5. If removed from the site, sludge, solid waste, and residual solids shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for reuse as animal feed, or land disposal at facilities (i.e., landfills, composting facilities, soil amendment sites operated in accordance with valid waste discharge requirements issued by a Regional Water Board) will satisfy this specification.

6. Any proposed change in solids use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

H. Provisions

1. The following report shall be submitted pursuant to Water Code section 13267 and shall be prepared as described in Provision H.5:

   a. By **1 September 2018**, the Discharger shall submit a *Groundwater Limitations Compliance Assessment Plan*. The plan shall propose and justify the statistical methods used to evaluate compliance with the groundwater limitation of this Order for the compliance wells and constituents specified in the MRP. Compliance shall be determined using appropriate statistical methods that have been selected based on-site specific information and the U.S. EPA Unified Guidance document cited in Finding 82 of this Order. The report shall explain and justify the selection of the appropriate statistical methods. In addition, the plan will explain how exceedances of the Groundwater Limitations in the compliance wells will be evaluated to determine compliance with this Order when compared to changing background conditions. This Order utilized groundwater data presented in the 2016 Annual Monitoring Report as a means to establish “current” groundwater conditions. The plan shall explain how “current” conditions may be redefined and updated. The plan shall provide the methods that will be used to determine whether increasing concentrations in compliance wells are attributed to poor quality upgradient groundwater.

   b. By **1 September 2018**, the Discharger shall submit a *Pond Liner Integrity Evaluation Workplan.* The *Pond Liner Integrity Evaluation Workplan* will specify the means and methods that the Discharger proposes to use to perform an annual 5-year evaluation of the geosynthetic liner at the equalization pond to comply with Discharge Specification D.13.

   c. By **1 January 2019**, the Discharger shall submit a *Lysimeter Abandonment Report*, describing the procedures used to abandon the lysimeters and the dates the work was performed.

   d. By **1 January 2019**, the Discharger shall submit a *Monitoring Well Installation Work Plan* for the installation of a replacement well for IMW10. The report shall be prepared in accordance with, and including the items listed in the first section of Attachment F: "*Requirements for Monitoring Well Workplans and Monitoring Well Installation Reports* ", which is attached hereto and made part of this Order by reference. The report shall describe the installation and development of the new monitoring wells and explain any deviation from the approved workplan.

   e. By **1 June 2019**, the Discharger shall submit a *Groundwater Monitoring Well Installation Report* that describes the installation of the new groundwater monitoring well required by Provision H.1.d. The report shall be prepared in accordance with, and including the items listed in the second section of

Attachment F: "*Monitoring Well Workplan and Monitoring Well Installation Report Guidance*". The report shall describe the installation and development of all new monitoring wells and explain any deviation from the approved workplan.

f. Within **2 months after the SAF bypass system is installed**, the Discharger shall submit a *Construction Completion Report*. The report shall describe when construction of the SAF bypass system was completed, construction details, and if the changes to the system were conducted in accordance with Finding 12.

g. Within **30 days of upgrading the SAF** to increase the SAF flow capacity, the Discharger shall submit a letter notifying the Central Valley Water Board of the completion of the upgrade and increased flow to the SAF.

2. If groundwater monitoring results show that the discharge of waste is causing groundwater to contain any waste constituents in concentrations greater than the Groundwater Limitations of this Order, within 120 days of the request of the Executive Officer, the Discharger shall submit a BPTC Evaluation Workplan that sets forth the scope and schedule for a systematic and comprehensive technical evaluation of each component of PCP's waste treatment and disposal system to determine best practicable treatment and control for each waste constituent that exceeds a Groundwater Limitation. The workplan shall contain a preliminary evaluation of each component of the wastewater treatment, storage and disposal system and propose a time schedule for completing the comprehensive technical evaluation. The schedule to complete the evaluation shall be as short as practicable, and shall not exceed one year.

3. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Central Valley Water Board by **31 January**.

4. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly

stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.

5. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.

6. The Discharger shall comply with Monitoring and Reporting Program **R5-201X-XXXX**, which is part of this Order, and any revisions thereto as ordered by the Executive Officer. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.

7. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

8. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

9. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.

10. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.

11. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.

12. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."

13. The Discharger shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal systems in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

14. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

15. In the event of any change in control or ownership of the processing plant and LAA, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.

16. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.

17. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge processing plant for reference by operating personnel. Key operating personnel shall be familiar with its contents.

18. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

I, PAMELA C. CREEDON, 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 on __.

_____

PAMELA C. CREEDON, Executive Officer