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July 8, 2016

Mr. Scott Hatton, P.E.
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA 93706-2020

Re: Tentative Waste Discharge Requirements
Discharger: Strathmore Public Utility District
Date Issued: May 2, 2016

Dear Scott:

The undersigned represents the Strathmore Public Utility District (District). This letter is in response to the Tentative Waste Discharge Requirements (TWDR) issued to the District on May 2, 2016, by the Regional Water Quality Control Board (RWQCB). This correspondence shall serve as the District's response to the TWDR and is in clarification of the letter submitted on June 24, 2016, under signature of Matthew C. Pierce, General Counsel to the District. The response attempts to convey the District's general concerns, followed by specific comments and concerns regarding many of the categories contained in the TWDR. The order of response, where applicable, is in the order of the TWDR and with our best attempt to identify the specific area of the TWDR where comment is directed. Thank you in advance for consideration of these responses and requests.

General Concerns Section

The TWDR and Monitoring and Reporting Program (MRP), as proposed, will require the District to incur significant initial and multi-year capital outlays and significantly increased ongoing operation, maintenance, replacement, testing and reporting expenses. As the District serves a severely disadvantaged community with a median household income of approximately \$18,650, the District will likely have difficulty and may not be able to raise user rates to the degree necessary to finance the anticipated capital improvements or the ongoing activities necessary to comply with the provisions of the WDRs/MRP. The District may be eligible for grant assistance to finance capital improvements of the required magnitude, but that is not a currently established fact. Operational, maintenance, replacement, testing and reporting costs will exponentially increase with the new facilities and reporting requirements, including the mandate currently in place of the State Water Resource Control Board for additional staff and staff certified at a higher grade than

the existing Chief Plant Operator. There are no known external sources of funding for other than initial capital costs. The District is required by the implementing provisions of Proposition 218 to secure authority to increase monthly customer rates from those customers. Given the nature of the TWDR and the associated schedule, it is likely that at least two (2) such rate increase processes would have to be undertaken, both of which would have to be successful in order for the District to comply with the proposed Order actions. The District has significant concern with respect to their ability to convince their customer base to concur with the anticipated increases. Participation of RWQCB staff at the time of the public hearing process is anticipated to be requested to help in this regard.

We would take this opportunity to note that defined groundwater quality parameters currently fail to meet state and federal drinking water standards. The TWDR require the District to not degrade, as a result of their discharge, groundwater quality to a level above existing drinking water standards. The groundwater is currently in that condition prior to any influence from the District's discharge. The District was required by the State, at great capital and operating expense, to construct a surface water treatment plant to provide their customers with a delivered water supply complying with state and federal drinking water standards. The user rates resulting from this mandate have resulted in monthly fees for the water utility being in excess of three percent of the median household income, double that normally considered to be a reasonable maximum.

The quantity of effluent currently discharged is less than two-thirds of one acre-foot per day. Resumption of efforts to reclaim this supply would result in a contribution to groundwater of less than 20,000 gallons per day. The groundwater related water quality improvements associated with implementing the provisions of the TWDR are not, in the opinion of the District, consistent with the forecasted dramatic increase in monthly costs to District customers. Should the District be required to shoulder any portion of the initial capital costs, the economic burden would be even more dramatic.

Specific Comments Section

1. The TWDR, if ordered without modification, will likely mandate a new wastewater treatment facility, including facilities capable of implementing program elements such as:
 - a. Title 22 compliant water recycling and nutrient management;
 - b. A nitrogen reduction plan; and/or
 - c. A salinity management plan reflecting EC limitations.

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.

2. The proposed MRP will significantly increase monitoring costs, including the time associated with sample collection. The Quarterly reports, including a fourth quarter report addressing annual information, will significantly increase existing monitoring and reporting costs and increase the operation time element related to these specific tasks.

3. For several parameters associated with plant performance, no numerical discharge specifications (discharge element concentrations) exist. Discharge performance/impact is to be measured against groundwater limitations and Basin Plan requirements. Future effort, not currently required, will be expended by the District in defending adequacy of treatment performance.

4. The time schedule for the proposed groundwater monitoring program is 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.

5. 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.

6. 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.

7. Reporting five (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.

Specific Order Comments

Background Section

1. The presented background information fails to mention that the Median Household Income for District customers is \$18,650, as calculated by an MHI study completed in the summer of 2015.

2. (Page 1, Item 6) The District has partially complied with the CAO requirements in this section. Certain pond soils, as identified in characterization efforts, will need to be removed. This will result in additional disposal effort beyond that which has previously occurred.

Wastewater Treatment and Disposal Section

1. (Pg. 2, Item 13) EC Data. Influent EC data, which is monitored, should be considered for inclusion in reporting.

2. (Pg. 2, Item 13) Copper Data. Copper test results have been elevated when compared to other dischargers in the area. The TWDR could be interpreted such that the District will be required to implement copper management protocols. If so, such protocols would result in addition studies, reports and potential collection system monitoring and improvements to the Wastewater Treatment Plant.

Groundwater Conditions Section

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

The resulting reduction in discharge impact as compared to the source water being from groundwater is not noted. In addition, referenced groundwater data is 14 years old.

B. Effluent Limitations Section (B)

1. (Pg. 12, Item 1) The proposed EC limitation is source water plus 500 umhos/cm (B.1). This objective may be hard to achieve without significant treatment. The District is unable under State law conditions to, in any manner, control brine based home or commercial water treatment equipment.

2. The Friant-Kern Canal is taken out of operation for three (3) to four (4) months every three (3) years, on average. The TWDR do not take into account the impact of canal outage periods on the base source water quality. It appears as though a separate basis is appropriate for this period of time.

C. Discharge Specifications Section (C)

1. (Pg. 12, Item 3) 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.

2. (Pg 13, Item 14a) Reference is made to an Erosion Control Plan regarding pond management. This is a new report element and an ongoing reporting arena. Significant cost is associated for no identified benefit. Certain pond structures have been in existence since the initial plant construction and others since 1983. Virtually no erosion related maintenance is currently required. The District feels that this is another provision where significant new resources are required to be invested for no identified gain.

3. (Pg. 13, Item 14e) Vegetation management requirements would require consideration of birds nesting between April 1 and June 30. This represents a new requirement and new cost center. No identification of T&E or migratory species is required on which such restrictive operational requirements are based.

E. Groundwater Limitations Section (E)

1. (Pg 14, Item 1a) Constituent concentrations are mandated to not exceed Title 22 MCLs or background levels, whichever is greater. Specific numeric requirements mandate that N levels be less than 10 mg/ℓ. As groundwater already exceeds this level, which is the Nitrate MCL, the TWDR contains an unresolved conflict.

2. (Pg 15, Item 1b) Total Coliform concentrations greater than 2.2 MPN/100 ml would be prohibited. Immediate downgradient discharges from household septic tank/individual disposal system discharges exist. This TWDR provision places 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 have the potential to influence this parameter.

F. Provisions

1. (Pg. 17, Item 16) The following reports have been noted to be required, each of which requires new funding, requiring a source of revenue which is not in place, or exists, at the current time:
 - a. WWTP Evaluation to determine upgrades needed to meet Basin Plan, including nitrogen reduction (1 year);
 - b. Salinity Management Plan including EC limitation compliance (4 years);
 - c. Study regarding potential recycled water program (5 years):
 - i. If feasible, Title 22 Report and Application for Waste Discharge;
 - ii. If feasible, nutrient management plan for land application; or
 - iii. If not feasible, nitrogen reduction program (6 years); and
 - d. Annual reporting regarding progress on required reports.

Monitoring and Reporting Program (MRP)

Influent Monitoring Section

The District anticipates that the new MRP requirements will result in a cost of \$4,060 annually. The BOD and TSS monitoring, which cost \$50 per set, will be required weekly, as compared to their current quarterly schedule. This single source is a net annual cost increase of \$2,400. The new effluent monitoring requirements will necessitate sampling of additional parameters such as nitrogen matrix, sodium, chloride and possibly general minerals, each further increasing sampling and testing costs above those noted herein.

Effluent Monitoring Section

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.

The District will have to significantly increase the number of parameters it currently monitors. It currently monitors four (4) parameters and would be required to monitor twenty-seven (27). This includes a new BOD and TSS monitoring increase from quarterly to weekly, at a cost of \$50 per set, as well as a monthly nitrogen matrix (ammonia, nitrates, TKN and total nitrogen). This will result in an approximately \$6,000 annual increase in the District's sampling and testing costs for this arena only. Reporting costs, including cost of direct laboratory reporting, are currently unknown, but far in excess of existing costs.

Pond Monitoring Section

1. Oxidation pond weekly DO measurements are currently in place. These measurements appear to be deleted.
2. 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.

Groundwater Monitoring Section

All of the District's monitoring requirements will increase from annual to quarterly sampling. The annual monitoring costs, per well, will increase approximately \$1,200 per well. This does not take into account the fact that the District will need to drill on the order of 14-21 new wells, as the District's seven (7) current monitor wells are dry. This cost is estimated to be on the order of \$250,000 - \$500,000. It is acknowledged that the District will be required to revisit and update its Groundwater Monitoring Plan. The frequency of sampling and the parameters should be determined by the Plan update and addressed in the approval process for the Plan.

Source Water Monitoring (Water Supply Monitoring) Section

TWDR provisions indicate flow-weighted averages of concentrations from each source. The Water Treatment Plant produced water is currently the only source. Water quality during periodic Canal maintenance periods have already been identified as a period for which a separate flow-weighted average should be considered.

Biosolids/Sludge Monitoring Section

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.

1. The TWDR require a change from multiple reporting frequencies to quarterly reports. The mandated Fourth Quarter Report includes additional materials. Increased costs and staff time will be required.
2. New reporting is required as follows:
 - a. Annual sludge production;
 - b. Rolling quarterly averages of EC data; and
 - c. Tabulated monitoring data, including the RL/PQL and the MDL.

Additional cost increases and requirements for staff time will result, as well as for non-staff generated reports and attachments.

Conclusions

The District seeks the Board staff and Board's reconsideration as to the above-referenced concerns and impacts. The District requests that the Board staff revisit the TWDR/MRP, taking into account the draconian costs of implementation that such requirements would pass on to the District customers. The unrealistic financial burden of compliance is certain to make it impossible for the District to meet the requirements proposed to be established by Order. The quantity of discharge into an already non-drinking water standard groundwater condition mandates a different condition that an establish high quality groundwater condition.

The District wishes to work with Board staff to modify the proposed requirements so that they are attainable and reflective of protection of beneficial uses of groundwater in the area. The current anticipated financial burden on the District's customers, based on the TWDR, appears to make the goals of these requirements unobtainable. At the very least, the Board and Board staff need to understand that the District is very concerned regarding potential liability it will incur if it fails to meet new requirements as currently proposed.

Very Truly Yours,



Dennis R. Keller
Consulting Civil Engineer

cc: Strathmore Public Utility District
Mr. Matt Pierce, Attorney for District