



Central Valley Regional Water Quality Control Board

28 September 2016

James Ross Public Works Manager City of Visalia 7579 Avenue 288 Visalia, California 93277

CERTIFIED MAIL 7016 0750 0000 7453 1293

NOTICE OF APPLICABILITY

STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2016-0068-DDW WATER RECLAMATION REQUIREMENTS FOR RECYCLED WATER USE CITY OF VISALIA WATER RECYCLING PROJECT TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff reviewed the City of Visalia's Notice of Intent (NOI) for regulatory coverage under Water Quality Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (hereafter, General Order). In conjunction with the NOI, the City also submitted an amendment to the 2009 Title 22 Engineering Report for the City entitled *Recycled Water Engineering Report: Fodder, Fiber and Seed Crops*.

The City of Visalia owns and operates a wastewater treatment facility at 7579 Avenue 288 in Tulare County, also known as the Water Conservation Plant (WCP). The WCP is regulated under Waste Discharge Requirements (WDRs) R5-2014-0076 for irrigation on 250 acres of City-owned fodder crops and land discharge (i.e., percolation ponds). The WCP is also regulated under National Pollutant Discharge Elimination System CA0079189 for discharge to surface water, although the discharge to Mill Creek ceased in August 2014.

Given the current drought conditions, the City of Visalia proposes to expand its undisinfected secondary effluent reuse in the following areas:

- Adjacent to the 250 acres of currently irrigated, City-owned fodder crop are 608 acres of tree crops, which were recently removed. The City plans to convert approximately 168 acres into fodder crop and irrigate with undisinfected secondary effluent.
- Additionally, five dairy farmers adjacent to the City's wastewater discharge conveyance canal and percolation pond (Basin No. 4) have shown interest in using the undisinfected secondary effluent to irrigate their fiber and fodder crops.

The City wishes to obtain a permit for providing these adjacent farmers with recycled water. Only farmers that have signed the *City of Visalia Recycled Water User Agreement: Undisinfected Secondary Reuse* (User Agreement) will be permitted to receive recycled water.

On 7 June 2016, the State Water Resources Control Board adopted the General Order to regulate the use of recycled water for all Title 22 uses except groundwater recharge. In addition, the General Order delegates the responsibility of administering water recycling programs to a designated Administrator to the fullest extent possible. Based on the information provided in the NOI, the proposed water recycling project satisfies the general and specific conditions of the General Order. Therefore, this serves as formal notice that Order WQ 2016-0068-DDW is applicable to the site and discharge described below. The City of Visalia will act as the Administrator of the Recycled Water Program for this discharge. You are hereby assigned WQ 2016-0068-R5001 for this discharge. Please include this number on all correspondence related to this discharge.

Prior to accepting recycled water, the Users shall provide the City and Central Valley Water Board with a revised Nutrient Management Plan and/or Waste Management Plan for their respective dairy or property, subject to Executive Officer approval. The Users shall ensure compliance with the Dairy General Order R5-2013-0122 (if applicable) and manage all applications of recycled water correctly. Acting as the Administrator, the City has an obligation to remind dairies and other Users to apply recycled water agronomically in accordance with the certified Nutrient Management Plan.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your recycled water project must be completed in accordance with the attached Monitoring and Reporting Program (MRP) WQ 2016-0068-R5001. This MRP was developed after review of your NOI as described in the enclosed Technical Memorandum.

WASTEWATER TREATMENT FACILITY

The City of Visalia's WCP currently produces undisinfected secondary effluent and includes headworks, primary clarifiers, secondary clarifiers, trickling filters, aeration basins, rapid mix chlorination mixers, chlorine contact basins, dechlorination facilities, gravity belt thickener, anaerobic sludge digesters, unlined sludge pits, and drying beds. The City is currently upgrading its system to provide tertiary treatment and disinfection, which should be completed by First Quarter 2017.

RECYCLED WATER PROGRAM FOR CROP IRRIGATION USE

The City of Visalia, as the Administrator, will be responsible for the administration of the Recycled Water Program authorized pursuant to this General Order, including the requirements of Title 22. The City of Visalia is the recycled water Producer, Distributor, and User and is responsible for all permit requirements related to the production and distribution of recycled water.

The City of Visalia will supply undisinfected secondary recycled water to permitted Users to irrigate fodder, fiber, and seed crops for non-human consumption. To obtain a use permit, the User is required to complete a Recycled Water User Agreement and receive training on wastewater handling. Training will cover the approved Title 22 uses, use requirements, and prohibited uses. Those property owners who have currently or previously shown interest and their respective acreage are:

- Barreto Silveira, 410 acres,
- Costa, 735 acres;
- Koetsier, 143 acres;
- LK Ranches, 1,128 acres; and
- Miller, 109 acres.

DIVISION OF DRINKING WATER CONSIDERATIONS

The City submitted an amendment to its 2009 Title 22 Engineering Report for regulatory coverage under the General Order. DDW issued a 6 September 2016 approval letter for use of undisinfected secondary recycled water for those areas identified in the City's NOI until 1 July 2017, with the understanding as detailed in the enclosed Technical Memorandum.

WATER RECYCLING USE REQUIREMENTS

- 1. The production, distribution, and use of recycled water shall be managed in accordance with the NOI, DDW approved Title 22 Engineering Report, and this Notice of Applicability (NOA).
- 2. Application of recycled water shall be limited to the uses described in the NOI, DDW approved Title 22 Engineering Report, and this NOA.
- 3. The use of recycled water shall not cause pollution or nuisance, as defined by Water Code section 13050.
- 4. The recycled water shall be undisinfected secondary effluent recycled water as defined by Title 22. section 60301.900.
- 5. The City of Visalia shall promptly notify the Central Valley Water Board of any spills or unauthorized uses of recycled water.

GENERAL INFORMATION AND REQUIREMENTS

The City of Visalia shall comply with the Prohibitions, Specifications, Water Recycling Administration Requirements, and General Provisions of the General Order.

Please review this NOA carefully to ensure that it completely and accurately reflects the proposed Recycled Water Program. If the discharge violates the terms or conditions, the Central Valley Water Board may take enforcement action, including the assessment of an administrative civil liability. Failure to abide by the conditions of the General Order, including the enclosed MRP WQ-2016-0068-R5001 and this letter authorizing applicability, could result in enforcement actions, as authorized by provisions of the California Water Code.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. The City of Visalia must submit in writing a Notice of Termination once the Recycled Water Program has ended.

DOCUMENT SUBMITTALS

The City of Visalia shall continue to submit electronic self-monitoring reports (eSMRs) using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program Web site (http://ciwqs.waterboards.ca.gov/).

If you have any questions regarding this matter, please contact Ralph Boyajian by phone at (559) 444-2418 or by email at ralph.boyajjan@waterboards.ca.gov.

Pamela C. Creedon **Executive Officer**

Enclosures: State Water Resources Control Board Order WQ 2016-0068-DDW, Water

Reclamation Requirements for Recycled Water Use (Discharger Only)

Monitoring and Reporting Program WQ 2016-0068-R5001 Technical Memorandum of City of Visalia's Notice of Intent

cc via email:

Timothy O'Brien, State Water Resources Control Board, Sacramento

Trisha Wathen, State Water Resources Control Board, Division of Drinking

Water, Fresno



Central Valley Regional Water Quality Control Board

TO:

Clay L. Rodgers

Assistant Executive Officer

Lonnie M. Wass

Supervising Enginee

Scott J. Hatton Senior Engineer

FROM:

Ralph T. Boyajian

Water Resource Control Engineer

RCE 27722

DATE:

28 September 2016

SUBJECT:

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2016-0068-DDW, WATER RECLAMATION REQUIREMENTS FOR RECYCLED WATER USE, CITY OF VISALIA, TULARE

COUNTY

On 16 June 2016 Central Valley Water Board staff (staff) received a Notice of Intent (NOI) with an appended amendment to the 2009 Title 22 Engineering Report from the City of Visalia for regulatory coverage under WQ 2016-0068-DDW, State Water Resources Control Board Order, Water Reclamation Requirements for Recycled Water Use (or General Order). The NOI and amended Title 22 Engineering Report (Report) were signed by Courtney L. Eaton and Penny Carlo, both California registered professional civil engineers with Carollo Engineers, Inc. The NOI and the Report were also submitted to the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW). This memorandum provides a summary of staff's review of the NOI and the applicability of this discharge for coverage under the General Order.

DESCRIPTION OF DISCHARGE

The City of Visalia owns and operates a wastewater treatment facility at 7579 Avenue 288 in Tulare County, also known as the Water Conservation Plant (WCP). The WCP is regulated under Waste Discharge Requirements (WDRs) Order R5-2014-0076 for irrigation on 250 acres of City-owned fodder crops and land discharge (i.e., percolation ponds). The WCP is also regulated under the National Pollutant Discharge Elimination System CA0079189 for discharge to surface water, although the discharge to Mill Creek ceased in August 2014.

The City wishes to expand its undisinfected secondary effluent reuse to the following areas:

 Adjacent to the 250 acres of currently irrigated, City-owned fodder crop are 608 acres of tree crops, which were recently removed. The City plans to convert approximately 168 acres into fodder crop and irrigate with undisinfected secondary effluent.

KARL E. LONGLEY SCD, P.E., CHAIR ! PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

Additionally, five dairy farmers adjacent to the City's wastewater discharge conveyance
canal and percolation pond (Basin No. 4) are interested in using the undisinfected
secondary effluent to irrigate their fiber and fodder crops. The City wishes to obtain a
permit for providing these adjacent farmers with recycled water. Only farmers that have
signed the City of Visalia Recycled Water User Agreement: Undisinfected Secondary
Reuse (User Agreement) will be permitted to receive recycled water.

The Costa, Koetsier, and Barreto & Silveira dairies; LK Ranches (provides dairy fodder); and Miller Property are the five adjacent farms identified in the NOI. Costa and Miller are currently not planning to receive recycled water but are included in this NOA. The City wishes to provide recycled water to these properties and provided information on nitrogen loading, water balances, and a demonstration that recycled water can be applied agronomically.

The Users shall provide the City and Central Valley Water Board with a revised Nutrient Management Plan or Waste Management Plan for their respective dairy or property, and ensure compliance with the Dairy General Order R5-2013-0122 (if applicable). The User shall manage all applications of recycled water correctly. Acting as the Administrator, the City has an obligation to remind dairies and other Users to apply recycled water agronomically in accordance with the certified Nutrient Management Plan.

The City is in the process of upgrading its WCP to provide tertiary treatment to produce disinfected tertiary recycled water. Once that facility comes on line, the City will provide tertiary recycled water for unrestricted reuse to City-owned properties and remote farmlands within Tulare Irrigation District, which will greatly reduce the amount of recycled water provided to these adjacent dairy farmers. At that time the City will submit a new NOI to expand coverage under the General Order.

For the purpose of this NOI, the City will assume the roles and responsibilities of Producer, Administrator, and Distributor under the General Order, and will require Users to submit a recycled water use permit application for approval and train themselves for the use of recycled water. The Users of the recycled water include the City and contracted farmers.

DIVISION OF DRINKING WATER CONSIDERATIONS

The City submitted an amendment to its 2009 Title 22 Engineering Report for regulatory coverage under the General Order. DDW issued an approval letter dated 6 September 2016, for use of undisinfected secondary recycled water for those contracted use areas identified in the City's NOI until 1 July 2017 with the understanding of the following:

- The City allows use of undisinfected secondary recycled water in only designated Use Areas identified in the City's submitted NOI;
- Appropriate signage is posted in areas of public access near Use Areas;
- Minimum setback distances are maintained in Use Areas as prescribed in the WDRs;
- Maintaining of berms and passive grading for on-site containment and ponding prevention;
- Prevention of any physical connection between recycled water and any separate system conveying potable water;

- Prevention of connection to any hose bibs; and
- Meet all other requirements set in the WDRs.

The City of Visalia is required to notify DDW and receive approval prior to making any changes to the facility and operations described in the approved engineering report.

MONITORING REQUIREMENTS

Monitoring requirements included in the Use Area Monitoring section from Attachment B of the General Order are appropriate for this discharge.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. WQ-2016-0068-R5001

FOR

THE CITY OF VISALIA TULARE COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the use of the treated effluent as recycled water at the City of Visalia's Wastewater Treatment Facility, also known as the Water Conservation Plant (WCP). This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Water Code section 13268 states, in part:

- "(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
- (b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

The City of Visalia has applied for and received coverage for the recycled water program subject to a Notice of Applicability (NOA) under Water Quality Order WQ 2016-0068-DDW (General Order). These reports are necessary to ensure that the City of Visalia complies with the NOA and General Order. Pursuant to California Water Code section 13267, the City of Visalia shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom

samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a California Environmental Laboratory Program (ELAP) certified laboratory or:

- 1. The user is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
- 3. Instruments are serviced by the manufacturer or authorized representative at the recommended frequency; and
- 4. Field calibration reports are maintained and available for at least three years.

Monitoring requirements listed below may duplicate existing requirements under Waste Discharge Requirements R5-2014-0076 (NPDES Permit No. CA0079189). Duplication of sampling and monitoring activities are not required if the monitoring activity satisfies the requirements of this order. Collecting composite samples is acceptable in most cases. The facility may continue using existing sampling collection equipment that is consistent with the applicable facility order. In addition to submitting the results under another order, the results shall be submitted in the reports required by this General Order.

USE AREA MONITORING

The City of Visalia shall monitor use areas(s) at a frequency appropriate to determine compliance with the General Order and the City of Visalia's recycled water use program requirements. The City of Visalia may assign monitoring responsibilities to a User as part of the Water Recycling Use Permit program; the City of Visalia retains responsibility to ensure the data is collected, as well as prepare and submit the annual report.

The following shall be recorded for each user with additional reporting for use areas as appropriate. The frequency of use area inspections shall be based on the complexity and risk of each use area. Use areas may be aggregated to combine acreage for calculation or observation purposes. Use area monitoring shall include the following parameters:

			Sampling	Reporting
Parameter	Units	Sample Type	Frequency	Frequency
Recycled Water User				Annually
Recycled Water Flow	gpd ⁽¹⁾	Meter ⁽²⁾	Monthly	Annually
Acreage Applied ⁽³⁾	Acres	Calculated		Annually
Application Rate	inches/acre/year	Calculated		Annually
Soil Saturation/Ponding		Observation	Quarterly	Annually
Nuisance Odors/Vectors		Observation	Quarterly	Annually
Discharge Off-Site		Observation	Quarterly	Annually
Notification Signs ⁽⁴⁾		Observation	Quarterly	Annually

⁽¹⁾ gpd denotes gallons per day.

⁽²⁾ Meter requires meter reading, a pump run time meter, or other approved method such as tank volume.

⁽³⁾ Acreage applied denotes the acreage to which recycled water is applied.

(4) Notification signs shall be consistent with the requirements of title 22, section 60310(g).

REPORTING

In reporting monitoring data, the City of Visalia shall arrange the data in tabular form so that the date, data type (e.g., flow rate, bacteriological, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

The City of Visalia shall continue to submit electronic self-monitoring reports (eSMRs) using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program Web site (http://ciwqs.waterboards.ca.gov/). The City of Visalia shall report in the eSMR the results for all monitoring specified in this MRP.

A. Annual Report

Annual Reports shall be submitted by **April 1st following the monitoring year**. The Annual Report shall include the following:

- 1. A summary table of all recycled water Users and use areas. Maps may be included to identify use areas. Newly permitted recycled water Users and use areas shall be identified.
- 2. A summary table of all inspections and enforcement activities initiated by the City of Visalia. Include a discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order. Copies of any enforcement actions taken by the City of Visalia shall be provided.
- 3. An evaluation of the performance of the recycled water conservation plant, including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year.
- 4. Tabular and graphical summaries of all monitoring data collected during the year, including priority pollutant monitoring, if required.
- 5. The name and contact information for the recycled water operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the annual report shall accompany each report. The letter shall summarize the numbers and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the City of Visalia or the City of Visalia's authorized agent:

"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 the 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."

The Discharger shall implement the above monitoring program as of the date of this MRP.

Ordered by:

PAMELA C. CREEDON, Executive Officer

DATE