

**Regional Water Quality Control Board
Central Valley Region
Board Meeting –18/19 August 2016**

**RESPONSE TO WRITTEN COMMENTS ON
TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR
STRATHMORE PUBLIC UTILITY DISTRICT
STRATHMORE WASTEWATER TREATMENT FACILITY
TULARE COUNTY**

At a public hearing scheduled for 18/19 August 2016, the Central Valley Water Board will consider adoption of Waste Discharge Requirements (WDRs) to regulate the discharge of undisinfected secondary treated wastewater from a wastewater treatment facility (WWTF) and evaporation/percolation ponds owned by the Strathmore Public Utility District (District). Written comments were required to be received by the Central Valley Water Board by 5:00 p.m. on 24 June 2016 in order to receive full consideration. Comments were received from Mr. Matthew C. Pierce, General Counsel for the District, on 24 June 2016, and from Mr. Dennis Keller, the District's Engineering Consultant, on 8 July 2016. This document contains the response to written comments received from the District.

Staff has made some minor changes to the proposed WDRs, Information Sheet, and the Monitoring and Reporting Program (MRP) based on the comments. Staff has also made changes to the proposed WDRs to increase clarity and fix typographical errors. Where specific changes are presented below, additions are in bold text and deletions are in strike-out.

Strathmore Public Utility District Comments

Below are the District's comments followed by Board staff's responses.

District General Comment: The District contends that the tentative WDRs will require "the District to incur significant initial and multi-year capital outlays and significantly increased ongoing operation, maintenance, replacement, testing and reporting expenses" primarily due to the imposition of requirements related to the control of nitrates, salinity, and pathogens. The District points out that nitrates in groundwater already exceed the nitrate primary MCL, that the District may lack the necessary authority to do anything with respect to managing salinity except for adding infeasible additional treatment processes, and that there are other sources of pathogens that may be contributing to groundwater exceedances downgradient of the WWTP.

Response to the District's General Comment: Central Valley Water Board staff acknowledge that small, severely disadvantaged communities such as the District face daunting challenges when working to comply with applicable regulatory requirements. These challenges are compounded when the small community is reliant on aging infrastructure that cannot be readily upgraded. To the extent allowed under existing regulations, Board staff have made changes to the tentative WDRs to make coming into compliance more manageable for the District. These changes include extending compliance timelines, reducing monitoring requirements, and adding flexibility, where appropriate.

With respect to the District's compliance with nitrate limits (where groundwater is already exceeding applicable water quality objectives) and salinity limits, Board staff note that the CV-SALTS initiative is currently considering options to address these constituents

more comprehensively at the local level. The options currently under consideration by CV-SALTS would have the potential to change existing regulatory requirements for dischargers that are willing to cooperatively develop management and restoration strategies with other similarly-situated dischargers. The proposed WDRs acknowledge that the CV-SALTS initiative may result in changes to applicable regulatory requirements, and this is one of the reasons why Board staff have included both an extended compliance timeline and a reopener provision that would allow the Board to revise the WDRs in accordance with any regulatory changes that come about due to the work of CV-SALTS.

District Comment 1: In Specific Comments Section the District states:

The proposed facility level will require a higher certification requirement for operators, as well as increased operations and maintenance efforts. The District's current plant operator holds a GI license and would require years of additional schooling, as well as experience under a qualified license holder of at least one year in each grade, before being qualified to operate such a facility. Given the disadvantaged economic nature of the District, it is highly unlikely that the District would be able to hire a full-time qualified operator necessary for such a facility or even for the time necessary, to provide the requisite on-the-job training for its current operator. Annual narrative reports are proposed to be required to address progress on required elements that are to be completed over the referenced ten (10) year period, which will result in additional costs to the District.

Response to Comment 1: The Tentative WDRs provide a ten year schedule for implementation of any potential treatment plant upgrades, salinity management, a recycled water study, and an effluent nitrogen reduction study. The ten year period is prescribed so the District has the time to plan for and prepare for any additional cost or changes determined by the study.

District Comment 2: The time schedule for the proposed groundwater monitoring program in unrealistic. The current schedule provides only ninety days to prepare an addendum to the existing Work Plan. The schedule provides only 180 days to complete installation of new monitoring wells, without any consideration of the need for approvals, permits or generation of funds to accomplish the work. These provisions are an open pathway to the issuance of a Notice of Violation.

Response to Comment 2: Provision F.17 will be changed to allow for **180 days** for completion of the Work Plan addendum and **two years** for submittal of a Groundwater Monitoring Well Network Installation Report.

District Comment 3: New requirements to provide the MDL along with the RL/PQL in testing procedures do not appear justified. The RL/PQL should be sufficient for reporting purposes. If a result is "estimated," the MDL can be noted as needed.

Response to Comment 3: The Monitoring and Reporting requirement to provide the MDL and either the RL or PQL is consistent with recently issued Monitoring and Reporting Programs, and should be expected from a Laboratory with Environmental Laboratory Accreditation Program (ELAP) accreditation, and therefore should not be a burden for the District to report with their monitoring. No change will be made.

District Comment 4: The background facts fail to mention that the median household income (MHI) for District customers is \$18,650, as calculated by an MHI study completed in the summer of 2015.

Response to Comment 4: A finding will be added that states the following:

The District reports that a 2015 median household income (MHI) study determined the MHI for District customers is \$18,650.

District Comment 5: Multiple comments stated that the increased monitoring frequency of multiple constituents would be an economic burden on the District.

Response to Comment 5: Changes have been made as follows:

Influent: TSS and BOD changed from weekly to **quarterly** to be more in line with the previous MRP. EC and pH changed from weekly to **monthly**.

Effluent: TSS and BOD changed from weekly to **quarterly** to be more in line with the previous MRP. EC and pH changed from weekly to **monthly**, general minerals changed from biannually to **annual**, and arsenic removed.

District Comment 6: The effluent monitoring location is proposed to be changed from the District's clarigester outlet to the oxidation pond outlet. No provision is provided as to which procedures and reports are required if there is no discharge from an oxidation pond to a percolation pond or to reclamation.

Response to Comment 6: EFF-001 sampling point description has been modified as follows:

Location where a representative sample of the WWTF's effluent can be obtained prior to discharge into the percolation ponds (overflow from the oxidation pond to the percolation ponds **or if no overflow from 12" under the surface near the oxidation pond outflow point**).

District Comment 7: Reporting (5) years of quarterly groundwater monitoring data appears excessive, as this will be twenty (20) quarterly reports. A reporting period of eight (8) quarters or fewer should be sufficient to identify trends. Longer periods resulting from observed trends may warrant consideration of involvement of the Executive Officer on an "as needed" basis.

Response to Comment 7: The Groundwater Reporting section of the MRP has been changed as follows:

For each monitoring well, a table showing constituent concentrations for at least ~~five~~ **two** previous years, if available, through the current quarter.

District Comment 8: Vegetation management efforts to address Provision 14, Items b and c, cannot be suspended for 90 days, during the spring period noted, which is the period when germination and growth of vegetation will most likely be a problem. The District Will need to seek direction on procedures to determine the presence of nesting birds in the vegetation areas, the potential disturbances caused by on-site activities, the avoidance of citation conditions

associated with normal operations and the management of vector breeding which will result from being prohibited from conducting proactive vegetation management.

Response to Comment 8: The following was added to the Wastewater section of the Information Sheet:

Discharge Specification C.14.e requires that vegetation management in areas in which nesting birds have been observed be carried out either before or after, but not during the April 1 to June 30 bird nesting season. Regional Water Board staff will not find the District in violation of Discharge Specification C.14.b or c for not minimizing pond weeds in accordance with Discharge Specification C.14.e during the April 1 to June 30 period if nesting birds are observed.

District Comment 9: The information provided does not reflect that the District's source water is surface water.

Response to Comment 9: Finding 21 under Source Water Characteristics states in part:

"Source water for the District is predominately treated surface water from the Friant-Kern Canal. Groundwater from a municipal supply well is used to augment the surface water supply as needed."

No changes have been made.

District Comment 10: The TWDR state that the discharge cannot cause a violation in Groundwater Limitations. As previously noted, the quality of the groundwater fails to comply with current state and federal drinking water standards. The regulatory approach proposed appears to reflect a situation where groundwater quality meets those standards.

Response to Comment 10: Groundwater Limitation E.1.a. states in part:

Release of waste constituents from any treatment, reclamation or storage component associated with the discharge shall not cause or contribute to groundwater.

- a. Containing constituent concentrations in excess of the concentrations specified below **or natural background quality, whichever is greater** (Bold for emphasis).

No changes have been made.

District Comment 11: Oxidation pond weekly DO measurements are currently in place. These measurements appear to be deleted.

Response to Comment 11: Discharge Specification C.10 states:

"As a means of discerning compliance with Discharge Specification C.9, the dissolved oxygen (DO) content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in any single pond is below 1.0 mg/L for three consecutive sampling events, the Discharger

shall report the findings to the Regional Water Board in writing within 10 days and shall include a specific plan to resolve the low DO results within 30 days.”

No change made to Discharge Specification C.10.

The Monitoring and Reporting Program has been changed as follows:

Definition of oxidation ponds added: **OXI-1 and OXI-2 “Location/s opposite oxidation pond inlet/s where a representative sample can be obtained from each oxidation pond.”**

Pond Monitoring section revised as follows: ~~Effluent storage p~~Pond monitoring shall be collected at PND-1 through PND-6 **and OXI-1 and OXI-2 and** include at least the following:

District Comment 12: The effluent storage ponds were constructed during the wet year of 1983 to avoid a WDR violation. The ponds were in use for a period of time following, but have seen little or no use since. The observation requirements noted should be triggered by some use parameter and not be required on the frequency called out through multiple years of non-use.

Response to Comment 12: Pond Monitoring section of the Monitoring and Reporting Program has been changed as follows:

~~The~~ **While in use the** Discharger shall inspect the condition of the ~~storage~~ ponds weekly and record visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether grease, dead algae, vegetation, scum, or debris are accumulating on ~~the storage~~ pond surface/s and their location; whether burrowing animals or insects are present; and the color of the reservoirs (e.g., dark green, dull green, yellow, gray, tan, brown, etc.). A summary of the entries made in the log shall be included in the subsequent monitoring report.

District Comment 13: Additional documentation is proposed to be required regarding pathogen reduction and vector attraction reduction. Costs of monitoring and reporting have not been developed, but are significantly in excess of current costs.

Response to Comment 13: Section D, Solids Disposal Specifications provides definitions of sludge and biosolids as follows:

“Sludge in this document means the solid, semisolid, and liquid residues removed during primary or secondary treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially used as soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations.”

To clarify sampling requirements for biosolids, the Biosolids/Sludge Monitoring section has been revised as follows:

Sludge and/or Biosolids, **if intended for land application**, shall be collected at BIO-001 and sampled for the following constituents:

District Comment 14: If groundwater levels rebound causing dry monitoring wells to contain water, the cost of monitoring all installed monitoring wells will be prohibitive. The District proposes to only sample monitoring wells which represent first encountered groundwater.

Response to Comment 14: The Groundwater Monitoring section of the Monitoring and Reporting Program has been changed as follows:

After measuring water levels and prior to collecting samples, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of standing water within the well casing and screen, or additionally the filter pack pore volume. Samples shall be collected at locations CW-001 and MW-001 1 through MW-006 (and any new monitoring well sites). **If groundwater levels rebound and previously dry wells are representative of first encountered groundwater, then only those wells shall be sampled. Groundwater shall be analyzed for the following:**

District Comment 14: The total coliform groundwater limit of 2.2MPN/100 ml is an unreasonable burden on the District to prove that downgradient beneficial uses are not being adversely impacted by the facility discharge. Numerous influences exist beyond the control of the District which has the potential to influence this parameter.

Response to Comment 14: The groundwater limit is set at the Basin Plan objective; however, because of current groundwater depth, it is unlikely that an exceedance of the 2.2 MPN/100 ml limit would be caused by the District's discharge. The following footnote will be added to the Groundwater Monitoring section of the Monitoring and Reporting Program:

Monitoring for Total and Fecal Coliform is not required unless groundwater rebounds and samples are able to be collected from the 30-foot deep monitoring wells, or upon direction of the Executive Officer.