

California Regional Water Quality Control Board
North Coast Region

**TIME SCHEDULE ORDER NO. R1-2011-0103
(Amended on August 22, 2013)**

TO PROVIDE TIME TO UNDERTAKE ACTIONS TO COMPLY WITH REQUIREMENTS IN
ORDER NO. R1-2013-0001
(Santa Rosa Subregional Water Reclamation System)
NPDES PERMIT NO. CA0022764

Sonoma County

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

1. The City of Santa Rosa (hereafter City or Permittee) owns and operates the Santa Rosa Subregional Water Reclamation System (the "Reclamation Plant"), a publicly-owned treatment works, which currently collects, treats, recycles and/or discharges an average dry weather flow of 15 million gallons per day (MGD) under Waste Discharge Requirements (WDRs) contained in Order No. R1-2013-0001, adopted by the Regional Water Board on August 22, 2013. Order No. R1-2013-0001 also serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0022764).
2. The City reuses most of its produced tertiary treated recycled water throughout the year, providing agricultural operators with recycled water for beneficial water reclamation and reuse (*i.e.*, agricultural irrigation of crops, including vineyards, orchards, animal fodder, pasture, and specialty vegetable crops), participating in urban reuse (*e.g.*, golf courses, playing fields, and landscaped areas), or providing the recycled water to the Geysers Recharge Project. These reuse projects used between 95 and 100 percent of the produced recycled water during the last six years of operation.
3. The City's WDRs/NPDES Permit allows the discharge of tertiary treated recycled water that is not reused from October 1st through May 14th of each year, in accordance with discharge restrictions set forth in the North Coast Region's Basin Plan. Discharge occurs from the City's recycled water storage ponds to the Laguna de Santa Rosa and/or Santa Rosa Creek, both tributaries to the Russian River.
4. The Laguna de Santa Rosa is on the State Water Resources Control Board's Clean Water Act 303(d) List of Water Quality Limited Segments as impaired for nitrogen and phosphorus. A Total Maximum Daily Load (TMDL) has not yet been prepared to address the listing.
5. The City's previous WDRs/NPDES Permit, Order No. R1-2006-0045, included the following effluent limitations for nitrogen and phosphorus at Provision IV.A.1.g:

The Regional Board plans to develop and adopt total maximum daily loads (TMDLs) for nitrogen and phosphorus which will specify wasteload allocations

(WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of these TMDLs by the Regional Water Board, this Order will be issued with final WQBELs [water quality based effluent limits] based on applicable WLAs. Alternatively, in the absence of a TMDL at the end of the compliance schedule authorized by this Order [Nov. 9, 2011], the final effluent limitation for nitrogen and phosphorus will be zero, or no net loading⁵.

Footnote 5 explains:

A 'no net loading' effluent limit may be met by: 1) reducing the effluent concentration below detectable levels through source control and/or treatment; 2) reducing loads through recycling/reclamation; and/or 3) reducing loads elsewhere in the watershed by an amount at least equal to the amount discharged (and of equivalent bioavailability) through an approved offset program.

6. On July 24, 2008, the Regional Water Board adopted the Santa Rosa Nutrient Offset Program, Resolution No. R1-2008-0061, (Nutrient Offset Program). The Nutrient Offset Program satisfied the WDRs/NPDES Permit's requirement that the "zero" or "no net loading" limitations could be complied with by reducing the loads elsewhere in the watershed by an amount at least equal to the amount discharged (and of equivalent bioavailability) through an approved offset program.
7. The Nutrient Offset Program provides the process by which the City can propose, and once approved, implement nutrient offset projects to earn nutrient reduction credits that offset annual nutrient loads discharged to the Laguna de Santa Rosa. The Nutrient Offset Program prescribes criteria for measurement and calculation of nutrient reduction credits, including a margin of safety.
8. The Nutrient Offset Program prescribes that compliance, with "zero, or no net loading" effluent limitations for nitrogen and phosphorus, is calculated using a three-year averaging period due to the variability and unpredictability of the following factors:
 - a) Annual discharges of recycled water nutrients to the Laguna de Santa Rosa
 - b) Nutrient reduction project implementation timelines
 - c) Varying nutrient reduction values from nutrient reduction projects

The City is deemed compliant with "zero or no net loading" limitations if the three-year average difference between actual discharge and offset reduction credits is less than or equal to zero mass units.

9. The "zero" or "no net loading" effluent limitations for nitrogen and phosphorus became effective November 9, 2011, and the first three-year average compliance determination was scheduled to occur in 2014, after conclusion of the 2013-2014 discharge season.

10. On November 4, 2011, the Regional Water Board Executive Officer issued Time Schedule Order No. R1-2011-0103, which extended the date for determining compliance with the effluent limitations for nitrogen and phosphorus from the conclusion of the 2013-2014 season to the conclusion of the 2014-2015 discharge season. The extension was justified because the City was making significant good faith efforts towards developing acceptable nutrient offset projects, but project finalization and approval proved to be more complicated than initially anticipated.
11. The Regional Water Board renewed the City's current WDRs/NPDES Permit on August 22, 2013 (Order No. R1-2013-0001); Order No. R1-2013-0001 permit includes the following effluent limitation for phosphorus, at Provision IV.A.2.b:
 - b. The Permittee shall maintain compliance with the following effluent limitations at Discharge Points 006A, 006B, 012A(1), 012A(2), 012B, and 015, with compliance measured at Monitoring Locations EFF-006A, EFF-006B, EFF-012A(1), EFF-012A(2), EFF-012B, and EFF-001, respectively, as described in the MRP, when discharges occur:
 - i. **Effluent Limitation for Total Phosphorus for Compliance with Narrative Objective for Biostimulatory Substances.** There shall be no net loading of total phosphorus to the water bodies of the greater Laguna de Santa Rosa.

Compliance with this effluent limitation shall be determined in accordance with section VII.N (Compliance Determination) of this Order.
12. Consistent with Order No. R1-2006-0045, the Nutrient Offset Program provides the process by which the City can propose, gain approval for, and implement nutrient offset projects to earn nutrient reduction credits that offset annual nutrient loads discharged to the Laguna de Santa Rosa. The Nutrient Offset Program prescribes criteria for measurement and calculation of nutrient reduction credits, including a margin of safety.
13. Regional Water Board and City staff are currently working cooperatively to investigate further nutrient offset project options, including those associated with agriculture, including dairies, that could be approved by Regional Water Board. The identification, approval, and implementation of nutrient offset projects, agricultural or otherwise, will take additional time. Therefore, the City is unlikely to be able to implement nutrient offset project(s) quickly enough to achieve compliance with the "zero, or no net loading" effluent limitations for nitrogen and phosphorus in 2014 through implementation of the Nutrient Offset Program.
14. California Water Code section 13300 states:

"Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the

regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."

15. For the reasons stated above, the Regional Water Board finds that a discharge of waste is taking place or threatening to take place that will violate requirements prescribed in Order No. R1-2013-0001.
16. Through issuance of this Time Schedule Order (TSO), the first three year-averaging period used to calculate compliance with the effluent limitation for total phosphorus via the Nutrient Offset Program will begin with the 2014-2015 discharge season, extending by an additional two years the commencement of the timeframe for determining compliance. The effluent limitation for total phosphorus still became effective November 9, 2011, but the first compliance determination will occur in 2017, after conclusion of the 2016-2017 discharge season, using a three-year average from the 2014-2015 discharge season through the 2016-2017 discharge season.
17. Within one year of the effective date of this Order, and upon demonstration by the City that additional time is warranted to develop high quality nutrient offset projects to comply with this Order, the Regional Water Board Executive Officer, at his discretion, may further extend the time period for this Order.
18. California Water Code section 13385(j)(3) provides protection from the imposition of mandatory minimum penalties otherwise imposed under section 13385, subsections (h) and (i), when: (1) the effluent limitation is a new, more stringent, or modified regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000; (2) new or modified control measures are necessary in order to comply with the effluent limitation; (3) the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days; and (4) the Regional Water Board establishes a time schedule bringing the waste discharge into compliance with the effluent limitation that is as short as possible.
19. The zero or no net loading requirement for total phosphorus constituted a new and more stringent effluent limit when adopted in Order No. R1-2006-0045, and still constitutes a new and more stringent effluent limit as applied to the City's surface water discharge. Order No. R1-2013-0001 contains the same zero or no net loading requirement for total phosphorus, but replaces the zero or no net loading effluent limitation for total nitrogen set forth in Order No. R1-2006-0045 with a final effluent limitation that is based on existing treatment plant performance. Because the final limitation for total nitrogen is performance-based, it is anticipated that the City is able to immediately comply with the limitation.

20. The Regional Water Board finds that new and modified control measures are necessary to comply with the effluent limitation for total phosphorus. As explained above, for the past several years, the City has endeavored to comply with the effluent limitations for nitrogen and phosphorus included in Order No. R1-2006-0045 through implementation of the Nutrient Offset Program. The development and finalization of approvable offset projects has proved to be more costly, time consuming, and complicated than all parties had originally contemplated. Therefore, additional projects must be developed and implemented in order to comply with the applicable effluent limitations. The Regional Water Board finds that additional time beyond 30 calendar days is needed to develop the control measures to offset discharges of total phosphorus in order to meet the effluent limitation contained in Order No. R1-2013-0001.
21. California Water Code section 13385(j)(3)(C) provides that for purposes of protecting a discharger from mandatory minimum penalties, the time schedule order may not initially exceed five years in length. As amended, Order R1-2011-0103 will have an effective date of three years because it extends by three years the commencement of the timeframe for determining compliance with the effluent limitation for phosphorus.
22. The Regional Board has notified the City, interested agencies, and persons, of its intent to issue a Time Schedule Order in accordance with Water Code section 13167.5.
23. This enforcement action by a regulatory agency is exempt from the provisions of the California Environmental Quality Act (Public Resources, Code, section 2100 *et seq.*) in accordance with the California Code of Regulations, title 14, section 15321.

IT IS HEREBY ORDERED, pursuant to California Water Code section 13300:

1. The first three year-averaging period used to calculate compliance with the effluent limitation for total phosphorus contained in Order No. R1-2013-0001 via the Nutrient Offset Program set forth in Resolution No. R1-2008-0061 will begin with the 2016-2017 discharge season. This extends, by a total of three years, the commencement of the timeframe for determining compliance described in Nutrient Offset Program.
2. The first compliance determination will occur in 2017, after conclusion of the 2016-2017 discharge season, using a three-year average from the 2014-2015 discharge season through the 2016-2017 discharge season.
3. To demonstrate progress toward compliance with the effluent limitation for total phosphorus, the City shall comply with the following:
 - a. By September 1, 2014, implement approved projects or submit proposal(s) for nutrient offset projects that offset at least 33 percent of the estimated annual mass discharge of total phosphorus.

- b. By September 1, 2015, implement approved projects or submit proposal(s) for nutrient offset projects that offset at least 66 percent of the estimated annual mass discharge of total phosphorus.
 - c. By September 1, 2016, implement approved projects or submit proposal(s) for nutrient offset projects that offset at least 100 percent of the estimated annual mass discharge of total phosphorus.
4. The City shall provide to the Regional Water Board written updates of the status of projects being developed and undertaken in fulfillment of the Nutrient Offset Program.

All other limitations, provisions, and requirements of Order No. R1-2013-0001 and Resolution No. R1-2008-0061, not in conflict with this Order, are in full force and effect.

Certification

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, North Coast Region, on August 22, 2013.

Matthias St. John
Executive Officer