

## Los Angeles Regional Water Quality Control Board

February 15, 2018

Michael Rock, City Manager  
City of Santa Paula  
970 Ventura Street  
Santa Paula, CA 93061

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO. 7017 1450 0002 1559 0539

**WASTE DISCHARGE REQUIREMENTS ORDER NO. R4-2018-0022 AND CEASE AND DESIST ORDER NO. R4-2018-0023 FOR SANTA PAULA WATER RECYCLING FACILITY (SPWRF) – CITY OF SANTA PAULA (FILE NO. 06-189, CI NO. 9259, GLOBAL ID WDR100000849)**

Dear Mr. Rock:

Our letter of February 5, 2018, transmitted the second revised tentative Waste Discharge Requirements and Cease and Desist Order (WDRs/CDO) for the Santa Paula Water Recycling Facility – the City of Santa Paula.

Pursuant to Division 7 of the California Water Code, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) at a public meeting held on February 8, 2018, reviewed the second revised tentative WDRs/CDO, considered all factors in the case, and adopted WDRs Order No. R4-2018-0022 and CDO No. R4-2018-0023 (copies enclosed) relative to this discharge. The adopted WDRs/CDO will be posted on the Regional Board's website at:

[http://www.waterboards.ca.gov/losangeles/board\\_decisions/adopted\\_orders/](http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/)

The City of Santa Paula shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the WDRs/CDO, including groundwater monitoring data, discharge location data, and searchable Portable Document Format of monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100000849.

If you have any questions, please contact the Project Manager, Dr. Don Tsai at (213) 620-2264 ([Don.Tsai@waterboards.ca.gov](mailto:Don.Tsai@waterboards.ca.gov)), or me at (213) 576-6683 ([Eric.Wu@waterboards.ca.gov](mailto:Eric.Wu@waterboards.ca.gov)).

Sincerely,



Eric Wu, Ph.D., P.E.  
Chief of Groundwater Permitting Unit

Enclosures:

1. Waste Discharge Requirements Order No. R4-2018-0022
2. Attachments A to E
3. Cease and Desist Order No. R4-2018-0023

cc (via email):

Mr. John Ilasin – City of Santa Paula  
Mr. Jim Kuykendall – Stantec  
Ms. Ashli Desai – Larry Walker Associates  
Ms. Stephanie Medina, Heal the Bay  
Mr. William C. Stratton, County of Ventura Environmental Health Division  
Mr. Jeff Pratt, Ventura County Public Works Agency  
Mr. Chris Theisen, Ventura Regional Sanitation District  
Mr. Mauricio E. Guardado, United Water Conservation District  
Department of Fish and Game, Region 5  
Ventura County Waterworks District 16  
Mr. Donald Westerdale  
Mr. David Lippert  
Mr. Norman Bigott  
Ms. Kate Neiswender  
Ms. Katherine Malzacher  
Dr. Edo McGowan  
Mr. David W. Rowlands, City of Fillmore

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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**ORDER NO. R4-2018-0022**  
**FILE NO. 06-189**  
**CI NO. 9259**

## **WASTE DISCHARGE REQUIREMENTS FOR CITY OF SANTA PAULA (SANTA PAULA WATER RECYCLING FACILITY)**

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

### **PURPOSE OF ORDER**

1. The City of Santa Paula (City or Discharger) is the owner of the Santa Paula Water Recycling Facility (SPWRF), a Publicly-Owned Treatment Works (POTW), located at 920 Corporation Street in Santa Paula, California (Figure 1). The SPWRF, currently operated by American Water, discharges tertiary-treated wastewater to groundwater via three percolation ponds adjacent to the facility.
2. The City was previously regulated under Waste Discharge Requirements (WDRs) contained in Order No. R4-2007-0028, adopted by this Regional Board on May 3, 2007. The Regional Board amended Order No. R4-2007-0028 three times as follows:
  - A. Order No. R4-2010-0074, adopted by this Regional Board on May 6, 2010, required that effluent discharged to percolations ponds shall not exceed 2.6 million gallons per day (MGD).
  - B. Order No. R4-2007-0028-R02, adopted by this Regional Board on February 2, 2012, incorporated pretreatment program requirements and corresponding monitoring requirements.
  - C. Order No. R4-2007-0028-R03, adopted by this Regional Board on April 6, 2017, extended the expiration date of Order No. R4-2007-0028 from May 3, 2010 to December 15, 2017 or upon future issuance of new or revised WDRs.
  - D. Order No. R4-2007-0028-R04, adopted by this Regional Board on December 21, 2017, extended the expiration date of Order No. R4-2007-0028 from December 15, 2017 to March 31, 2018 or upon future issuance of new or revised WDRs.
3. On October 1, 2015, the Regional Board directed the City to submit a Report of Waste Discharge (ROWD) for application of renewal of the City's WDRs to discharge treated wastewater from the SPWRF to the percolation pond. On December 5, 2015, the City filed its ROWD for the SPWRF.

4. To verify the information provided in the ROWD, Regional Board staff conducted inspections of the SPWRF on December 8, 2015 and December 28, 2016, including the wastewater treatment processes, percolation ponds, and groundwater monitoring wells.
5. The purpose of this Order is to renew WDRs for the City's SPWRF. This Order includes updates to effluent limitations, groundwater limitations, and Monitoring and Reporting Program (MRP) CI No. 9259 to ensure that the City's discharge of waste complies with water quality objectives set forth in the *Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) and is protective of beneficial uses.

**BACKGROUND**

6. Before 2010, the City's wastewater was treated at the Santa Paula Wastewater Reclamation Plant (Plant), which discharged the treated wastewater to the Santa Clara River. That discharge was regulated by a National Pollutant Discharge Elimination System (NPDES) permit. Due to the age of the Plant, which was built in 1939, the City was unable to comply with the effluent limitations for biological oxygen demand (BOD), total suspended solids (TSS), turbidity, bacteria, residual chlorine, nitrate-nitrite, sulfate, and toxicity, as set forth in its NPDES permit. More than 3,000 violations at the Plant lead the Regional Board to engage in settlement discussions with the City, resulting in a Stipulated Consent Judgment and Final Order in 2007. The City chose to build a new treatment plant, the SPWRF, to discharge to groundwater through percolation ponds. The City was required to complete construction of the new SPWRF by September 15, 2010 and be in full compliance with WDRs set forth in Order No. R4-2007-0028 by December 15, 2010.
7. Construction of the SPWRF began in July 2008 and was completed in December 2009. The SPWRF began accepting partial flow in April 2010 and then accepted all flow from the City in May 2010. The Plant built in 1939 was thereafter decommissioned.
8. According to the United States Census Bureau, approximately 19% of the population in the City have income levels below the poverty line, and approximately 25% of area in the City is categorized as a disadvantage community (less than 80% of the State's median household income) or a severely disadvantaged community (less than 60% of the State's median household income). The average sewer fee assessed for a single family was about \$88, based on the City's *2014 Water and Sewer Rate Study Results*.
9. Drinking water supplied to the City is produced from deep wells including Well 1-B, Well 11, Well 12, Well 13, and Well 14, which are owned and operated by the Water Division of the City and produce up to 10.6 MGD. Water produced at all five wells between 2010 and 2016 complied with all primary state and federal drinking water standards. Table 1 summarizes drinking water test results for total dissolved solids (TDS), sulfate, chloride, and boron from the City's 2010-2016 Annual Water Quality Reports, as compared to the groundwater quality objectives (GQOs) set forth in the Basin Plan.

| Table 1 – Drinking Water Quality (milligrams/Liter, mg/L) |     |         |          |       |
|---|-----|---------|----------|-------|
| Period  | TDS | Sulfate | Chloride | Boron |
| 2010  | 941 | 440     | 43       | 0.53  |
| 2011  | 918 | 428     | 41       | 0.54  |

| <b>Table 1 – Drinking Water Quality (milligrams/Liter, mg/L)</b> |             |                |                 |              |
|--|-------------|----------------|-----------------|--------------|
| <b>Period</b>  | <b>TDS</b>  | <b>Sulfate</b> | <b>Chloride</b> | <b>Boron</b> |
| <b>2012</b>  | 964         | 442            | 42              | 0.52         |
| <b>2013</b>  | 693         | 208            | 47              | 0.52         |
| <b>2014</b>  | 975         | 420            | 42              | 0.54         |
| <b>2015</b>  | 941         | 405            | 44              | 0.47         |
| <b>2016</b>  | 981         | 440            | 48              | 0.55         |
| <b>GQOs</b>  | <b>2000</b> | <b>800</b>     | <b>110</b>      | <b>1.0</b>   |

**CURRENT FACILITY AND TREATMENT PROCESS DESCRIPTION**

**10. SPWRF and Vicinity**

- A. The SPWRF (34° 19' 56.3" N, 119° 04' 57.2" W) is sited on a 50-acre parcel along Calpipe Road and Todd Lane in Santa Paula, California (Figure 1). The SPWRF is approximately 1,200 feet southeast of Highway 126, approximately 1,000 southwest of Shell Road, and approximately 1,300 feet northwest of the Santa Clara River.
- B. The SPWRF is located over the Santa Clara-Santa Paula Groundwater Basin (DWR Basin No. 4-4) (Figure 2).

**11. SPWRF Treatment**

- A. The SPWRF treats wastewater generated within the City and is designed for a flow of 4.2 MGD. Based on the discharge records between July 2010 and June 2017, the monthly average effluent discharged from the SPWRF ranged between 1.36 and 2.44 MGD, with an average of 1.86 MGD.
- B. The wastewater treatment process at the SPWRF (See Figure 3 for process flow schematic) consists of preliminary treatment (coarse and fine mechanical screening and grit removal at the Influent Lift Station), flow equalization (two flow equalization tanks), secondary treatment (three aeration tanks with nitrification and denitrification activated sludge), tertiary treatment (six biomembrane reactors, providing further carbonaceous oxidation, nitrification/denitrification and solids removal to meet the limits of the WDRs), and disinfection (UV). Treated and disinfected effluent is discharged to three percolation ponds (Figure 4). The returned activated sludge is treated at two of three aerobic digesters (one aerobic digester is for backup) after being thickened at two thickeners. The solids generated at the aerobic digesters receive final dewatering at the screw dewatering press. Final solids meeting the United States Environmental Protection Agency (USEPA) Class B reuse standards are sent to the Ventura County Regional Bio-Solids facility.
- C. The SPWRF was not designed to remove chloride. Since the SPWRF has no ability to remove chloride, chloride is passed through to the effluent and then groundwater via discharges to the percolation pond.

- D. The City owns and operates the sewer collection system, which conveys domestic, commercial, and industrial wastewater to the SPWRF. Two industrial users within the City are Aurora Casting (metal foundry) and Saticoy Lemon (lemon packing house). The City is required to implement a Pretreatment Program and to comply with requirements for operation and maintenance of the sewer collection system. The City has been implementing an industrial wastewater Pretreatment Program for the SPWRF, which has been approved by the USEPA and the Regional Board.
- E. Percolation Ponds
  - i. The three percolation ponds were built on approximately 34 acres of agriculture land (Figure 4) and are located along Todd Lane in the Santa Clara-Santa Paula Groundwater Basin area.
  - ii. The Regional Board classified the discharge to the percolation pond as a discharge of treated wastewater to land that is subject to WDRs.
  - iii. A hydrologic model completed by the City in 2008 indicated that the percolation pond have a maximum discharge capacity of 2.6 MGD during wet years. Therefore, the allowable discharge of the SPWRF was reduced from 8 MGD to 2.6 MGD in Order No. R4-2010-0074 (amending Order No. R4-2007-0028).

**GROUNDWATER DEPTH AND MONITORING WELLS**

- 12. Depth to groundwater within the shallow aquifer at the site ranges from approximately 15 to 49 feet below ground surface. Groundwater gradients generally appear to parallel the ground surface, gently sloping downward to the southwest. During wet years, groundwater may rise to within 10 to 11 feet below ground surface in the area along the Santa Clara River.
- 13. The City owns and currently samples eight (8) groundwater monitoring wells, including MW-1, MW-2a, MW-3, MW-4, MW-5, MW-6, MW-7a, and MW-8 (shown on Figure 4). Per Section IV.C.3 of the Monitoring and Reporting Program (MRP) (Attachment E), the City will be proposing a modified groundwater monitoring network. Upon approval by the Executive Officer, the modified groundwater monitoring network will be used to determine compliance with the groundwater limitations in this Order, demonstrate that the discharge via percolation ponds does not cause mounding of groundwater, and to generally monitor the change of groundwater quality to ensure that the discharge does not cause adverse impacts to groundwater.

**COMPLIANCE HISTORY**

- 14. Based on data collected from July 2010 to June 2017, the City had the following number of exceedances recorded in the effluent and groundwater at the SPWRF, which are identified in Table 2.

| Table 2 – Number of Exceedances Recorded in Effluent and Groundwater |          |             |
|--|----------|-------------|
| Pollutants   | Effluent | Groundwater |
| Chloride   | 84       | 174         |
| Di(2-ethyl)phthalate   | 1        | ---         |

| <b>Table 2 – Number of Exceedances Recorded in Effluent and Groundwater</b> |                 |                    |
|---|-----------------|--------------------|
| <b>Pollutants</b>   | <b>Effluent</b> | <b>Groundwater</b> |
| <b>Dioxin</b>   | 1               | ---                |
| <b>Total nitrogen</b>   | 1               | ---                |
| <b>Nitrate plus nitrite</b>   | ---             | 1                  |
| <b>Sulfate</b>  | ---             | 1                  |
| <b>chromium</b>   | ---             | 5                  |
| <b>Aluminum</b>   | ---             | 10                 |
| <b>Nickel</b>   | ---             | 1                  |
| <b>Boron</b>  | ---             | 1                  |

Multiple effluent and groundwater limitations were exceeded during the period between the 2nd quarter of 2010 and the 3rd quarter of 2011. Beginning with the 4<sup>th</sup> quarter of 2011, the City had met all effluent limitations except for chloride. As previously noted, the SPWRF was not designed to remove chloride. The monthly effluent chloride concentration ranged from 125 to 166 mg/L and continuously exceeded the effluent chloride monthly average of 110 mg/L. Table 3 summarizes the annual average chloride concentrations in the SPWRF effluent.

| <b>Table 3 – Annual Average Chloride Concentrations<sup>[1]</sup> (mg/L) in SPWRF Effluent</b> |                    |
|--|--------------------|
| <b>2010</b>  | 156                |
| <b>2011</b>  | 153                |
| <b>2012</b>  | 149                |
| <b>2013</b>  | 155                |
| <b>2014</b>  | 145                |
| <b>2015</b>  | 134                |
| <b>2016</b>  | 137                |
| <b>2017 (Jan – Jun)</b>  | 141                |
| <b>Range<sup>[2]</sup></b>   | <b>144.4 ± 8.2</b> |

**Table Notes:**

[1] All data collected from grab samples.

[2] Data range is based on one standard deviation.

- Table 4 summarizes the groundwater annual average chloride concentration before and after the SPWRF began discharging via the percolation pond. The annual average chloride groundwater concentration was 108 mg/L at the downgradient water supply Well AW03 prior to initiation of discharge at the percolation pond in 2010. After the SPWRF began discharging to the percolation pond, the annual average chloride groundwater concentration increased to 135 mg/L at Well AW03. Monitoring data from the upgradient groundwater monitoring Well MW-3 indicates an annual average chloride groundwater

concentration of 100 mg/L. This information suggests that the background groundwater chloride concentration was around 100 mg/L. Groundwater chloride concentrations at the downgradient groundwater monitoring Well MW-5 have been recorded between 135 and 155 mg/L, with an average of 142 mg/L. This data closely aligns with the SPWRF's effluent chloride concentration of approximately 144 mg/L (Table 3). The groundwater and effluent data indicate that the chloride discharges from the SPWRF have impacted, and continue to impact, the receiving groundwater quality in the vicinity of the SPWRF.

| <b>Table 4 – Annual Average Chloride Concentration<sup>[1]</sup> in Groundwater (mg/L)</b> |  |  |                                      |
|--|--|--|--------------------------------------|
| <b>Period</b>  | <b>Downgradient MW-5<sup>[2]</sup></b> | <b>Downgradient 03N21W21G03S<sup>[3]</sup></b> | <b>Upgradient MW-3<sup>[4]</sup></b> |
| <b>Prior to Discharge from SPWRF</b>   |  |  |                                      |
| <b>2003</b>  | ---                                    | 113  | ---                                  |
| <b>2004</b>  | ---                                    | 111  | ---                                  |
| <b>2005</b>  | 115                                    | 117  | 92                                   |
| <b>2006</b>  | 114                                    | 112  | 88                                   |
| <b>2007</b>  | 108                                    | 110  | 85                                   |
| <b>2008</b>  | 87                                     | 100  | 78                                   |
| <b>2009</b>  | 74                                     | 92   | 96                                   |
| <b>Range<sup>[5]</sup></b>   | <b>99.6 ± 16.3</b>                     | <b>107.9 ± 8.6</b>                             | <b>87.8 ± 6.1</b>                    |
| <b>After Discharge from SPWRF</b>  |  |  |                                      |
| <b>2010 (Jul – Dec)</b>  | 145                                    | 138  | 93                                   |
| <b>2011</b>  | 145                                    | 146  | 112                                  |
| <b>2012</b>  | 153                                    | 135  | 87                                   |
| <b>2013</b>  | 155                                    | 136  | 103                                  |
| <b>2014</b>  | 135                                    | 129  | 115                                  |
| <b>2015</b>  | 136                                    | 129  | 108                                  |
| <b>2016</b>  | 135                                    | 134  | 103                                  |
| <b>2017 (Jan – Jun)</b>  | 121                                    | 131  | 82                                   |
| <b>Range<sup>[5]</sup></b>   | <b>142.4 ± 17.6</b>                    | <b>134.0 ± 6.7</b>                             | <b>100.2 ± 15.2</b>                  |

**Table Notes:**

- [1] All data collected from grab samples.
- [2] Data were averaged from samples collected at the City-owned groundwater monitoring Well MW-5 with screen intervals of 42 to 62 feet, located approximately 50 feet downgradient from Percolation Pond 3.
- [3] Water supply Well AW03 is owned and operated by a private entity. This well is located approximately 300 feet southwest of Well MW-5. The screen intervals of Well AW03 are from 80 to 120 below surface grade. Water produced at this well is used for agricultural irrigation only.

- [4] Data were averaged from samples collected at the City-owned groundwater monitoring Well MW-3 with screen intervals of 25 to 45 feet, located approximately 1,800 feet upgradient from Percolation Pond 1.
  - [5] Data range is based on one standard deviation.
16. The Regional Board issued three Notices of Violation (NOVs) to the City, dated November 3, 2011, December 30, 2014, and March 20, 2017, for exceedances of the chloride effluent and groundwater limitations in Order No. R4-2007-0028. These NOVs required the City to implement corrective and preventative actions to bring the City's discharge to full compliance with the chloride effluent limitation and receiving water requirements specified in Order No. R4-2007-0028.

**PLAN FOR CHLORIDE COMPLIANCE**

17. The City's efforts to reduce the chloride concentration in the influent to the SPWRF are summarized below:
- A. The City identified that the influent to the SPWRF contains brine with elevated chloride concentration from Self-Regenerating Water Softeners (SRWS). There are approximately 1,250 residential SRWS used in the City.
  - B. On September 5, 2006, the City established Ordinance No. 1160 prohibiting the installation or replacement of residential SRWS.
  - C. On June 22, 2015, the City adopted Resolution No. 6918 approving a SRWS Buyback and Incentive Program. This program offers a financial incentive to residents to voluntarily remove SRWS. A Kick-Off SRWS Buyback event was held on September 19, 2015. The removal of SRWS under this program began in October 2015. As of September 30, 2017, 255 of the approximately 1,250 SRWS have been removed. Table 5 summarizes the progress of SRWS removal by comparing the monthly average chloride concentration in the effluent compared to the accumulated number of SRWS removed. A reliable decreasing trend for chloride has not been observed in the effluent.

| <b>Period</b>         | <b>Accumulated Number of SRWS Removed</b> | <b>Effluent (mg/L)</b> |
|-----------------------|---|------------------------|
| <b>April 2015</b>     | 0   | 135                    |
| <b>May 2015</b>       | 0   | 134                    |
| <b>June 2015</b>      | 0   | 132                    |
| <b>July 2015</b>      | 0   | 136                    |
| <b>August 2015</b>    | 0   | 134                    |
| <b>September 2015</b> | 0   | 129                    |
| <b>October 2015</b>   | 23  | 132                    |
| <b>November 2015</b>  | 46  | 133                    |

| <b>Table 5 – Monthly Average Chloride Concentration<sup>[1]</sup> in Effluent Compared to Accumulated Number of SRWS Removed</b> |   |                        |
|--|---|------------------------|
| <b>Period</b>  | <b>Accumulated Number of SRWS Removed</b> | <b>Effluent (mg/L)</b> |
| December 2015  | 58  | 129                    |
| January 2016   | 74  | 146                    |
| February 2016  | 83  | 139                    |
| March 2016   | 96  | 138                    |
| April 2016   | 106                                       | 137                    |
| May 2016   | 115                                       | 138                    |
| June 2016  | 122                                       | 138                    |
| July 2016  | 125                                       | 134                    |
| August 2016  | 135                                       | 125                    |
| September 2016   | 158                                       | 133                    |
| October 2016   | 166                                       | 142                    |
| November 2016  | 196                                       | 140                    |
| December 2016  | 200                                       | 141                    |
| January 2017   | 220                                       | 146                    |
| February 2017  | 228                                       | 157                    |
| March 2017   | 233                                       | 143                    |
| April 2017   | 236                                       | 131                    |
| May 2017   | 243                                       | 134                    |
| June 2017  | 244                                       | 134                    |
| July 2017  | 247                                       | 129                    |
| August 2017  | 254                                       | 125                    |
| September 2017   | 255                                       | 129                    |
| <b>Monthly Range<sup>[2]</sup></b>   | <b>---</b>                                | <b>136.4 ± 7.4</b>     |

**Table Notes:**

[1] All data collected from grab samples.

[2] Data range is based on one standard deviation and results from data collected between October 2015 and September 2017.

- To address the City's chloride exceedances in the effluent and groundwater, the Regional Board required the City to submit a Chloride Reduction Workplan. Board staff also met with the City on several occasions to discuss the City's chloride exceedances. A summary of these events are as follows:

- A. On December 19, 2013 and May 11, 2015, the Regional Board met with the City to discuss its Chloride Reduction Workplan. The City's Chloride Reduction Workplan includes the following tasks:
    - i. Prohibit SRWS installations or replacements;
    - ii. Implement a SRWS Buyback Program;
    - iii. Implement a Recycled Water Program to reduce effluent discharged to the three percolation ponds; and
    - iv. Implement Supplemental Strategies, if needed, including advanced treatment (e.g. reverse osmosis) and disposal of brine.
  - B. On January 28, 2016, Regional Board staff discussed with the City the necessary actions to reduce the chloride concentration in the effluent, which included the SRWS Buyback Program. The City also proposed to explore application of recycled water at locations other than identified groundwater hot spots and to conduct groundwater impact investigation and remediation activities. The City was notified that detailed schedules and milestones were required for all actions.
  - C. On March 8, 2016 and September 14, 2016, the City met with Regional Board staff to provide an update of its SRWS Buyback Program efforts. The City noted that five City employees were deployed to conduct door-to-door visits to encourage participation in the SRWS Buyback Program among 7,500 dwellings within the City.
  - D. On October 31, 2016, the City met with Regional Board staff to provide an update on the following topics:
    - i. Status of implementing the chloride compliance strategy and potential for reduction of effluent discharged to the three percolation ponds via the City's Recycled Water Program;
    - ii. Assimilative capacities for chloride at different groundwater locations beneath the City based on the Salt and Nutrient Management Plan for the Lower Santa Clara River Basin; and
    - iii. Groundwater hot spots (i.e., chloride-impaired areas with no assimilative capacity for recycled water applications) in the City.
19. On July 9, 2015, the Regional Board adopted Resolution No. R15-007, an amendment to the Basin Plan that incorporated stakeholder-developed groundwater quality management plan for salts and nutrients in the Lower Santa Clara River groundwater basins. Groundwater quality management measures were developed by stakeholders as part of the Salt and Nutrient Management Plan (SNMP) for the Lower Santa Clara River Basins in Ventura County. Such plans are a requirement of the State Water Resources Control Board's (State Water Board) Recycled Water Policy and are intended to maintain high quality waters and to protect the beneficial uses of groundwater while promoting recycled water use throughout the state. The SNMP utilized a groundwater quality model that characterized the water quality in the Santa Paula Basin and examined the degree of impairment to water quality in the Basin. The model shows there is available assimilative

capacity for salts and nutrients, including chloride, in most areas of the Santa Paula Basin to allow for recycled water projects consistent with the Recycled Water Policy. As described below, the City is planning to recycle effluent that is currently discharged to the percolation pond.

20. The City developed and utilized a simple spreadsheet mixing model, the *Groundwater Chloride Transportation Model* (Chloride Model), to analyze the effect of future effluent discharges on groundwater over time at various distances from the percolation pond. The City's modelling assumed some degradation of groundwater with respect to chloride within a limited range of mixing zone radius below and adjacent to the SPWRF, measured from the boundaries of the percolation pond. This distance is the maximum allowable distance where SPWRF effluent disposed to the percolation pond can mix with groundwater and result in receiving water chloride concentrations of 110 mg/L or less in order to provide protection to groundwater beneficial uses at the first encountered water supply wells which are at 150 feet away from the percolation ponds. Groundwater within the mixing zone will exceed the chloride GQO of 110 mg/L. Mass-volume balance calculations along with Darcy's Law are used to account for travel in porous media. The Chloride Model simulates instantaneous and complete mixing of ambient groundwater with effluent seepage reaching the water table from the percolation pond using SPWRF data for flow and chloride effluent concentrations. It was conservatively assumed that any effluent discharge to the percolation pond would infiltrate into the underlying aquifer and not be diverted for other uses. Groundwater parameters within the spreadsheet model were selected based on recent monitoring reports in order to be representative of average conditions within the vicinity of the SPWRF. The Chloride Model assumes an initial volume of groundwater underlying the ponds possessing background chloride concentrations of 136 mg/L. The volume of the existing groundwater body is calculated as the product of the radius of interest (150-1200 feet), an assumed saturated thickness of potentially impacted groundwater (50 feet), and the porosity of the underlying sediments (assumed to be 0.2) based on the low end of published literature values for a sand and gravel mixture. Based on the regional groundwater quality data documented in the SNMP, regional groundwater inflow is assumed to have a chloride concentration of 91 mg/L.

On December 14, 2016, Regional Board staff met with the City to discuss the results of the Chloride Model, which evaluated compliance with the groundwater quality objectives beneath and adjacent to the three percolation ponds, for various discharge scenarios. Based on Regional Board staff's comments, the City implemented additional discharge scenarios in the Chloride Model, which was discussed in meetings held on February 8, 2017, February 17, 2017, July 24, 2017, and August 7, 2017.

21. The Chloride Model simulated chloride concentrations in the receiving groundwater resulting from chloride mass loading reduction in the three percolation ponds. The Model predicted GQOs being achieved at 150 feet away from the percolation pond when the total mass of chloride in the effluent is significantly reduced. The initial mass of chloride is calculated based on the average chloride effluent concentration of 135 mg/L and the discharge rate of 2.2 MGD [95 percentile of monthly average effluent flows, resulting from data recorded between October 2015 (beginning of the SRWS Buyback Program) and June 2017], which results in 2,479 pounds total mass of chloride discharged per day. The reduction of chloride mass discharged to the percolation pond can be achieved by improving the effluent chloride concentration (e.g., source control or treatment), or diverting a significant amount of flow for recycled water uses, or a combination of both in order to protect water supply Wells AW01, AW02, and, AW03, approximately 150, 150, and 300 feet, respectively, away from

percolation ponds. Water produced from these wells is primarily for agricultural irrigation use.

To achieve the chloride GQO of 110 mg/L in groundwater at least 150 feet away from the percolation pond, the City provided various effluent chloride concentration and allowable flow combinations (Table 6). Based on the hydrology and hydrogeologic condition at the SPWRF percolation ponds area, the higher the concentration of chloride in the effluent, the less volume and mass can be discharged to percolation ponds to comply with the chloride GQO in the Basin Plan. For example, if the chloride concentration in the effluent is 135 mg/L, only 0.07 MGD, which is equivalent to 79 pounds of chloride per day, could be discharged to the percolation pond to achieve the chloride GQO of 110 mg/L at 150 feet away from the percolation pond. If the chloride concentration in the effluent is reduced to 120 mg/L, then more flow (0.2 MGD) can be discharged to the percolation pond and achieve the chloride GQO 150 feet away from the percolation pond.

| <b>Chloride Effluent Concentration</b> | <b>Flow to Percolation Ponds (% of 2.2 MGD)</b> | <b>Allowable Effluent Mass Load to Groundwater (Daily)</b> | <b>Chloride Groundwater Concentration at 150 feet</b> |
|--|---|--|---|
| 135 mg/L                               | 0.07 MGD (3.2%)                                 | 79 pounds (lbs)  | 110 mg/L  |
| 130 mg/L                               | 0.1 MGD (4.5%)                                  | 108 lbs  | 110 mg/L  |
| 125 mg/L                               | 0.13 MGD (5.9%)                                 | 135 lbs  | 110 mg/L  |
| 120 mg/L                               | 0.2 MGD (9.1%)                                  | 200 lbs  | 110 mg/L  |
| 115 mg/L                               | 0.4 MGD (18.2%)                                 | 384 lbs  | 110 mg/L  |

22. To achieve compliance with the chloride GQO in this Order and to conserve potable water, the City plans to reduce the volume of effluent, and thus a reduction of the chloride mass discharged to the percolation pond by providing recycled water for various local uses. The Regional Board has evaluated the planned recycle projects and has determined that they will be consistent with the State Water Board’s Recycled Water Policy and will still preserve available assimilative capacity within the Santa Paula Basin consistent with the SNMP. The mass-based effluent limitation for chloride in this Order reflects the City’s chosen compliance option. The groundwater limitations are based on the GQOs in the Basin Plan.
23. On December 22, 2015, the City submitted the Recycled Water Program Technical Report and Notice of Intent with the Title 22 Engineering Report to the State Water Board’s Division of Drinking Water (DDW) for approval. DDW conditionally approved the Title 22 Engineering Report on August 19, 2016. On June 14, 2017, the Regional Board enrolled the City’s recycled water program under separate *Water Reclamation Requirements for Recycled Water Use*, Order WQ 2016-0068-DDW, issued by the State Water Board on June 7, 2016.
24. In the City’s report, *Chloride Load Reduction Milestones*, submitted to the Regional Board on March 14, 2017, the City included the construction of reverse osmosis treatment at the SPWRF as an option (under Supplemental Strategies), if needed, in order to comply with the chloride groundwater quality objective of 110 mg/L. The City will continue its source

control efforts to remove SRWSs and will first focus on recycling most of its effluent in order to bring the groundwater back into compliance with GQOs. Progress with these efforts will be assessed at Year 2022 and determination will be made as to whether advanced treatment will be required to meet the chloride GQO at Year 2027. If advanced treatment is required, effluent limits will be applied in a way to ensure protection of all beneficial uses, including salt-sensitive crops.

25. Due to the following reasons, the City cannot immediately comply with the chloride effluent and groundwater limitations prescribed in this Order: (1) elevated chloride concentrations in the influent, (2) the wastewater treatment process not currently designed to remove chloride out of the waste stream, and (3) time needed to construct recycled water pipelines to deliver recycled water to users. In addition, the current progress of the City's SRWS Buyback Program does not reliably ensure that the SPWRF will comply with the chloride effluent and groundwater limitations. Therefore, the Regional Board has determined that issuance of an accompanying CDO is appropriate and necessary to put the City on the path towards compliance with the effluent and groundwater limitations for chloride set forth in this Order. The CDO requires the City to comply with interim chloride effluent and groundwater limitations and implement actions pursuant to a prescribed time schedule. The CDO provides an option for the City to consider an alternative approach including a request to the Regional Board to consider a Basin Plan amendment for revision of the GQO based on studies on chloride and salt-sensitive agriculture and after formation of a stakeholder working group.

By the end of the CDO schedule, there will be permitted degradation of groundwater with respect to chloride within a limited mixing zone radius downgradient and adjacent to the SPWRF percolation ponds, measured from the boundaries of the percolation pond to 150 feet. This distance is the shortest distance where SPWRF effluent disposed to the percolation pond can mix with groundwater and result in receiving water chloride concentrations of 110 mg/L or less. Groundwater within the 150-foot mixing zone will exceed the chloride GQO of 110 mg/L. Based on the available data, there are no water supply wells within the 150-foot mixing zone. The City can arrange for alternative water supplies for any well owners in the mixing zone, if any are discovered.

## **GLOBAL WARMING AND CLIMATE CHANGE**

26. The observed century-scale rise in the average temperature of the Earth's surface, oceans, and atmosphere, commonly recognized as the Global Warming, has resulted in extreme climate change, such as the extreme drought and extremely heavy rainfall. In Southern California, the predicted impacts of climate change are numerous. Annual average temperatures are expected to increase, coupled with a higher frequency of extreme heat days. A likely consequence of this warmer climate will be more severe drought periods, leading to an increase in the amount and intensity of fires and a longer fire season. In addition, precipitation patterns are likely to be modified. A decrease in snowfall, combined with warmer temperatures, will induce a decrease in the amount and duration of snowpack, an essential source of freshwater to the region. The increasing occurrence of extreme precipitation events will amplify the risk of flooding, which recently happened in Southern California.

These impacts will affect water quality in multiple ways, including changes in stream flow, aquatic habitats, surface water temperature, pollutant levels, sedimentation, algal growth, and salinity levels and acidification in coastal areas. For permitted facilities such as

Publically Owned Treatment Works (POTWs), specific impacts could include, but are not limited to, an increase in the concentration of pollutants entering the facility, an increase in the temperature of effluents and receiving waters, an increase in storm water inflow and infiltration, increase in flooding/inundation of facilities, sewer overflows, power outages, pump maintenance issues, and onsite or nearby hillside destabilization.

Executive Order B-30-15, issued on April 29, 2015, recognizing the challenges posed by climate change, directed state agencies to take climate change into account in their planning decisions, guided by the following principles: Priority should be given to actions that both build climate preparedness and reduce greenhouse gas emissions; where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts; actions should protect the state's most vulnerable populations; and natural infrastructure solutions should be prioritized.

This Order contains provisions to require planning and actions to address climate-related impacts that can cause or contribute to violations of this Order and/or degradation of waters of the state.

27. The SPWRF was designed to include protection from a 100-year storm event in the Santa Clara River. The SPWRF buildings and percolation ponds are located behind a dike that has an elevation above the elevation anticipated as the result of a 100-year storm event. The design documents and potential flood flow assessment is contained in files in the City's Building & Safety Department. The elevation of the dike at the SPWRF is 23 feet higher than the Santa Clara River located at approximately 1,300 feet southeast. This elevation separation provides additional protection from a possible flood overflow from the Santa Clara River caused by the climate change. It should also be noted that the SPWRF is located outside of the Santa Clara River floodway defined by the Federal Emergency Management Agency and the Ventura County Watershed Protection District. Lastly, the SPWRF is equipped with a backup generator that is capable of operating the SPWRF through power outages and other emergencies.

Climate change may also increase drought and related impacts such as reduced potable water supply and/or changing water supplies, which may be of less quality.

#### **APPLICABLE LAWS, PLANS, POLICIES, AND REGULATIONS**

28. This Order serves as WDRs pursuant to Division 7, Chapter 4, Article 4 of the California Water Code (commencing with section 13260). WDRs have been established because discharges from the SPWRF have the potential to affect the quality of the waters of the State, to impact the beneficial uses of those waters, and/or to cause a nuisance. The Regional Board developed the requirements of this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information.
29. 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, the Regional Board adopted a comprehensive revision to the Basin Plan. The Basin Plan: (i) designates beneficial uses for surface and groundwater, (ii) establishes narrative and numeric water quality objectives that must be attained or maintained to protect the designated beneficial uses, and (iii) sets forth implementation programs to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan also incorporates State Water Board Resolution No. 68-16 (see finding below for detail). In addition, the Basin Plan

incorporates applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Basin Plan has been amended occasionally since 1994, including recent administrative updates. The requirements in this Order implement the Basin Plan.

30. Beneficial Uses - The SPWRF overlies the Santa Clara-Santa Paula Groundwater Basin (DWR Basin No. 4-4). The Basin Plan identifies beneficial uses for regional waters, including those based on State Water Board Resolution No. 88-63 ("Sources of Drinking Water Policy"), which established state policy that all surface and ground waters of the State, with certain exceptions, are considered suitable or potentially suitable for municipal or domestic water supply. Beneficial uses applicable to the receiving groundwater are as follows:

| Table 7 – Basin Plan Beneficial Uses of Groundwater     |   |
|---|---|
| Receiving Water   | Beneficial Use(s)   |
| Santa Clara-Santa Paula Groundwater (DWR Basin No. 4-4) | Existing:<br>Municipal and domestic supply (MUN); industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR). |

31. Title 22, California Code of Regulations (CCR) - To protect sources of drinking water, the Basin Plan (Chapter 3) incorporates the primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water as water quality objectives. These MCLs are codified in CCR, Title 22, Division 4. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. The primary MCLs (see Attachments A-1 to A-6) are applicable water quality objectives for a receiving water to protect beneficial uses when that receiving water is designated as municipal and domestic supply. The Basin Plan also specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore, the secondary MCLs, which are limits based on aesthetic, organoleptic standards, are applicable water quality objectives for a receiving water to protect beneficial uses when that receiving water is designated as municipal and domestic supply. These water quality objectives are implemented in this Order to protect the designated beneficial uses.
32. Domestic Water Quality – In compliance with California 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 MCLs implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.
33. Impaired Water Bodies on Clean Water Act Section 303(d) List/Total Maximum Daily Loads (TMDLs) – The Santa Clara River is listed on the Clean Water Act Section 303(d) List as impaired by ammonia in Reach 3 and by nitrate plus nitrite in Reach 7. To address this impairment, the Regional Board established the Santa Clara River Nitrogen Compounds TMDL on August 7, 2003 by Regional Board Resolution No. 2003-011. The State Water Board approved the TMDL on November 19, 2003 (Resolution No. 2003-0073) and OAL approved it on February 27, 2004. The TMDL became effective upon approval of the U.S. Environmental Protection Agency on March 18, 2004. Concentration-based loads for

nitrogen compounds are allocated for nonpoint sources. The Discharger is subject to the following assigned load allocation for nonpoint sources:

| <b>Table 8 – Nonpoint Source Load Allocation for Santa Clara River<br/>Nitrogen Compounds TMDL</b>                       |                          |
|--|--------------------------|
| <b>Combined Ammonia, Nitrate, Nitrite (NH<sub>3</sub>-N + NO<sub>2</sub>-N + NO<sub>3</sub>-N)<br/>Loads as Nitrogen</b> | Monthly Average: 10 mg/L |

34. California Water Code section 13263 requires that the Regional Board, when prescribing waste discharge requirements, take into consideration the factors in section 13241. The Regional Board has considered those factors in establishing the WDRs in this Order.
35. State Water Board Resolution No. 68-16, Antidegradation Policy – State Water Board Resolution No. 68-16 “Statement of Policy with Respect to Maintaining High Quality of Waters in California” (also called the “Antidegradation Policy”) requires the Regional Board, in regulating the discharges of waste, to maintain high quality waters of the state unless it is demonstrated that any change in quality is 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 State Water Board’s policies (e.g., quality that exceeds water quality objectives). Further, any activity that produces waste must meet waste discharge requirements that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

Excepting chloride (discussed below), the SPWRF’s discharge is high quality, tertiary-treated effluent meeting groundwater quality objectives in the Basin Plan and MCLs for drinking water. The Regional Board finds that the discharge, as allowed in this Order, is consistent with Resolution No. 68-16 since this Order: (1) requires compliance with the requirements set forth in this Order, including the use of best practicable treatment and control of the discharges, (2) requires implementation of a Monitoring and Reporting Program (MRP); and (3) requires that the discharges comply with effluent limits to meet water quality objectives. This Order establishes limitations and requirements that will not unreasonably threaten present and anticipated beneficial uses or result in receiving ground water 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 limit applies as the governing limitation for that waste constituent, unless otherwise justified. 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.

The discharge of chloride authorized by this Order will cause some limited and localized groundwater degradation in the immediate vicinity of the SPWRF percolation ponds. Untreated discharges of chloride over the last 10 years have resulted in elevated concentrations of chloride in the effluent and groundwater. The groundwater quality objective for chloride is 110 mg/L and the average effluent chloride concentration in 2016 was 137 mg/L. To comply with the chloride groundwater limitations in this Order, which are based on the chloride groundwater quality objective, the City intends to implement recycled water projects to reduce flow to the percolation pond, and thus reduce the mass loading of chloride to the groundwater. This will greatly shrink the area of influence of the wastewater and largely restore the impaired groundwater zone adjacent and downgradient to the

percolation pond. However, implementation of recycled water projects in the Santa Paula area will take time to fully implement, which will result in continued localized degradation. While groundwater within the 150-foot mixing zone adjacent to the percolation ponds will exceed the chloride groundwater quality objective, this Order imposes limits on flow and chloride mass loading in the effluent to ensure receiving groundwater beneficial uses will be maintained and supported. Beneficial uses will be maintained as all wells utilized for crop irrigation will be located outside the mixing zone.

In order to more immediately reduce the chloride concentration in the effluent and groundwater to 110 mg/L at the percolation pond, the City would need to install a Reverse Osmosis (RO) system to treat all or a portion of the effluent. The Regional Board recognizes that reducing chloride concentrations in the effluent or in the groundwater by using RO can be costly. The current estimated cost for the City to install a RO system is \$26.6 million with annual operating and maintenance costs of \$1.6 million, including brine waste disposal. These costs would be passed on to the ratepayers, who already pay one of the highest sewer rates in the State. The City is also a small low-income community. The costs of RO treatment depends on the volume of effluent or groundwater to be treated in order to meet the groundwater quality objectives specified in the Basin Plan. Therefore, rather than install costly RO at this time, the requirements in this Order provide the City with the opportunity to first pursue recycling efforts and source reduction through the SRWS Buyback Program to meet groundwater quality objectives. If these efforts are deemed unsuccessful, the City may need to implement RO technology as an additional treatment mechanism in the future. Other basin-specific solutions can also be explored to minimize costs while restoring protection of beneficial uses.

Reference is also made to the Regional Board's past efforts to address chronic chloride exceedances in the Upper Santa Clara River, which utilized findings from studies on chloride and salt-sensitive agriculture. The first of the special studies, entitled "Literature Review and Evaluation (LRE)," was an evaluation of the appropriate chloride threshold for the reasonable protection of salt-sensitive agriculture. The LRE, which was completed in 2005, found that the best estimate of a chloride hazard concentration for avocado crops falls within the range of 100 to 117 mg/L. An independent technical advisory panel (TAP) reviewed the LRE and found a similar protective range of 100 to 117 mg/L. The TAP found that the upper end of the range is only protective if other factors such as quantity and timing of irrigation water and soil drainage are not limiting. An additional study completed in 2008, entitled "Compliance Averaging Period for Chloride Threshold Guidelines in Avocado," found that a 3-month averaging period of the LRE guidelines would be protective of avocados. The TAP co-chairs reviewed this study and agreed that a 3-month averaging period is appropriate. The Regional Board considered the LRE and TAP review of the LRE when developing site-specific water quality objectives (SSOs) for certain reaches of the Upper Santa Clara River to support the Alternative Water Resources Management (AWRM) approach proposed by the Santa Clarita Valley Sanitation District (SCVSD). The Regional Board found that the SSOs were consistent with antidegradation requirements, and subsequently established the SSOs on December 11, 2008 via Resolution No. R08-012. The Regional Board rescinded the SSOs in 2014 via Resolution R14-010 only after SCVSD decided to no longer pursue the AWRM approach.

Incorporating an approach that utilizes a recycled water approach and has limited groundwater degradation within the immediate vicinity of the percolation pond for chloride at levels that are above the groundwater quality objective is justified considering the socio-economic conditions of this small community that already has one of the highest sewage

rates in the state, and is consistent with State Water Board Resolution No. 68-16 in that the resulting water quality constitutes the highest water quality that is reasonable, considering all demands placed on the waters, economic and social considerations, and other public interest factors. Together, these factors are consistent with the maximum benefit to the people of the State.

36. California Water Code section 13267 authorizes the Regional Board to require the City to submit monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the state. The monitoring and reporting requirements established in this Order are necessary to characterize the discharge, evaluate compliance with this Order, and evaluate groundwater quality and the extent of degradation, if any, caused by the discharge.
37. Publicly Owned Treatment Works (POTW) – The term POTW means a treatment works as defined by section 212 of the federal Clean Water Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment facility. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such treatment works. (40 C.F.R. section 403.3(q)). The SPWRF meets all of the above criteria and therefore is considered a POTW.
38. Pretreatment – The City is required to implement a Pretreatment Program and to comply with requirements for operation and maintenance of its sewer collection system. Pursuant to CCR, Title 23, section 2233 and Title 40, Code of Federal Regulations (C.F.R.), Part 403, the City has been implementing an approved industrial wastewater Pretreatment Program for the SPWRF since February 2012. The Regional Board finds it appropriate to require the City to continue to implement its approved Pretreatment Program.
39. Endangered Species Act Requirements - This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C. §§ 1531 to 1544). This Order requires compliance with effluent limits, groundwater quality objectives, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
40. California Environmental Quality Act - This Order involves the renewal of WDRs for an existing facility. Therefore, this action to prescribe WDRs is exempt from the provisions of CEQA (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, Title 14, section 15301.

## NOTIFICATION

41. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations.

42. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
43. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the Regional Board's action, 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 will be provided upon request or may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

**IT IS HEREBY ORDERED** that, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, the City of Santa Paula shall comply with the following requirements, including all attachments, in all operations and activities at the SPWRF:

**I. INFLUENT LIMITATIONS AND REQUIREMENTS**

Influent wastewater shall be limited to wastewater generated within the jurisdiction of the City.

**II. EFFLUENT LIMITATIONS**

- A. Discharges from the SPWRF shall not exceed the maximum effluent volume of 4.2 MGD and the quarterly average effluent volume of 2.6 MGD.
- B. Tertiary-treated effluent shall not exceed the effluent limits in Table 9 below.

| Table 9 – Effluent Limits         |           |                      |                   |
|-----------------------------------|-----------|----------------------|-------------------|
| Constituents                      | Units     | Monthly Average      | Daily Maximum     |
| Oil and grease                    | mg/L      | 10 <sup>[1]</sup>    | 15 <sup>[1]</sup> |
| Total suspended solids            | mg/L      | 10 <sup>[1]</sup>    | 15 <sup>[1]</sup> |
|                                   | % removal | ≥ 85 <sup>[2]</sup>  | ---               |
| BOD <sub>5@20°C</sub>             | mg/L      | 10 <sup>[1]</sup>    | 15 <sup>[1]</sup> |
|                                   | % removal | ≥ 85 <sup>[2]</sup>  | ---               |
| Ammonia-N + Nitrate-N + Nitrite-N | mg/L      | 10 <sup>[3]</sup>    | ---               |
| Nitrite-N                         | mg/L      | 1                    | ---               |
| Total Dissolved Solids            | mg/L      | 2,000 <sup>[4]</sup> | ---               |
| Sulfate                           | mg/L      | 800 <sup>[4]</sup>   | ---               |
| Boron                             | mg/L      | 1.0 <sup>[4]</sup>   | ---               |
| Chloride                          | lbs/day   | 79 <sup>[5]</sup>    | ---               |

**Table Notes:**

[1] Limit is based on best professional judgment. Limits adopted by this Regional Board exist

in the permits for tertiary-treated wastewater treatment plants.

- [2] Limit is based on secondary treatment requirements, 40 C.F.R. section 133.102.
  - [3] Limit is based on the Load Allocations for nonpoint sources set forth in the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 2003-011.
  - [4] Limit based on Basin Plan Groundwater Quality Objective.
  - [5] This mass-based effluent limit is derived from the City's Chloride Model and Chloride Load Reduction Milestones, which is based on an allowable flow to the percolation pond of 0.07 MGD and chloride effluent concentration at 135 mg/L in order to meet the chloride groundwater quality objective of 110 mg/L at 150 feet from the percolation pond.
- 

C. The pH of effluent discharged shall at all times be within the range of 6.5 to 8.5. Excursion from this range shall not be considered a violation provided the duration is not more than 10 minutes in a 24-hour period, and pH shall at all times be within 6 to 9.

D. Effluent shall, at all times, be adequately disinfected and oxidized and shall meet the following effluent limitations:

1. the median concentration of total coliform bacteria shall not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed; and
2. the number of total coliform bacteria shall not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

Samples shall be collected at a time when wastewater flow and characteristics are most demanding (e.g., during peak flows) on treatment facilities and disinfection processes.

E. A filtered wastewater shall be an oxidized wastewater that has been passed through a membrane so that the turbidity of the filtered wastewater does not exceed any of the following:

1. An average of 2 Nephelometric Turbidity Units (NTU) within a 24-hour period;
2. 5 NTU more than 5 percent of the time within a 24-hour period; and
3. 10 NTU at any time.

F. Maximum Contaminant Levels: The effluent shall not contain trace, toxic and other constituents in concentrations that exceed the applicable maximum contaminant levels for drinking water established by the State Water Board's Division of Drinking Water (DDW) in sections 64431, 64442, 64443, 64444, 64449, and 64533 of CCR, Title 22, Division 4, or subsequent revisions, or at levels that adversely affect the beneficial uses of receiving groundwater. The effluent shall, at all times, not exceed the following MCLs (Attachment A). In the event of a violation of any primary or secondary MCL, the City shall notify and submit a report in accordance with Provision VI.F. of this Order.

1. Primary MCLs specified in CCR, Title 22, Division 4, Chapter 15 (Domestic Water Quality and Monitoring Regulations):
  - i. Inorganic chemicals in CCR, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A, except for nitrogen compounds (Attachment A-1 of this Order);
  - ii. Radionuclides in CCR, Title 22, Division 4, Chapter 15, Section 64442, Table 64442 (Attachment A-2 of this Order) and Section 64443, Table 64443 (Attachment A-3 of this Order); and
  - iii. Organic chemicals in CCR, Title 22, Division 4, Chapter 15, Section 64444, Table 64444-A (Attachment A-4 of this Order).
2. Secondary MCLs specified in CCR, Title 22, Division 4, Chapter 15 (Domestic Water Quality and Monitoring Regulations), Section 64449, Table 64449-A (Attachment A-5 of this Order).
3. Primary MCLs for disinfection byproducts specified in CCR, Title 22, Division 4, Chapter 15.5 (Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors) Article 2, Section 64533, Table 64533-A (Attachment A-6 of this Order).

### III. GROUNDWATER LIMITATIONS

- A. The City is prohibited from negatively altering the quality or elevation of the underlying groundwater.
- B. The discharge of treated wastewater from the SPWRF shall not cause an exceedance of the following groundwater limitations in Table 10 below. Except for chloride, compliance with the groundwater limitations will be determined by the groundwater samples collected from monitoring wells located within or on the boundary of the percolation pond. Compliance with the chloride groundwater limitation will be determined by the groundwater samples collected from monitoring wells located 150 feet away from the percolation pond. The specific monitoring well locations will be determined through the Monitoring and Reporting Program (MRP) (Attachment E). Per Section IV.C.3 of the MRP, the City is required to submit a work plan proposing a modified groundwater monitoring network by May 1, 2018.

| Table 10 – Groundwater Limitations |       |                      |
|------------------------------------|-------|----------------------|
| Constituents                       | Units | Monthly Average      |
| Nitrate-N + Nitrite-N              | mg/L  | 10 <sup>[1]</sup>    |
| Nitrite-N                          | mg/L  | 1 <sup>[1]</sup>     |
| Total Dissolved Solids             | mg/L  | 2,000 <sup>[1]</sup> |
| Sulfate                            | mg/L  | 800 <sup>[1]</sup>   |
| Chloride                           | mg/L  | 110 <sup>[1]</sup>   |
| Boron                              | mg/L  | 1.0 <sup>[1]</sup>   |

| Table 10 – Groundwater Limitations |           |                    |
|------------------------------------|-----------|--------------------|
| Constituents                       | Units     | Monthly Average    |
| Total coliform                     | MPN/100mL | 1.1 <sup>[1]</sup> |
| Fecal coliform                     | MPN/100mL | 1.1 <sup>[1]</sup> |

**Table Note:**

[1] Limit based on Basin Plan Groundwater Quality Objective.

- C. Groundwater shall not exceed the MCLs specified in Attachments A-1 to A-6.
- E. The minimum vertical separation between the bottom of the percolation pond and groundwater table shall be five feet.

**IV. GENERAL REQUIREMENTS**

- A. The SPWRF and areas where any potential pollutants are stored shall be adequately protected from inundation and damage by storm flows and runoff.
- B. Adequate facilities shall be provided to protect the SPWRF, treatment system devices, sewer collection system and recycling/disposal facilities from damage by storm flows and run-off or run-on generated by a 100-year return storm/24 hour duration.
- C. The SPWRF and the collection system that is a part of the treatment and disposal system shall be maintained in such a manner that prevents sewage from surfacing or overflowing at any location.
- D. A minimum of two feet of freeboard shall be maintained in the percolation/evaporation ponds at all time to ensure that direct rainfall will not cause overtopping.
- E. No disposal areas with treated wastewater shall be located within 600 feet of any domestic water supply well unless all of the following conditions have been met:
  - 1. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;
  - 2. The well contains an annular seal that extends from the surface into the aquitard;
  - 3. The well is housed to prevent any treated wastewater spray from coming into contact with the wellhead facilities;
  - 4. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and
  - 5. The owner of the well approves of the elimination of the buffer zone requirement.
- F. There shall be no storage or impoundment of treated wastewater within 600 feet of any domestic water supply well.

- G. No disposal of sludge, waste, and treated wastewater shall take place within 600 feet of any reservoir or stream used as a source of domestic water.
- H. Any wastes that do not meet the foregoing requirements shall be held in impervious containers and discharged at a legal point of disposal.
- I. Percolation ponds shall be maintained to ensure that percolation rate at the pond bottom shall not decrease over time.
- J. The Discharger shall notify well owners within 500 feet radius from the boundary of percolation ponds when there is any exceedance on the effluent limitations and/or groundwater limitations.

## V. PROHIBITIONS

- A. Any discharge of wastewater from the SPWRF (including the wastewater collection system) at any point other than specifically described in this Order is prohibited.
- B. There shall be no waste overflows or discharge of untreated or partially-treated waste from the SPWRF's treatment, storage or disposal facilities to adjacent drainage or water ways, adjacent properties, or to waters of the State at any time. The discharge of any wastewater to surface waters or surface water drainage courses is prohibited without a NPDES permit.
- C. Industrial wastewater subject to the Prohibited Discharge Standards in 40 C.F.R. section 403.5 shall not be accepted by the SPWRF.
- D. Wastes discharged shall not contain tastes, odors, color, foaming, any materials, or other objectionable characteristics in concentrations that would:
  - 1. Affect human, animal, or plant life;
  - 2. Cause nuisance or adversely affect any beneficial uses and quality of the receiving groundwater; and
  - 3. Impact the Santa Clara River that may be in hydraulic connection with groundwater.
- E. Odors originating at the SPWRF, including of sewage origin, shall not be perceivable any time outside the boundary of the SPWRF property owned by the City.
- F. The percolation pond 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. The wastewater treatment shall not result in nuisance conditions caused by breeding of mosquitoes, gnats, midges, or other pests.
- G. Discharge of waste classified as "hazardous waste," as defined in CCR, Title 23, section 2521(a), is prohibited. Discharge of waste classified as "designated waste," as defined in California Water Code section 13173, in a manner that causes violation of receiving water limits is prohibited.

- H. The percolation/evaporation ponds, drying beds, and the berms surrounding the ponds shall not contain plants, shrubs, or bushes that may damage the berms and the ponds.
- I. The percolation pond shall not be altered without the approval by the Regional Board.
- J. There shall be no onsite disposal of sludge. Sludge-drying activities are allowed, but only as an intermediate treatment prior to offsite 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 USEPA, and which is in full compliance therewith. Any wastewater or sludge handling shall be in such a manner as to prevent its reaching surface waters or watercourses.
- K. Bypass (the intentional diversion of waste streams from any portion of the SPWRF) is prohibited. The Regional Board may take enforcement action against the City for bypass, unless:
  - 1. 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 SPWRF that cause it to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass.
  - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. 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 occurred during normal periods of equipment downtime or preventive maintenance.
  - 3. Notice
    - i. Anticipated bypass: If the City knows in advance of the need for a bypass, it shall submit written notice to the Regional Board, if possible at least 10 days before the date of the bypass.
    - ii. Unanticipated bypass: The City shall provide verbal notice to the Regional Board Executive Officer of an unanticipated bypass within 24 hours from the time the City becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the City becomes aware of the circumstances.

## VI. PROVISIONS

- A. This Order includes "Attachment B - Standard Provisions Applicable to Waste Discharge Requirements" (Standard Provisions). If there is any conflict between provisions stated herein and the Standard Provisions, the provisions stated herein prevail.

- B. The City shall operate and maintain facilities, treatment operations, associated collection systems and outfalls in ways that preclude adverse impacts to surface or groundwater from impacts predicted to occur due to climate change.
- C. The City shall submit a Climate Change Effects Vulnerability Assessment and Management Plan (Climate Change Plan) no later than 12 months after adoption of this Order. Submittal of the Climate Change Plan is required pursuant to California Water Code section 13267. As required by this provision, a regional board may require a person to submit technical or monitoring program reports that the regional board requires. The Climate Change Plan is needed in order to assess and manage climate change related-effects associated with City operations that may affect water quality.

The Climate Change Plan shall include an assessment of short and long term vulnerabilities of the facility(ies) and operations as well as plans to address vulnerabilities of collection systems, facilities, treatment systems, and outfalls for predicted impacts in order to ensure that facility operations are not disrupted, compliance with permit conditions is achieved, and receiving waters are not adversely impacted by discharges. Control measures shall include, but are not limited to, emergency procedures, contingency plans, alarm/notification systems, training, backup power and equipment, and the need for planned mitigations to ameliorate climate-induced impacts including, but not limited to, changing influent and receiving water quality and conditions, as well as the impact of rising sea level (where applicable) storm surges and back-to-back severe storms that are expected to become more frequent.

- D. The City shall comply with MRP No. CI-9259 (Attachment E), 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. If there is any conflict between the provisions stated herein and the MRP, the provisions stated herein prevail.
- E. The City shall file with the Regional Board, under penalty of perjury, annual and quarterly reports on self-monitoring work performed according to the detailed specifications contained in the MRP attached hereto and incorporated herein by reference, as directed by the Executive Officer. The results of any monitoring done in addition to what is required or done more frequently than required at the location and/or times specified in the MRP shall be reported to the Regional Board. The City shall comply with all of the provisions and requirements of the MRP.
- F. The City shall notify this Regional Board by telephone or electronic means within 24 hours of knowledge of any discharge exceeding the effluent limits prescribed in this Order from the SPWRF; written confirmation shall follow within 5 working days from date of notification, unless otherwise specified in this Order. The report shall include, but is not limited to, the following information, as appropriate:
  - 1. Nature and extent of the violation;
  - 2. Date and time: when the violation started, when compliance was achieved, and when injection was suspended and restored, as applicable;
  - 3. Duration of violation;

4. Cause(s) of violation;
  5. Corrective and/or remedial actions taken and/or will be taken with a time schedule for implementation to prevent future violations; and
  6. Impact of the violation.
- G. This Order does not exempt the City from compliance with any other laws, regulations, or ordinances that may be applicable; they do not legalize the recycling and use facilities; and they leave unaffected any further constraint on the use of recycled water at certain site(s) that may be contained in other statutes or required by other agencies.
- H. This Order does not alleviate the responsibility of the City 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. Expansion of the recycled water distribution facility shall be contingent upon issuance of all necessary requirements and permits, including a conditional use permit.
- I. After notice and opportunity for a hearing, this Order may be modified, revoked and reissued, or terminated for cause, that includes, but is not limited to: failure to comply with any condition in this Order, endangerment of human health, adverse impacts on water quality and/or beneficial uses of the receiving water resulting from the permitted activities in this Order, obtaining this Order by misrepresentation or failure to disclose all relevant facts, and acquisition of new information that could have justified the application of different conditions if known at the time of Order adoption.

The filing of a request by the City for modification, revocation and reissuance, or termination of this Order; or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- J. The City shall furnish, within a reasonable time, any information that the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The City shall also provide the Regional Board, upon request, with copies of records required to be kept under this Order for at least three (3) years.
- K. Spill Clean-Up Contingency Plan (SCCP) Requirements – The City is required to periodically submit an updated and revised SCCP, which describes the activities and protocols to address clean-up of spills, overflows, and bypasses of untreated or partially treated wastewater from the City's collection system or treatment facilities. At a minimum, this SCCP shall include sections on spill clean-up and containment measures, public notification, and monitoring. The City shall review and amend this SCCP as appropriate after each spill from the SPWRF or in the service area of the SPWRF. The City shall include a discussion in the annual summary report of any modifications to the SCCP and the application of the SCCP to all spills during the year.
- L. Construction, Operation, and Maintenance Requirements
1. The City shall, at all times, properly operate and maintain the SPWRF, including its wastewater collection, treatment, and disposal facilities (and related

appurtenances) to ensure compliance with this Order, as well as provide adequate and reliable transport, treatment, and disposal of all wastewater from planned future wastewater sources under the City's responsibilities. Proper operation and maintenance includes, but is not limited to: effective performance, repairs and upgrades when needed, adequate funding, adequate operator staffing and training, adequate operator supervision, and adequate laboratory and process controls (including appropriate quality assurance/quality control procedures).

2. The SPWRF shall be supervised and operated by persons possessing certificates of appropriate grade in accordance with CCR, Title 23, Division 3, Chapter 26 and California Water Code sections 13625 - 13633.
3. The SPWRF shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program. The City's Operation, Maintenance, and Monitoring Plan (OMM Plan) shall be available for reference and use by all applicable personnel. The City shall maintain, regularly review, and revise or update as necessary the OMM Plan 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 on an annual basis.
4. The City shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the City shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.
5. The City shall provide standby or emergency power facilities and/or sufficient storage capacity or other means so that in the event of plant upset, outage due to power failure or other cause, or heavy rainfall, discharge of raw or inadequately treated sewage does not occur and infiltration ponds do not exceed their hydraulic capacity.

M. Sludge Disposal Requirements

1. All sludge generated at the wastewater treatment plant shall be disposed of, treated, or applied to land in accordance with federal regulations contained in 40 C.F.R. Part 503. These requirements are enforceable by USEPA.
2. The City shall comply with requirements in State Water Board Order No. 2004-10-DWQ, *"General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities"* for those sites receiving the City's biosolids that a regional water board has placed under this general order, and with the requirements in individual waste discharge requirements issued by a regional water board for sites receiving the City's biosolids.

3. The City shall comply, if applicable, with WDRs issued by other regional water boards to which jurisdiction the biosolids are transported and applied.
4. The City shall provide this Regional Board with a copy of any report(s) submitted to USEPA, the State Water Board, or other regional water boards, with respect to municipal sludge or biosolids.

N. Collection System Requirements

The State Water Board adopted General WDRs for Sanitary Sewer Systems (Order No. 2006-0003-DWQ) on May 2, 2006, to provide a consistent and statewide approach to regulating sanitary sewer systems to prevent and/or reduce sanitary sewer overflows (SSOs). Order No. 2006-0003-DWQ requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database. The City's collection system is part of the system that is subject to Order No. 2006-0003-DWQ. The City enrolled in Order No. 2006-0003-DWQ on July 27, 2006. As such, the City must properly operate and maintain its collection system. The City must also report any non-compliance and mitigate any discharge from the collection system in violation of this Order.

O. Spill Reporting Requirements

1. **Initial Notification** – Although State and Regional Board staff do not have duties as first responders, this requirement is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses. For certain spills, overflows and bypasses, the City shall make notifications as required below:
  - i. In accordance with the requirements of Health and Safety Code section 5411.5, the City shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but no later than two (2) hours after becoming aware of the release.
  - ii. In accordance with the requirements of California Water Code section 13271, the City shall provide notification to the California Emergency Management Agency (Cal EMA) of the release of reportable quantities of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. CCR, Title 23, section 2250 establishes 1,000 gallons or more as a reportable quantity of sewage. The phone number for reporting these releases to the Cal EMA is (800) 852-7550.
  - iii. The City shall notify the Regional Board of any unauthorized release of sewage from the SPWRF that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. This initial notification does not need

to be made if the City has notified Cal EMA and the local health officer or the director of environmental health with jurisdiction over the affected waterbody. The phone number for reporting these releases of sewage to the Regional Board is (213) 576-6683. The phone numbers for after hours and weekend reporting of releases of sewage to the Regional Board are (213) 305-2284 and (213) 305-2253.

At a minimum, the following information shall be provided to the Regional Board:

- a. The location, date, and time of the release;
  - b. The water body that may be impacted by the discharge;
  - c. An estimate of the amount of sewage or other waste released and the amount that reached the receiving water at the time of notification;
  - d. If ongoing, the estimated flow rate of the release at the time of the notification;
  - e. The name, organization, phone number, and email address of the reporting representative; and
  - f. A certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the possibly affected water bodies have been notified of the discharge.
2. **Monitoring** – For spills, overflows and bypasses reported under Section VI.O.1., the City shall monitor as required below:

To define the geographical extent of the spill's impact, the City shall obtain grab samples (if feasible, accessible, and safe) for all spills, overflows or bypasses of any volume that reach any waters of the State (including surface and ground waters). The City shall analyze the samples for total and fecal coliforms, E. coli (if fecal coliform test shows positive), enterococcus, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible and safe). This monitoring shall be done on a daily basis from the time the spill is known until the results of two (2) consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Public Health authorizes cessation of monitoring.

3. **Reporting** – The initial notification required under Section VI.O.1. shall be followed by:
- i. As soon as possible, but not later than twenty-four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the City shall submit a statement to the Regional Board via email. If the discharge is 1,000 gallons or more, this statement shall certify that Cal EMA has been notified of the discharge in accordance with California Water Code section

13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

- a. Agency, Order No., and MRP CI No.;
  - b. The location, date, and time of the discharge;
  - c. The water body that received the discharge;
  - d. A description of the level of treatment of the sewage or other waste discharged;
  - e. An initial estimate of the amount of sewage or other waste released and the amount that reached the impacted water body;
  - f. The Cal EMA control number and the date and time that notification of the incident was provided to Cal EMA; and
  - g. The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).
- ii. A written preliminary report shall be submitted to the Regional Board within five (5) working days after disclosure of the incident via the State Water Board GeoTracker database under Global ID WDR100000359. The final written report shall be included in the next quarterly monitoring report submitted to the GeoTracker database above. The written report shall document the information required in Section VI.O.4. below, monitoring results and any other information required in provisions of the Standard Provisions (Attachment B) including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.
  - iii. The City shall include a certification in the annual summary report (due according to the schedule in the MRP) that states that the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the City's preventive maintenance plan. Any deviations from or modifications to the preventive maintenance plan shall be approved by the Executive Officer.
4. **Records** – The City shall prepare and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or the SPWRF. This record shall be made available to the Regional Board upon request and a spill summary shall be included in the annual report, as required in the MRP. The record shall contain:
- i. The date and time of each spill, overflow, or bypass;

- ii. The location of each spill, overflow, or bypass;
  - iii. The estimated volume of each spill, overflow, or bypass including gross volume, amount recovered and amount not recovered, monitoring results as required by Section VI.O.2.;
  - iv. The cause of each spill, overflow, or bypass;
  - v. Whether each spill, overflow, or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
  - vi. Any corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and
  - vii. The mandatory information included in Sanitary Sewer Overflows (SSO) online reporting for finalizing and certifying the SSO report for each spill, overflow, or bypass under State Water Board Order No. 2006-0003-DWQ.
5. **Activities Coordination** – The Regional Board expects that the City will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this Order, and (ii) State Water Board Order No. 2006-0003-DWQ.
6. **Consistency with State Water Board Order No. 2006-0003-DWQ** – The requirements contained in this Order in Sections VI.K. (SCCP Requirements), VI.L. (Construction, Operation, and Maintenance Requirements), and VI.O. (Spill Reporting Requirements) are intended to be consistent with the requirements of Order No. 2006-0003-DWQ. The Regional Board recognizes that there may be some overlap between this Order and Order No. 2006-0003-DWQ. The requirements of Order No. 2006-0003-DWQ are considered the minimum thresholds (see Finding 11 of Order No. 2006-0003-DWQ). To encourage efficiency, the Regional Board will accept the documentation prepared by the City under Order No. 2006-0003-DWQ for compliance purposes, as satisfying the requirements in Sections VI.K., VI.L., and VI.O. provided the more stringent provisions enumerated in this Order have also been addressed.

P. Pretreatment Requirements

1. This Order includes the City's Pretreatment Program, as previously submitted to this Regional Board and specified in Order No. R4-2007-0028-R2, adopted by this Regional board on February 2, 2012. Any change to the Program shall be reported to the Regional Board in writing and shall not become effective until approved by the Executive Officer in accordance with procedures established in 40 C.F.R. section 403.18.
2. The City shall enforce the requirements under Sections 307(b), 307(c), 307(d), and 402(b) of the Federal Clean Water Act with timely, appropriate, and effective enforcement actions. The City shall require industrial users to comply with Federal Categorical Standards and shall initiate enforcement actions against those users who do not comply with the standards. The City shall require industrial users

- subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.
3. The City shall perform the pretreatment functions as required in 40 C.F.R. Part 403 including, but not limited to:
    - i. Implement the necessary legal authorities as provided in 40 C.F.R. section 403.8(f)(1);
    - ii. Enforce the pretreatment requirements under 40 C.F.R. sections 403.5 and 403.6;
    - iii. Implement the programmatic functions as provided in 40 C.F.R. section 403.8(f)(2); and
    - iv. Provide the requisite funding of personnel to implement the Pretreatment Program as provided in 40 C.F.R. section 403.8(f)(3).
  4. The City shall submit an annual report of effectiveness of the City's Pretreatment Program. This annual report shall be submitted to the Regional Board, with copies to the State Water Board and USEPA Region 9, describing the City's pretreatment activities over the period and whether such activities have been effective. If the City is not in compliance with any conditions or requirements of this Order, the City shall include the reasons for noncompliance and shall state how and when the City will comply with such conditions and requirements.
  5. The City shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 C.F.R. Part 403, including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the City as Control Authority, but does not specify a timetable for completion of the actions, the City shall complete the required actions within six months from the effective date of this Order or the effective date of Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the City shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Board or USEPA may initiate enforcement action against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

## VII. REOPENER

The Regional Board will review this Order periodically and will revise requirements when necessary. The waste discharge requirements and monitoring and reporting requirements in this Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure compliance with them. If applicable laws and regulations change, including but not limited to, establishment of total maximum daily loads, or once new information is obtained that will change the overall discharge and its potential to impact waters of the state, it may be

appropriate to reopen this Order. This Order may also specifically be reopened to make revisions consistent with an approved salt and nutrient management plan.

#### **VIII. TERMINATION**

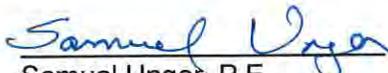
Except for enforcement purposes, Order No. R4-2007-0028, adopted by the Regional Board on May 3, 2007, and amended on May 6, 2010, February 2, 2012, April 6, 2017 and December 21, 2017, is hereby terminated.

The Regional Board's termination of prior waste discharge requirements and/or monitoring and reporting requirements do not extinguish any violations that may have occurred during the time those requirements were in effect. The Regional Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded requirements as allowed by law.

#### **IX. EFFECTIVE DATE**

This Order becomes effective immediately upon its adoption.

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on February 8, 2018.

  
Samuel Unger, P.E.  
Executive Officer

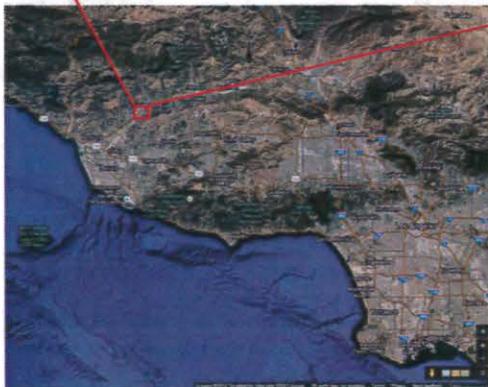


Figure 1 – The Vicinity of Santa Paula Water Recycling Facility (SPWRF)

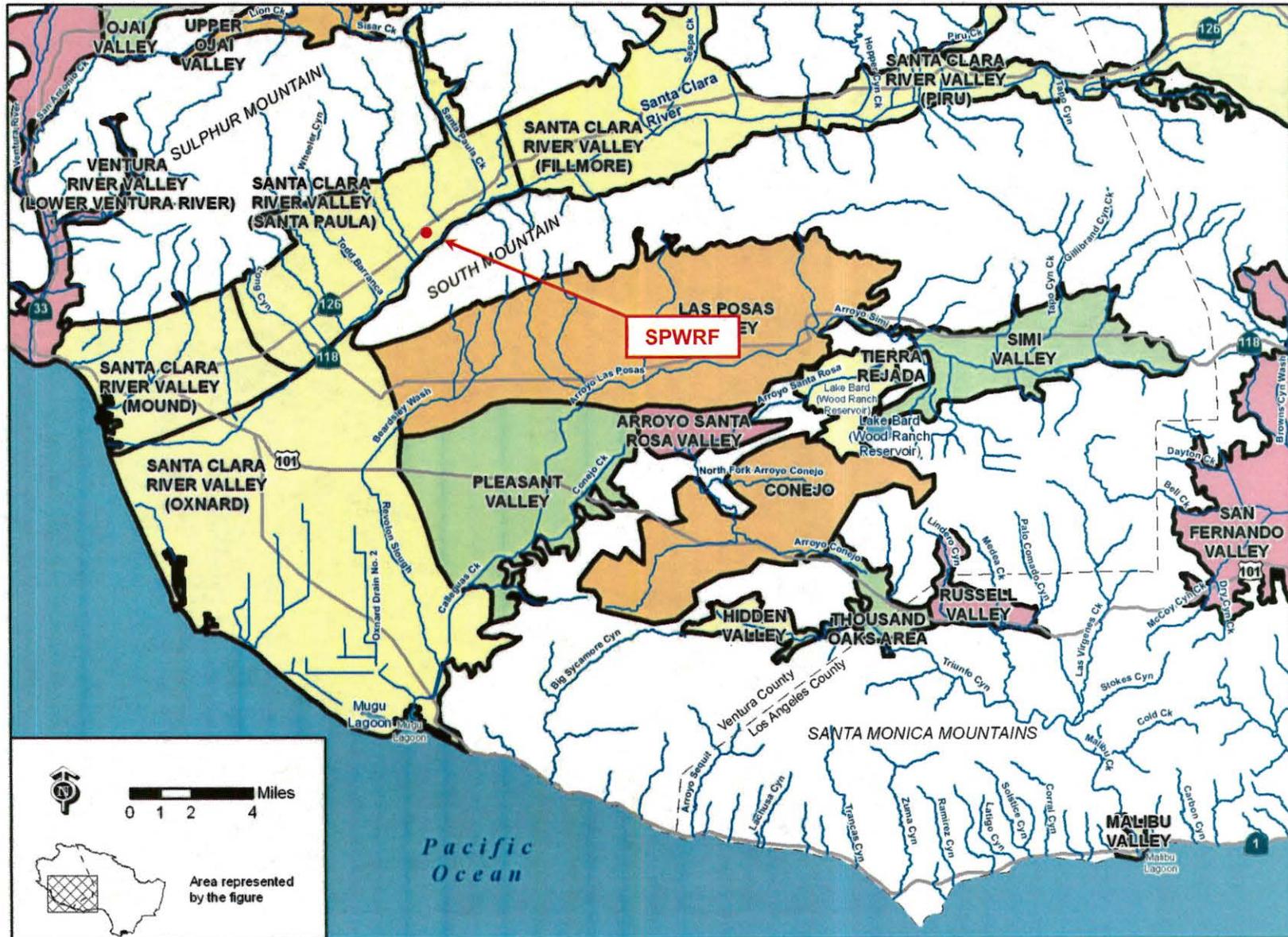


Figure 2 – Santa Paula Groundwater Basin

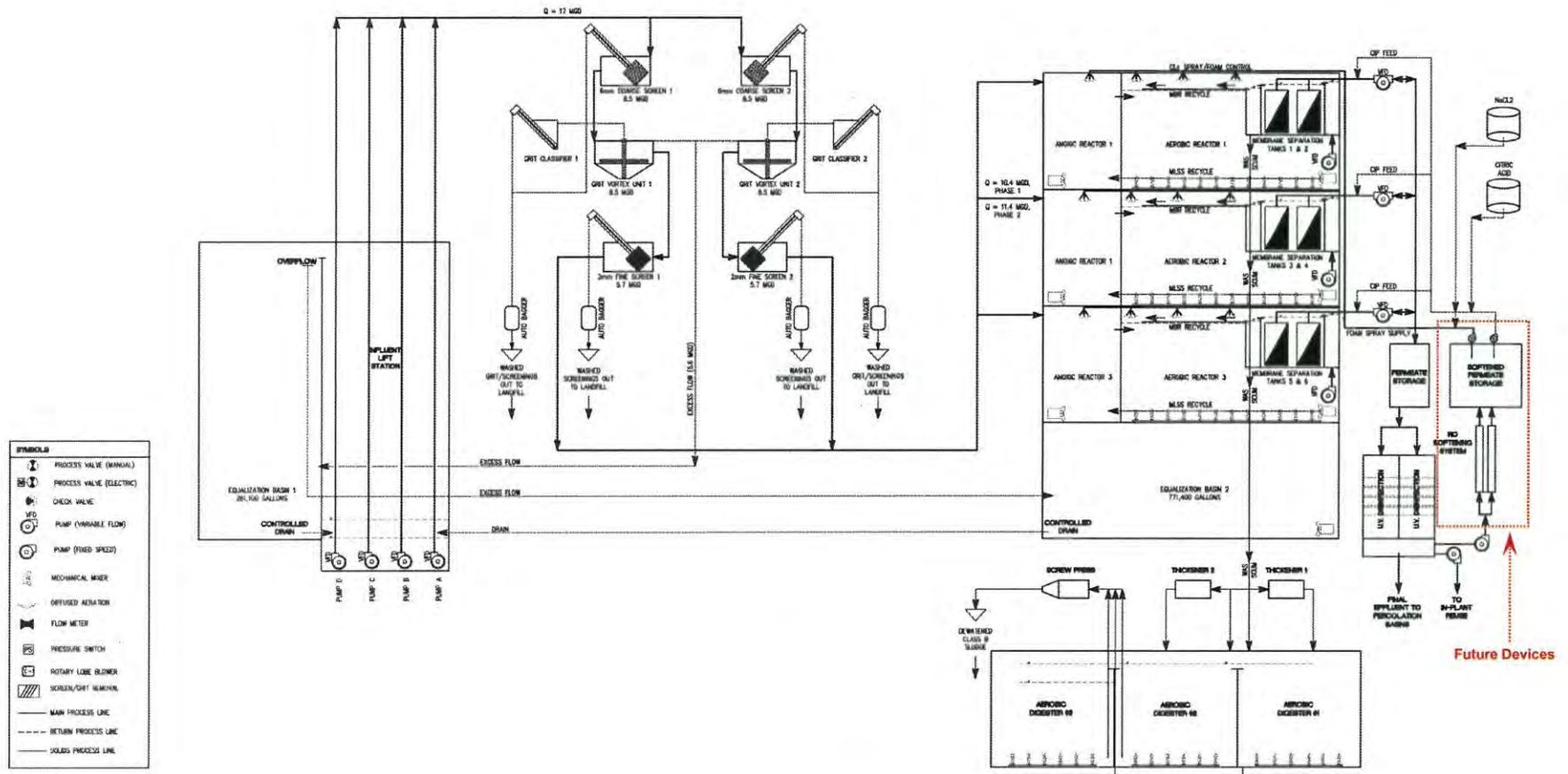


Figure 3 – Process Flow Schematic of Santa Paula Wastewater Recycling Facility



Figure 4 – Locations of Groundwater Monitoring Wells

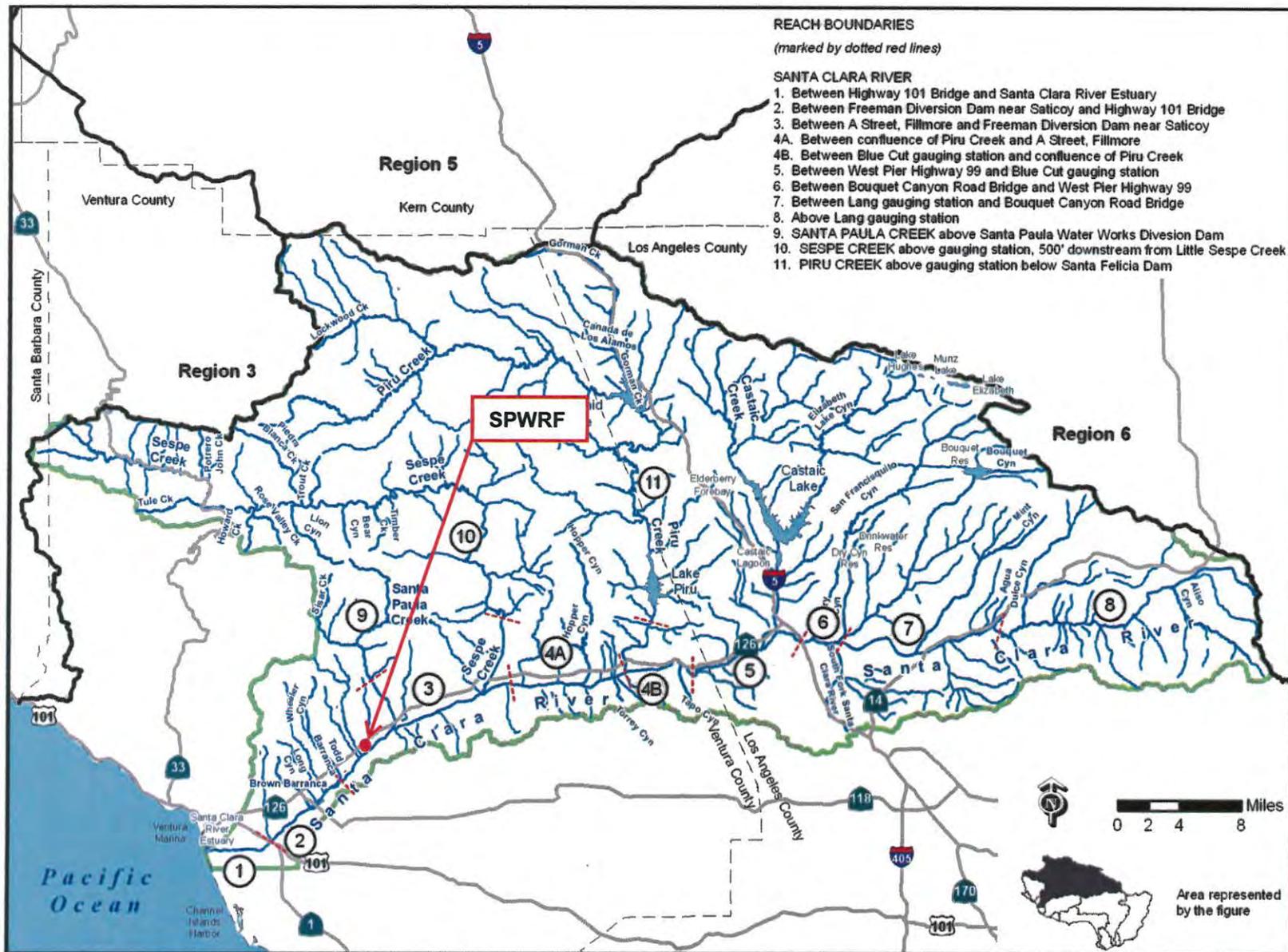


Figure 5 – Santa Clara River Watershed Surface Reaches

## Attachment A – Maximum Contaminant Levels

### Attachment A-1 Inorganic Chemicals

| Table 64431-A <sup>[1]</sup> |   |  |
|------------------------------|---|--|
| Chemical                     | Maximum Contaminant Levels (mg/L <sup>[2]</sup> ) | Reporting Detection Limit (mg/L <sup>[2]</sup> ) |
| Aluminum                     | 1   | 0.05   |
| Antimony                     | 0.006   | 0.006  |
| Arsenic                      | 0.01  | 0.002  |
| Asbestos                     | 7 MFL <sup>[3]</sup>                              | 0.2 MFL > 10 µm                                  |
| Barium                       | 1   | 0.1  |
| Beryllium                    | 0.004   | 0.001  |
| Cadmium                      | 0.005   | 0.001  |
| Chromium                     | 0.05  | 0.01   |
| Cyanide                      | 0.15  | 0.1  |
| Fluoride                     | 2.0   | 0.1  |
| Chromium (VI)                | 0.010   | 0.001  |
| Mercury                      | 0.002   | 0.001  |
| Nickel                       | 0.1   | 0.01   |
| Selenium                     | 0.05  | 0.005  |
| Thallium                     | 0.002   | 0.001  |
| Perchlorate                  | 0.006   | 0.004  |

**Table Notes:**

[1]. California Code of Regulation (CCR), Title 22, Section 64431, last updated July 16, 2015.

[2]. mg/L = milligrams/liter.

[3]. MFL = million fibers per liter; MCL for fibers exceeding 10µm in length.

## Attachment A-2 Radionuclides

| Table 64442 <sup>[1]</sup>                                  |  |   |
|---|--|---|
| Chemical  | Maximum Contaminant Levels (pCi/L <sup>[2]</sup> ) | Reporting Detection Limit (pCi/L <sup>[2]</sup> ) |
| Radium-226  | 5 pCi/L (combined radium-226 and radium-228)       | 1   |
| Radium-228  |  | 1   |
| Gross Alpha particle activity (excluding radon and uranium) | 15   | 3   |
| Uranium   | 20   | 1   |

**Table Notes:**

[1]. CCR, Title 22, Section 64442, last updated July 16, 2015.

[2]. pCi/L = picocuries/liter.

### Attachment A-3 Radionuclides

| Table 64443 <sup>[1]</sup> |   |   |
|----------------------------|---|---|
| Chemical                   | Maximum Contaminant Levels (pCi/L <sup>[2]</sup> )                      | Reporting Detection Limit (pCi/L <sup>[2]</sup> ) |
| Beta/photon Emitters       | 4 millirem/year dose equivalent to the total body or any internal organ | Gross Beta particle activity: 4                   |
| Strontium-90               | 8 (=4 millirem/year dose to bone marrow)                                | 2   |
| Tritium                    | 20,000 (=4 millirem/year dose to total body)                            | 1,000   |

**Table Notes:**

[1]. CCR, Title 22, Section 64443, last updated July 16, 2015.

[2]. pCi/L = picocuries/liter.

### Attachment A-4 Organic Chemicals

| Table 64444-A <sup>[1]</sup>          |   |  |
|---------------------------------------|---|--|
| Chemical                              | Maximum Contaminant Levels (mg/L <sup>[2]</sup> ) | Reporting Detection Limit (mg/L <sup>[2]</sup> ) |
| <b>(a) Volatile Organic Chemicals</b> |   |  |
| Benzene                               | 0.001   | 0.0005   |
| Carbon Tetrachloride (CTC)            | 0.0005  | 0.0005   |
| 1,2-Dichlorobenzene                   | 0.6   | 0.0005   |
| 1,4-Dichlorobenzene                   | 0.005   | 0.0005   |
| 1,1-Dichloroethane                    | 0.005   | 0.0005   |
| 1,2-Dichloroethane (1,2-DCA)          | 0.0005  | 0.0005   |
| 1,1-Dichloroethene (1,1-DCE)          | 0.006   | 0.0005   |
| Cis-1,2-Dichloroethylene              | 0.006   | 0.0005   |
| Trans-1,2-Dichloroethylene            | 0.01  | 0.0005   |
| Dichloromethane                       | 0.005   | 0.0005   |
| 1,2-Dichloropropane                   | 0.005   | 0.0005   |
| 1,3-Dichloropropene                   | 0.0005  | 0.0005   |
| Ethylbenzene                          | 0.3   | 0.0005   |
| Methyl-tert-butyl-ether (MTBE)        | 0.013   | 0.003  |
| Monochlorobenzene                     | 0.07  | 0.0005   |
| Styrene                               | 0.1   | 0.0005   |
| 1,1,2,2-Tetrachloroethane             | 0.001   | 0.0005   |
| Tetrachloroethylene (PCE)             | 0.005   | 0.0005   |
| Toluene                               | 0.15  | 0.0005   |
| 1,2,4-Trichlorobenzene                | 0.005   | 0.0005   |
| 1,1,1-Trichloroethane                 | 0.2   | 0.0005   |
| 1,1,2-Trichloroethane                 | 0.005   | 0.0005   |
| Trichloroethylene (TCE)               | 0.005   | 0.0005   |
| Trichlorofluoromethane                | 0.15  | 0.005  |

| <b>Table 64444-A <sup>[1]</sup></b>                 |  |   |
|---|--|---|
| <b>Chemical</b>                                     | <b>Maximum Contaminant Levels (mg/L<sup>[2]</sup>)</b> | <b>Reporting Detection Limit (mg/L<sup>[2]</sup>)</b> |
| <b>(a) Volatile Organic Chemicals</b>               |  |   |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane               | 1.2  | 0.01  |
| Vinyl Chloride                                      | 0.0005   | 0.0005  |
| Xylenes (m,p)                                       | 1.75   | 0.0005  |
| <b>(b) Non-Volatile Synthetic Organic Chemicals</b> |  |   |
| Alachlor  | 0.002  | 0.001   |
| Atrazine  | 0.001  | 0.0005  |
| Bentazon  | 0.018  | 0.002   |
| Benzo(a)pyrene                                      | 0.0002   | 0.0001  |
| Carbofuran  | 0.018  | 0.005   |
| Chlordane   | 0.0001   | 0.0001  |
| 2,4-D   | 0.07   | 0.01  |
| Dalapon   | 0.2  | 0.01  |
| 1,2-Dibromo-3-chloropropane (DBCP)                  | 0.0002   | 0.00001   |
| Di(2-ethylhexyl)adipate                             | 0.4  | 0.005   |
| Di(2-ethylhexyl)phthalate                           | 0.004  | 0.003   |
| Dinoseb   | 0.007  | 0.002   |
| Diquat  | 0.02   | 0.004   |
| Endothall   | 0.1  | 0.045   |
| Endrin  | 0.002  | 0.0001  |
| Ethylene Dibromide (EDB)                            | 0.00005  | 0.00002   |
| Glyphosate  | 0.7  | 0.025   |
| Heptachlor  | 0.00001  | 0.00001   |
| Heptachlor Epoxide                                  | 0.00001  | 0.00001   |
| Hexachlorobenzene                                   | 0.001  | 0.0005  |
| Hexachlorocyclopentadiene                           | 0.05   | 0.001   |
| Lindane   | 0.0002   | 0.0002  |

| Table 64444-A <sup>[1]</sup>                        |   |  |
|---|---|--|
| Chemical  | Maximum Contaminant Levels (mg/L <sup>[2]</sup> ) | Reporting Detection Limit (mg/L <sup>[2]</sup> ) |
| <b>(b) Non-Volatile Synthetic Organic Chemicals</b> |   |  |
| Methoxychlor  | 0.03  | 0.01   |
| Molinate  | 0.02  | 0.002  |
| Oxamyl  | 0.05  | 0.02   |
| Pentachlorophenol                                   | 0.001   | 0.0002   |
| Picloram  | 0.5   | 0.001  |
| Polychlorinated Biphenyls                           | 0.0005  | 0.0005   |
| Simazine  | 0.004   | 0.001  |
| Thiobencarb   | 0.07  | 0.001  |
| Toxaphene   | 0.003   | 0.001  |
| 2,3,7,8-TCDD (Dioxin)                               | $3 \times 10^{-8}$                                | $5 \times 10^{-9}$                               |
| 2,4,5-TP (Silvex)                                   | 0.05  | 0.001  |

**Table Notes:**

[1]. CCR, Title 22, Section 64444-A, last updated July 15, 2015.

[2]. mg/L = milligrams/liter.

## Attachment A-5 Secondary Maximum Contaminant Levels

| Chemical                       | Units      |
|--------------------------------|------------|
| Aluminum                       | 0.2 mg/L   |
| Color                          | 150 Units  |
| Copper                         | 1.0 mg/L   |
| Foam Agents (MBAS)             | 0.5 mg/L   |
| Iron                           | 0.3 mg/L   |
| Manganese                      | 0.05 mg/L  |
| Methyl-tert-butyl-ether (MTBE) | 0.005 mg/L |
| Odor – Threshold               | 3 units    |
| Silver                         | 0.1 mg/L   |
| Thiobencarb                    | 0.001 mg/L |
| Turbidity                      | 5 Units    |
| Zinc                           | 5 mg/L     |

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**Table Note:**

[1]. CCR, Title 22, Section 64449, last updated July 16, 2015.

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## Attachment A-6 Disinfection Byproducts

| Table 64533-A <sup>[1]</sup>  |   |  |
|-------------------------------|---|--|
| Constituent                   | Maximum Contaminant Levels (mg/L <sup>[2]</sup> ) | Reporting Detection Limit (mg/L <sup>[2]</sup> ) |
| Total Trihalomethanes (TTHM)  | 0.08  |  |
| Bromodichloromethane          |   | 0.001  |
| Bromoform                     |   | 0.001  |
| Chloroform                    |   | 0.001  |
| Dibromochloromethane          |   | 0.001  |
| Haloacetic acid (five) (HAA5) | 0.06  |  |
| Monochloroacetic acid         |   | 0.002  |
| Dichloroacetic acid           |   | 0.001  |
| Trichloroacetic acid          |   | 0.001  |
| Monobromoacetic acid          |   | 0.001  |
| Dibromoacetic acid            |   | 0.001  |

**Table Notes:**

[1]. CCR, Title 22, Section 64533, Chapter 15.5, last updated July 16, 2015.

[2]. mg/L = milligrams/liter.

## **Attachment B – Standard Provisions Applicable to Waste Discharge Requirements**

### **1. DUTY TO COMPLY**

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. (California Water Code, Sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, and 13350). Failure to comply with any waste discharge requirement, monitoring and reporting requirement, or other order or prohibition issued, reissued or amended by the Los Angeles Water Board or State Water Resources Control Board is a violation of these waste discharge requirements and the California Water Code, which can result in the imposition of civil liability. (California Water Code, Section 13350, subdivision (a).)

### **2. GENERAL PROHIBITION**

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by California Water Code section 13050. In addition, the discharge of waste classified as hazardous, as defined in California Code of Regulations, Title 23, Section 2521, subdivision (a) is also prohibited.

### **3. AVAILABILITY**

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. (California Water Code, Section 13263).

### **4. CHANGE IN OWNERSHIP**

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date forward. (California Water Code, Sections 13267 and 13263)

### **5. CHANGE IN DISCHARGE**

In the event of a material change or proposed change in the character, location, or volume of the discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. (California Water Code, Section 13260, subdivision (c)). A material change includes, but is not limited to, the following:

- (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

- (b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- (d) Increase in flow beyond that specified in the waste discharge requirements.
- (e) Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. (California Code of Regulations, Title 23, Section 2210)

**6. REVISION**

These waste discharge requirements are subject to review and revision by the Regional Board. (California Water Code, Section 13263)

**7. NOTIFICATION**

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. (California Water Code, Sections 13260 and 13267)

**8. VESTED RIGHTS**

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. All discharges of waste into waters of the state are privileges, not rights. (California Water Code, Section 13263, subdivision (g).)

**9. SEVERABILITY**

Provisions of these waste discharge requirements are severable. If any provisions of these requirements are found invalid, the remainder of the requirements shall not be affected.

**10. OPERATION AND MAINTENANCE**

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. (California Water Code, Section 13263, subdivision (f).)

## **11. NOTIFICATION REQUIREMENT**

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the California Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. (California Water Code, Section 13271, subdivision (a).)

## **12. OIL OR PETROLEUM RELEASES**

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. (California Water Code, Section 13272)

## **13. INVESTIGATIONS AND INSPECTIONS**

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's 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;
- (c) 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 California Water Code, any substances or parameters at any location. (California Water Code, Section 13267)

- (e) Except for material determined to be confidential in accordance with applicable law, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the office of the Los Angeles Water Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

#### **14. MONITORING PROGRAM AND DEVICES**

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. (California Water Code, Section 13267)

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

The analysis of any material required pursuant to Division 7 of the California Water Code shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. However, this requirement does not apply to field tests, such as test for color, odor, turbidity, pH, temperature, dissolved oxygen, conductivity, and disinfectant residual chlorine. (California Water Code, Section 13176). Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board's Division of Drinking Water. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40CFR Part 136) promulgated by the United States, Environmental Protection Agency (USEPA). (California Code of Regulation, Title 23, Section 2230)

The Quality Assurance-Quality Control Program must conform to the USEPA Guidelines "Laboratory Documentation Requirements for Data Validation", January 1990, USEPA Region 9) or procedures approved by the Los Angeles Regional Water Quality Control Board.

All quality assurance and quality control (QA/QC) analyses must be run on the same dates when samples were actually analyzed. All QA/QC data shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, and explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recoveries. In cases where contaminants are detected in QA/QC samples (e.g., field, trip, or lab blanks); the accompanying sample results shall be appropriately flagged.

The Discharger shall make all QA/QC data available for inspection by Regional Board staff and submit the QA/QC documentation with its respective quarterly report. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.

**15. TREATMENT FAILURE**

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. (California Water Code, Section 13263, subdivision (f).)

**16. DISCHARGE TO NAVIGABLE WATERS**

A person who discharges pollutants or proposes to discharge pollutants or proposes to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or a person who discharges dredged or fill material or proposes to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of waste discharge in compliance with the procedures set forth in California Water Code section 13260. (California Water Code, Section 13376)

**17. ENDANGERMENT TO HEALTH AND ENVIRONMENT**

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Office within 24 hours:

- (a) Any bypass from any portion of the treatment facility.
- (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
- (c) Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. (California Water Code, Sections 13263 and 13267)

**18. MAINTENANCE OF RECORDS**

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring

instrumentation, copies off all reports required by this Order, and record of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurement;
  - (b) The individual(s) who performed the sampling or measurement;
  - (c) The date(s) analyses were performed;
  - (d) The individual(s) who performed the analyses;
  - (e) The analytical techniques or method used; and
  - (f) The results of such analyses.
- 19.** (a) All application reports or information to be submitted to the Executive Office shall be signed and certified as follows:
- (1) For a corporation – by a principal executive officer or at least the level of vice president.
  - (2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.
  - (3) For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.
- (b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this provision.
  - (2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and,
  - (3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

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

including the possibility of fine and imprisonment. [California Water Code Sections 13263, 13267, and 13268]"

**20. OPERATOR CERTIFICATION**

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the Public Utilities Commission, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with California Code of Regulations, title 23, section 3680. State Board may accept experience in lieu of qualification training. (California Code of Regulations, Title, 23, Sections 3680 and 3680.2.) In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Public Health where reclamation is involved. (California Code of Regulations, Title, 23, Section 3670.1, subdivision (b).)

**ADDITIONAL PROVISIONS APPLICABLE TO  
PUBLICLY OWNED TREATMENT WORKS' ADEQUATE CAPACITY**

21. Whenever a regional board finds that a publicly owned wastewater treatment plant will reach capacity within four years, the board shall notify the discharger. Such notification shall inform the discharger that the regional board will consider adopting a time schedule order pursuant to Section 13300 of the California Water Code or other enforcement order unless the discharger can demonstrate that adequate steps are being taken to address the capacity problem. The notification shall require the discharger to submit a technical report to the regional board within 120 days showing how flow volumes will be prevented from exceeding existing capacity or how capacity will be increased. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The time for filing the required technical report may be extended by the regional board. An extension of 30 days may be granted by the executive officer. Longer extensions may be granted by the regional board itself. (California Code of Regulations, Title, 23, Section 2232.)

## Attachment C – Monitoring for Constituents of Emerging Concern (CECs) <sup>[1]</sup>

| Constituent   | Reporting Limit (µg/L <sup>[2]</sup> ) |
|---------------|--|
| 17β-Estradiol | 0.001                                  |
| Caffeine      | 0.05                                   |
| NDMA          | 0.002                                  |
| Triclosan     | 0.05                                   |
| DEET          | 0.05                                   |
| Sucralose     | 0.1                                    |

Table Note:

- [1]. CECs are based on Table 1 Groundwater Recharge Reuse – Subsurface Application of State Water Board Resolution 2013-003.
- [2]. µg/L = micrograms/liter.

### Attachment D – Monitoring for Priority Pollutants

|                          |                              |                           |
|--------------------------|------------------------------|---------------------------|
| Antimony                 | Trichloroethylene            | Fluoranthene              |
| Arsenic                  | Vinyl Chloride               | Fluorene                  |
| Beryllium                | 2-Chlorophenol               | Hexachlorobenzene         |
| Cadmium                  | 2,4-Dichlorophenol           | Hexachlorobutadiene       |
| Chromium (III)           | 2,4-Dimethylphenol           | Hexachlorocyclopentadiene |
| Chromium (VI)            | 4,6-Dinitro-2-Methylphenol   | Hexachloroethane          |
| Copper                   | 2,4-Dinitrophenol            | Indeno[1,2,3-cd]pyrene    |
| Lead                     | 2-Nitrophenol                | Isophorone                |
| Mercury                  | 4-Nitrophenol                | Naphthalene               |
| Nickel                   | 4-Chloro-3-Methylphenol      | Nitrobenzene              |
| Selenium                 | Pentachlorophenol            | N-nitrosodimethylamine    |
| Silver                   | Phenol                       | N-Nitrosodi-N-propylamine |
| Thallium                 | 2,4,6-Trichlorophenol        | N-Nitrosodiphenylamine    |
| Zinc                     | Acenaphthene                 | Phenanthrene              |
| Cyanide                  | Acenaphthylene               | Pyrene                    |
| Asbestos                 | Anthracene                   | 1,2,4-Trichlorobenzene    |
| 2,3,7,8-TCDD             | Benzidine                    | Aldrin                    |
| Acrolein                 | Benzo[a]anthracene           | alpha-BHC                 |
| Acrylonitrile            | Benzo[a]pyrene               | beta-BHC                  |
| Benzene                  | Benzo[b]fluoranthene         | gamma-BHC                 |
| Bromoform                | Benzo[ghi]perylene           | delta-BHC                 |
| Carbon tetrachloride     | Benzo[k]fluoranthene         | Chlordane                 |
| Chlorobenzene            | Bis(2-chloroethoxy) Methane  | 4,4'-DDT                  |
| Chlorodibromomethane     | Bis(2-chloroethyl) Ether     | 4,4'-DDE                  |
| Chloroethane             | Bis(2-chloroisopropyl) Ether | 4,4'-DDD                  |
| 2-Chloroethylvinyl Ether | Bis(2-ethylhexyl) Phthalate  | Dieldrin                  |
| Chloroform               | 4-Bromophenyl Phenyl Ether   | alpha-Endosulfan          |
| Dichlorobromomethane     | Butylbenzyl Phthalate        | beta-Endosulfan           |
| 1,1-Dichloroethane       | 2-Chloronaphthalene          | Endosulfan Sulfate        |

|                            |                             |                    |
|----------------------------|-----------------------------|--------------------|
| 1,2-Dichloroethane         | 4-Chlorophenyl Phenyl Ether | Endrin             |
| 1,1-Dichloroethylene       | Chrysene                    | Endrin Aldehyde    |
| 1,2-Dichloropropane        | Dibenzo[ah]anthracene       | Heptachlor         |
| 1,3-dichloropropylene      | 1,2-Dichlorobenzene         | Heptachlor Epoxide |
| Ethylbenzene               | 1,3-Dichlorobenzene         | PCB (Aroclor-1016) |
| Methyl Bromide             | 1,4-Dichlorobenzene         | PCB (Aroclor-1221) |
| Methyl Chloride            | 3,3'-Dichlorobenzidine      | PCB (Aroclor-1232) |
| Methylene Chloride         | Diethyl Phthalate           | PCB (Aroclor-1242) |
| 1,1,2,2-Tetrachloroethane  | Dimethyl Phthalate          | PCB (Aroclor-1248) |
| Tetrachloroethylene        | Di-n-butyl Phthalate        | PCB (Aroclor-1254) |
| Toluene                    | 2,4-Dinitrotoluene          | PCB (Aroclor-1260) |
| 1,2-Trans-Dichloroethylene | 2,6-Dinitrotoluene          | Toxaphene          |
| 1,1,1-Trichloroethane      | Di-n-octyl Phthalate        | ---                |
| 1,1,2-Trichloroethane      | 1,2-Diphenylhydrazine       | ---                |

## Attachment E

### MONITORING AND REPORTING PROGRAM NO. CI-9259 FOR CITY OF SANTA PAULA (SANTA PAULA WATER RECYCLING FACILITY) (File No. 06-189)

This Monitoring and Reporting Program (MRP) No. CI-9259 is issued pursuant to California Water Code section 13267, which authorizes the Regional Water Quality Control Board, Los Angeles Region (Regional Board) to require the City of Santa Paula (City), who discharges tertiary-treated wastewater generated from the Santa Paula Water Recycling Facility (SPWRF) to groundwater via three percolation ponds, to furnish technical or monitoring reports.

The reports required herein are necessary to:

- Determine compliance with Waste Discharge Requirements (WDRs) Order No. R4-2018-0022 and assure protection of the waters of the state and their beneficial uses.
- Assess treatment plant performance, identify operational problems, and improve plant performance.
- Assess effectiveness of the City's Pretreatment Program.
- Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.
- Determine total maximum daily load (TMDL) effectiveness.

The evidence that supports the need for the reports is set forth in the WDRs and the Regional Board record.

#### I. SUBMITTAL OF REPORTS

- A. The City shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under this MRP, including electronic data format (EDF) groundwater and surface water monitoring data, injection location data, and monitoring reports. These reports shall be received by the Regional Board via the State Water Resources Control Board's (State Water Board) GeoTracker database under Global ID WDR100000849 on the dates indicated as follows:
1. **Quarterly Monitoring Reports** shall be received by the Regional Board by the 30<sup>th</sup> day of the month following the end of each quarterly monitoring period according to Table 1 below. The first Quarterly Monitoring Report under this program must be received by the Regional Board by April 30, 2018.

| Table 1 – Reporting Period and Due |            |
|------------------------------------|------------|
| Reporting Period                   | Report Due |
| January ~ March                    | April 30   |
| April ~ June                       | July 30    |
| July ~ September                   | October 30 |
| October ~ December                 | January 30 |

2. **Annual Summary Report** shall be received by the Regional Board by March 1 of each year. The first Annual Summary Report under this program must be received by the Regional Board no later than March 1, 2018.
- B. If there is no discharge during any reporting period, the report shall still be submitted and so state.
  - C. Data collected from monitoring wells shall be included in the quarterly monitoring reports and annual summary report. The data shall include the well specifications, ordinances, well heads elevation to mean sea level (MSL) and the method to develop the well. The California Department of Water Resources sets standards for the construction of groundwater wells, as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 74-81* (December 1981). These well 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 waste discharge or monitoring and reporting requirements.
  - D. In accordance with California Business and Profession 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 reports submitted to the Regional Board pursuant to waste discharge or monitoring and reporting requirements that contain work plans 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), such a licensed engineer or a certified hydrogeologist in the State of California, even if not explicitly stated. Each report must submitted by the Discharger shall bear the professional's signature and stamp.
  - E. All monitoring reports must include, at minimum, the following:
    1. Well or location identification, date and time of sampling;
    2. Sampler identification, laboratory identification, and chain of custody;
    3. Quarterly observation of groundwater levels, recorded to 0.01 feet mean sea level (MSL), and flow direction; and
    4. Calculation of vertical separation of the water table from the bottom of the disposal system.

## II. MONITORING REQUIREMENTS

- A. Monitoring shall be used to determine compliance with waste discharge requirements and shall include, but is not limited to, implementation and documentation of the following:
1. Locations of each groundwater well where representative samples can be obtained and the rationale for the selection. The City must include a map, at a scale of 1 inch equals 1,200 feet or less, that clearly identifies the locations of the SPWRF, and all groundwater monitoring wells.
  2. Sampling protocols (specified in 40 C.F.R. Part 136 or American Water Works Association standards where appropriate) and chain of custody procedures.
  3. For groundwater monitoring, outline the methods and procedures to be used for measuring water levels; purging wells; collecting samples; decontaminating equipment; containing, preserving, and shipping samples; and maintaining appropriate documentation. Also include the procedures for handling, storing, testing, and disposing of purge and decontamination waters generated from the sampling events.
  4. Laboratory or laboratories, which conducted the analyses. Include copy or copies of laboratory certifications by the Environmental Laboratory Accreditation Program (ELAP) of the State Water Board's Division of Drinking Water (DDW) every year or when the City changes their contract laboratory.
  5. Analytical test methods used and the corresponding Detection Limits for Purposes of Reporting (DLR) for unregulated and regulated chemicals. Please see the DDW's website at [http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/EDT.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/EDT.shtml) for unregulated and regulated chemicals.
  6. Quality assurance and control measures.
- B. The samples shall be analyzed using analytical methods described in 40 C.F.R. Part 136; or where no methods are specified for a given pollutant, by commercially available methods approved by the United State Environmental Protection Agency (USEPA) or DDW, Regional Board and/or State Board. The City shall select the analytical methods that provide reporting detection limits (RDLs) lower than the limits prescribed in waste discharge requirements.
- C. The City shall instruct its laboratories to establish calibration standards so that the RDLs (or its equivalent if there is a different treatment of samples relative to calibration standards) are the lowest calibration standard. At no time shall the City use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- D. Upon request by the City, the Regional Board, in consultation with the USEPA or DDW and the State Board Quality Assurance Program, may establish RDLs in any of the following situations:

1. When the pollutant has no established method under 40 C.F.R. Part 136 (revised May 14, 1999, or subsequent revision);
  2. When the method under 40 C.F.R. Part 136 for the pollutant has a RDL higher than the limit specified in this Order; or
  3. When the City agrees to use a test method that is more sensitive than those specified in 40 C.F.R. Part 136 and is commercially available.
- E. Samples of influent and disinfected effluent must be analyzed within allowable holding time limits as specified in 40 C.F.R. section 136.3. All quality assurance/quality control (QA/QC) analyses must be run on the same dates when samples were actually analyzed. The City shall make available for inspection and/or submit the QA/QC documentation upon request by the Regional Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly monitoring report.
- F. Constituents of emerging concern (CECs): In recent years, the Regional Board has required monitoring of a select group of anthropogenic chemicals, particularly pesticides, pharmaceuticals and personal care products, known collectively as CECs, into monitoring and program requirements to better understand the propensity, persistence and effects of CECs in our environment. Recently adopted permits in this region contain requirements for CEC effluent monitoring, including identification of the CECs to be monitored in the effluent, sample type, sampling frequency, and sampling methodology.
1. The City shall monitor a selective list of CECs identified in Attachment C in the SPWRF's effluent discharge and in the groundwater. The reporting limits in Attachment C shall be used for these constituents.
  2. The City shall select methods according to the following approach:
    - i. Use USEPA drinking water methods, if available;
    - ii. Use DDW-recommended methods for CECs, if available;
    - iii. If there is no DDW-recommended drinking water method for a chemical, and more than a single USEPA-approved method is available, use the most sensitive USEPA-approved method;
    - iv. If there is no USEPA-approved method for a chemical, and more than one method is available from the scientific literature and commercial laboratory, after consultation with DDW, use the most sensitive method; or
    - v. If no approved method is available for a specific chemical, the City's laboratory may develop or use its own methods and should provide the analytical methods to DDW or the Regional Board for review and approval. Those methods may be used until DDW-recommended or USEPA-approved methods are available.

- vi. In the event that subsections II.F.2.i. or II.F.2.v. are applicable, the City shall inform the Regional Board.
3. CECs identified in Attachment C shall be monitored once within six months from the effective date of this Order (by May 2, 2018) and once every five years thereafter. The Regional Board Executive Officer may add or delete chemicals from Attachment C as new analytical methods become available and may also make revisions to approved analytical methods as needed. A revised CECs list will be made available to the City when changes occur. The City shall request (and submit a justification for) any deviation from the attached list for Executive Officer approval, if a change is required, before collecting samples.
4. Monitoring results shall be reported as part of the annual report. Analysis under this section is for monitoring purposes only as there are currently no standards for these constituents.

### **III. REPORTING REQUIREMENTS**

The City shall submit all reports to the Regional Board by the dates indicated in Section I. All quarterly and annual reports shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limits. All quarterly and annual monitoring reports shall contain a separate section titled "Summary of Non-Compliance", which discusses the compliance records and corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs.

#### **A. Quarterly Monitoring Reports**

1. These reports shall include, at a minimum, the following information:
  - i. The volume of the effluent used for land disposal via percolation.
  - ii. The date and time of sampling and analyses on the influent, effluent, and groundwater.
  - iii. All analytical results of samples collected during the monitoring period of the influent, effluent, and groundwater.
  - iv. Documentation of all QA/QC procedures that were followed during sampling and laboratory analyses.
  - v. Records of any operational problems, plant upset and equipment breakdowns or malfunctions, and any discharge(s) used for land disposal via percolation.
  - vi. Discussion of compliance, non-compliance, or violation of waste discharge requirements.
  - vii. All corrective and/or preventive action(s) taken or planned with schedule of implementation, if any violation occurs.

2. For the purpose of reporting compliance with numerical limitations, analytical data shall be reported using the following reporting protocols:
  - i. Sample results greater than or equal to the RDL must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample);
  - ii. Sample results less than the RDL, but greater than or equal to the laboratory's method detection limit (MDL), must be reported as "Detected, but Not Quantified" (DNQ). The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to Est. Conc.); or
  - iii. Sample results less than the laboratory's MDL must be reported as "None-Detected" (ND).
3. If the City samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any sample more frequently than required in this MRP using approved analytical methods, the results of those analyses shall be included in the report. These results shall be included in the calculation of the average used in demonstrating compliance with average effluent limits, receiving groundwater limits, etc.
4. The Regional Board may request supporting documentation, such as daily logs of operations.

#### **B. Annual Summary Reports**

These reports shall include, at a minimum, the following information:

1. Tabular and graphical summaries of the monitoring data (quality of influent, effluent, and groundwater; quantity of influent and effluent to percolation ponds,) obtained during the previous calendar year. A comparison of laboratory results against effluent limits contained in these WDRs and notations of any exceedances of limits or other requirements shall be summarized and submitted at the beginning of the report.
2. Discussion of the compliance record and corrective and/or preventive action(s) taken or planned that may be needed to bring the treated effluent, including the treated effluent used for recycled water, into full compliance with the requirements in the WDRs.
3. An in-depth discussion of the results of the final effluent monitoring and groundwater monitoring conducted during the previous year includes:
  - i. Any change of receiving groundwater resulting from effluent discharges at percolation ponds; and
  - ii. Any change of groundwater flow pattern resulting from discharge via percolation ponds.

Temporal and spatial trends in the data shall be analyzed, with particular reference to comparisons between stations with respect to distances from the monitoring wells and comparisons to data collected during previous years. Appropriate statistical tests and indices, subject to approval by the Regional Board Executive Officer, shall be calculated and included in the annual report.

4. The description of any changes and anticipated changes including any impacts in operation of any unit processes or facilities shall be provided.
5. A list of the analytical methods employed for each test and associated laboratory QA/QC procedures shall be included. The report shall restate the laboratories used by the City to monitor compliance with the accompanying Order, their status of certification, and provide a summary of analyses.
6. The report shall confirm operator certification and provide a list of current operating personnel, their responsibilities, and their corresponding grade of certification.
7. The report shall also summarize any change of the Operation, Maintenance, and Monitoring Plan (OMM Plan) due to the optimization of the existing SPWRF operation. The summary shall discuss conformance with the SPWRF's OMM Plan for operations, maintenance, and monitoring of the SPWRF, and whether the OMM Plan requires revision for the current facilities.

#### IV. WATER QUALITY MONITORING REQUIREMENTS

##### A. Influent Monitoring

1. The City shall monitor influent to the SPWRF at Influent Pump Station located in the main stream of the influent channel prior to the headworks as specified in Table 2 below.

| Table 2 – Influent Monitoring |                      |                   |                               |
|-------------------------------|----------------------|-------------------|-------------------------------|
| Constituents                  | Units <sup>[1]</sup> | Type of Sample    | Minimum Frequency of Analysis |
| Total waste flow              | gpd                  | Recorder          | Continuous <sup>[2]</sup>     |
| BOD <sub>5@20°C</sub>         | mg/L                 | Grab              | Monthly                       |
| Total Suspended Solids        | mg/L                 | Grab              | Monthly                       |
| Chloride                      | mg/L                 | 24-hour composite | Monthly                       |
| Sulfate                       | mg/L                 | Grab              | Monthly                       |
| Boron                         | mg/L                 | Grab              | Monthly                       |
| Total Dissolved Solids        | mg/L                 | Grab              | Monthly                       |
| Metals <sup>[3]</sup>         | µg/L                 | Grab              | Quarterly                     |

**Table Notes:**

[1] gpd: gallons per day

mg/L: milligrams/liter  
 µg/L: micrograms/liter

- [2] The City shall report the daily minimum, maximum, and average values.
- [3] Metals include antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.

**B. Effluent Monitoring**

- 1. The City shall monitor its discharge of tertiary-treated effluent at downstream of all treated effluent passing through the effluent sampling station, including the final disinfection process.
- 2. The following shall constitute the effluent monitoring program, specified in Table 3 below:

| <b>Table 3 – Effluent Monitoring</b> |                           |                                     |                                      |
|--------------------------------------|---------------------------|-------------------------------------|--------------------------------------|
| <b>Constituent</b>                   | <b>Unit<sup>[1]</sup></b> | <b>Type of Sample<sup>[2]</sup></b> | <b>Minimum Frequency of Analysis</b> |
| Total Flow                           | gpd                       | Recorder                            | Continuous <sup>[3]</sup>            |
| UV                                   | mW-s/cm <sup>[2]</sup>    | Recorder                            | Continuous <sup>[3]</sup>            |
| Turbidity                            | NTU                       | Recorder                            | Continuous <sup>[3][4]</sup>         |
| pH                                   | pH units                  | Grab                                | Daily                                |
| Fecal Coliform                       | MPN/100mL                 | Grab                                | Daily                                |
| Total Coliform                       | MPN/100mL                 | Grab                                | Daily                                |
| Enterococcus                         | MPN/100mL                 | Grab                                | Weekly                               |
| Total Suspended Solids               | mg/L                      | 24-hour composite                   | Monthly                              |
| BOD <sub>5@20°C</sub>                | mg/L                      | 24-hour composite                   | Monthly                              |
| Oil and Grease                       | mg/L                      | Grab                                | Monthly                              |
| Ammonia Nitrogen                     | mg/L                      | Grab                                | Monthly                              |
| Nitrate as Nitrogen                  | mg/L                      | Grab                                | Monthly                              |
| Nitrite as Nitrogen                  | mg/L                      | Grab                                | Monthly                              |
| Organic as Nitrogen                  | mg/L                      | Grab                                | Monthly                              |
| Residual Chlorine                    | mg/L                      | Grab                                | Monthly                              |
| Total Dissolved Solids               | mg/L                      | Grab                                | Monthly                              |
| Sulfate                              | mg/L                      | Grab                                | Monthly                              |
| Chloride                             | mg/L                      | 24-hour composite                   | Weekly                               |
| Boron                                | mg/L                      | Grab                                | Monthly                              |
| MBAS <sup>[5]</sup>                  | mg/L                      | 24-hour composite                   | Quarterly                            |
| CTAS <sup>[6]</sup>                  | mg/L                      | 24-hour composite                   | Quarterly                            |

| Table 3 – Effluent Monitoring                 |                     |                               |  |
|---|---------------------|-------------------------------|--|
| Constituent                                   | Unit <sup>[1]</sup> | Type of Sample <sup>[2]</sup> | Minimum Frequency of Analysis                                    |
| Total hardness                                | mg/L                | 24-hour composite             | Quarterly  |
| Total Phosphorus                              | mg/L                | 24-hour composite             | Quarterly  |
| Constituents listed in Attachments A-1 to A-6 | various             | Grab/24-hour composite        | Quarterly  |
| CECs in Attachment C                          | various             | Grab                          | Once within 6 Months and every 5 Years thereafter <sup>[7]</sup> |
| Remaining Priority Pollutants in Attachment D | µg/L                | Grab/24-hour composite        | Annually   |

**Table Notes:**

- [1] NTU: nephelometric turbidity unit  
 mW-s/cm<sup>2</sup>: milli-watts seconds per square centimeter  
 MPN/100mL: Most Probable Number/100 milliliter  
 µg/L: micrograms/liter
- [2] Grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. When an automatic composite sampler is not used, composite sampling shall be done as follows. If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual “grab” sample may be substituted. 24-hour composite is for semi-volatile and volatile chemicals.
- [3] The City shall report the daily minimum, maximum, and average values.
- [4] In the event the continuous turbidity meter and recorder fail, grab sampling may be substituted for a period of up to 24 hours. The turbidity samples must be taken at intervals of no more than 1.2 hours over a 24-hour period to determine compliance for turbidity.
- [5] MBAS: Methylene Blue Active Substances
- [6] CTAS: Cobalt Thiocyanate Active Substances
- [7] CECs shall be monitored once within six months from the effective date of this Order (by May 2, 2018) and once every five years thereafter.

**C. Groundwater Monitoring**

1. The City shall monitor the groundwater at and surrounding the SPWRF to assess the water quality impact of the SPWRF’s discharges to groundwater.
2. The City shall continue to conduct groundwater monitoring from all existing wells, including MW-1, MW-2a, MW-3, MW-4, MW-5, MW-6, MW-7a, and MW-8, until such time as the City’s work plan proposing a modified groundwater monitoring

network, described in Section IV.C.3 below, is approved by the Executive Officer and is implemented by the City.

3. By May 1, 2018, the City shall submit to the Regional Board a work plan proposing a modified groundwater monitoring network for compliance determination with the groundwater limitations. The proposed groundwater monitoring network shall include groundwater monitoring wells upgradient, cross gradient, and downgradient to the percolation pond. In addition to installation of new wells, the City may propose continuing to use some or all of the existing groundwater monitoring wells (MW-1, MW-2a, MW-3, MW-4, MW-5, MW-6, MW-7a, and MW-8). For compliance determination with the groundwater limitation for chloride, the City's proposed modified groundwater monitoring network shall include wells at approximately 150 feet downgradient from the percolation pond. The work plan shall be submitted to the Regional Board for the Executive Officer's review and approval. If the City proposes to use existing wells (such as water supply or irrigation wells) not owned by the City, or proposes to install new wells on property not owned by the City, the City shall include as part of its work plan any access agreements between the City and property owner(s) to use and/or install groundwater wells on non-City-owned property. The City shall implement the work plan, by completing installation of any new wells and commencing monitoring from them, within 60 days after the Executive Officer's approval.
  
4. The required groundwater monitoring of constituents/parameter with sample type and frequencies is specified in Table 4 below.

| <b>Constituents</b>                  | <b>Units</b> | <b>Type of Sample</b> | <b>Minimum Frequency of Analysis<sup>[2]</sup></b> |
|--------------------------------------|--------------|-----------------------|--|
| Water level elevation <sup>[1]</sup> | Feet         | Recorder              | Monthly  |
| pH                                   | pH units     | Grab                  | Monthly  |
| Total Coliform                       | MPN/100mL    | Grab                  | Monthly  |
| Fecal Coliform                       | MPN/100mL    | Grab                  | Monthly  |
| Enterococcus                         | MPN/100mL    | Grab                  | Monthly  |
| Ammonia nitrogen                     | mg/L         | Grab                  | Monthly  |
| Nitrate as nitrogen                  | mg/L         | Grab                  | Monthly  |
| Nitrite as nitrogen                  | mg/L         | Grab                  | Monthly  |
| Organic Nitrogen                     | mg/L         | Grab                  | Monthly  |
| Total Dissolved Solids               | mg/L         | Grab                  | Monthly  |
| Sulfate                              | mg/L         | Grab                  | Monthly  |
| Chloride                             | mg/L         | Grab                  | Monthly  |
| Boron                                | mg/L         | Grab                  | Monthly  |

| Table 4 – Groundwater Monitoring              |         |                |   |
|---|---------|----------------|---|
| Constituents                                  | Units   | Type of Sample | Minimum Frequency of Analysis <sup>[2]</sup>      |
| Constituents listed in Attachments A-1 to A-5 | Various | Grab           | Annually  |
| CECs in Attachment C                          | µg/L    | Grab           | Once within 6 Months and every 5 Years thereafter |
| Remaining Priority Pollutants in Attachment D | µg/L    | Grab           | Annually  |

**Table Notes:**

- [1] Annual samples shall be collected during the dry season each year.
- [2] Water level elevations must be measured to the nearest 0.01 feet, and referenced to mean sea level.

**D. Monitoring of Effluent Flow to Percolation Ponds**

The City shall record the volume in gallons per day (GPD) of treated wastewater discharged to the three percolation ponds. This information shall be submitted as part of the quarterly monitoring reports.

**V. GENERAL MONITORING AND REPORTING REQUIREMENTS**

- A. The City shall comply with all Standard Provisions (Attachment B) related to monitoring, reporting, and recordkeeping.
- B. For every requirement not met, the City shall submit a statement of the actions undertaken or proposed that will bring the treated effluent into full compliance with requirements at the earliest possible time, and submit a timetable for implementation of the corrective measures.
- C. Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if:
  - 1. The authorization is made in writing by the signatory;
  - 2. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
  - 3. The written authorization is submitted to the Regional Board Executive Officer.
- D. The monitoring report shall contain the following completed declaration:

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

Executed on the \_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_  
\_\_\_\_\_  
Signature  
\_\_\_\_\_  
Title

- E. The City shall retain records of all monitoring information, including all calibration and maintenance, monitoring instrumentation, and copies of all reports required by this Order, for a period of at least three (3) years from the date of sampling measurement, or report. This period may be extended by request of the Regional Board at any time and shall be extended during the course of any unresolved administrative proceeding or judicial litigation regarding the regulated activity.
- F. Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements;
  - 2. The individual(s) who performed the sampling or measurements;
  - 3. The date(s) analyses were performed;
  - 4. The individual(s) who performed the analysis;
  - 5. The analytical techniques or methods used; and
  - 6. The results of such analyses.
- G. The City shall submit to the Regional Board, together with the first monitoring report required by this Order, a list of all chemicals and proprietary additives that could affect the quality of the treated effluent. Any subsequent changes in types and/or quantities shall be reported promptly. An annual summary of the quantities of all chemicals, listed by both trade and chemical names that are used in the treatment process shall be included in the annual report.

**VI. WASTE HAULING REPORTING**

In the event that waste sludge, septage, or other wastes are hauled offsite, the name and address of the hauler shall be reported, along with types and quantities hauled during the reporting period and the location of final point of disposal. In the event that no wastes are hauled during the reporting period, a statement to that effect shall be submitted in the quarterly monitoring report.

## VII. PRETREATMENT REPORTING

The City shall submit annual reports to the Regional Board, with copies to the State Board, and USEPA Region 9, describing the City's pretreatment activities over the period.

- A. The annual reports shall identify:
1. All significant industrial users (SIUs) that violated any standards or reporting requirements during that year;
  2. The violations committed;
  3. The enforcement actions undertaken; and
  4. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions that attained compliance during the quarter).
- B. By March 1 of each year, beginning January 1, 2018, the City shall submit an annual summary report to the Regional Board describing the pretreatment activities within the service area during the previous year. In the event that any control authority within the service area is not in compliance with any conditions or requirements of this Order or their approved pretreatment program (such as due to industrial user discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the City shall also include the reasons for noncompliance and state how and when the City and the control authority shall comply with such conditions and requirements. The report shall contain, but not be limited to, the following information:
1. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the SPWRF's influent and effluent wastewaters for those pollutants that are known or suspected to be discharged by industrial users (IUs) as identified by the pretreatment program.
  2. The summary shall include the result of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan.
  3. The City shall also provide any influent or effluent monitoring data for non-priority pollutants that the City believes may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality.
  4. Sampling and analysis shall be performed in accordance with the techniques prescribed in pretreatment program and amendments thereto.
  5. A discussion of any upset, interference, or pass-through incidents at the treatment plant (if any), which the City knows or suspects were caused by IUs of the SPWRF system. The discussion shall include the following:
    - i. The reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the IU(s) responsible.

- ii. A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through, interference or noncompliance with sludge disposal requirements, if any.
6. A complete and updated list of the City's significant industrial users (SIUs), including names, Standard Industrial Classification code(s) and addresses, and a list of any SIU deletions and/or additions.
7. The City shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs equivalent to Federal Categorical Standards by specifying which standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations and those that are not subject to local limits.
8. A list or table characterizing the industrial compliance status of each SIU, including:
  - i. SIU name and address;
  - ii. Industrial category;
  - iii. The type (processes) of wastewater treatment in place;
  - iv. Number of samples taken by the SPWRF during the year;
  - v. Number of samples taken by the SIU during the year;
  - vi. Whether all needed certifications (if allowed) were provided by SIUs that have limits for total toxic organics;
  - vii. Regional Standards violated during the year, reported separately;
  - viii. whether the SIU at any time in the year was in Significant Noncompliance (SNC), equivalent to that defined in 40 C.F.R. section 403.12(f)(2)(vii);
  - ix. A summary of enforcement actions against the SIU taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included; and
  - x. Number of inspections conducted at each SIU during the year.
9. A compliance summary table that includes:
  - i. SIU's which were in SNC at any time during the year;
  - ii. The total number of SIUs that are in SNC with pretreatment, compliance schedules during the year; and
  - iii. The total number of notices of violation and administrative orders issued against SIUs during the year:

- a. The total number of civil and criminal judicial actions filed against SIUs during the year;
  - b. The number of SIUs that were published as being in SNC during the year; and
  - c. The number of IUs from which penalties were collected during the year.
10. A short description of any significant changes in operating the pretreatment program that differ from the previous year including, but not limited to changes concerning:
  - i. The program's administrative structure;
  - ii. Local industrial discharge limitations;
  - iii. Monitoring program or monitoring frequencies;
  - iv. Legal authority or enforcement policy;
  - v. Funding mechanisms; and
  - vi. Resource requirements and/or staffing levels.
11. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
12. A summary of public participation activities to involve and inform the public.
13. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.
14. The cumulative number of industrial users that the City has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
15. The City shall submit the quarterly compliance status reports and the annual pretreatment report to the Regional Board.

#### **VIII. MONITORING FREQUENCIES**

The Regional Board Executive Officer is delegated authority to revise this Monitoring and Reporting Program, including monitoring frequencies and parameters. The City may make a request (with justification) to reduce the monitoring frequency or to modify the list of monitoring constituents. The City shall not make any adjustment until the Executive Officer provides written approval after determining that the request is adequately justified.