



CITY OF SANGER
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PUBLIC WORKS DEPARTMENT

JOHN F. MULLIGAN, PUBLIC WORKS DIRECTOR

December 23, 2013

Regional Water Quality Control Board
Mr. Dale Harvey, Senior Engineer
1685 E Street
Fresno, CA 93706

RE: Tentative Waste Discharge Requirements for the City of Sanger Domestic Wastewater Treatment Facility

Dear Mr. Harvey:

On behalf of the City of Sanger, we are pleased to provide our comments and concerns for the Tentative Waste Discharge Requirements issued on November 14, 2013.

Like many cities in the Central San Joaquin Valley, the City of Sanger was deeply affected by the economic downturn of late 2008 and 2009. Prior to the resulting layoffs and significant budget cuts in all City departments, the City had been planning to expand the Wastewater Treatment Facilities. The City's planning and design efforts of 2005–2008 had included the preparation of the January 2006 Wastewater Treatment Plant Master Plan and the construction plans for a 2008 WWTF Expansion. These documents included the construction plans for 5.3 million gallons per day (MGD) WWTF at a cost of \$34 million. This project was to be funded by anticipated future users and existing users. The 5.3 MGD design was essentially an entirely new domestic WWTF with two oxidation ditches capable of de-nitrification capabilities. Due to the deep decline in development plans (with corresponding decline in revenue) within the City, the project was never built.

Although the planning efforts for the plant expansion had been consistent with growth factors at the time, any future planning efforts will target a lesser growth rate. Therefore, significant efforts will be required in order to re-think the City's approach to growth and regulatory requirements. As an example, an average growth of 2% per year is more appropriate for the upcoming 10 and 20-years periods. Using this grow factor to project the domestic plant flows would result in a 2.1 MGD and 2.6 MGD flow (average day maximum month flow), respectively. The corresponding annual average projections are 1.9 MGD and 2.4 MGD (average annual flow), respectively. These figures are substantially less than the previously designed 5.3 MGD facility. These projected flows would remain lower than the existing 3.0 MGD plant capacity.

The City continues to operate separate domestic and industrial wastewater treatment facilities with an average annual flow of 1.6 mg and 0.4 mg, respectively. The City completed the requirements of the previous issued WDR issued in 1998 and will continue to comply with all future waste discharge requirements.

The following comments are specific to the Tentative Waste Discharge Requirements issued on November 14, 2013. The City's comments are primarily related to the requirements of an industrial pretreatment program, the effluent nitrate nitrogen limits of 10mg/L, and the requirements for groundwater limitations in the vicinity of the Lincoln ponds. Additionally, minor comments are developed for corrections and minor editorial issues.

1. PRETREATMENT PROGRAM. As a result of the 1998 WDR requirement, the City developed and adopted a robust City Ordinance for Industrial Discharge Requirements. The City of Sanger's existing Municipal Code includes the Industrial Discharge Requirements (Chapter 82-Utilities, Article III, Sewer Service, Division 4. Industrial Discharge Requirements constitute a Pretreatment Program for the City. The Ordinance identified discharges into three groups, including heavy metal discharges. The Municipal code and the IDR can be found at the City's website www.ci.sanger.ca.us. This Ordinance covers the items listed in Provision F.17 and F.18. The Ordinance specifically includes limits on items such as explosive liquids, and discharges limits with a pH between 6.5 and 8.0. It also places limits on FOG, limits temperature, and the concentrations of many heavy metals. As an indicator to providing strict restrictions on industrial discharges, the City has not had seen heavy metals appear in the sludge sampled and hauled away every two years. The sludge is sampled per the 503 regulations every six month by the hauler. The City recognizes that the strict National Pretreatment Standards of 40CFR403 were not imposed on the City's 98 WDR requirements and are not within the TWDRs. Therefore, the City has essentially developed the IPP program with the development and adoption of the Sewer Ordinance Section 8
2. PROVISION B.3 and F.19 on TOTAL NITROGEN. The City is requesting to eliminate provision B.3 and that the Groundwater Limitations of provision D.1.a.i are sufficient for addressing the effluent nitrogen. As mentioned above, the City was ready to expand the facilities in 2009 with an entirely new plant capable of accommodating aggressive growth along with Nitrification and De-nitrification capabilities. The current thinking will require a new approach to accommodate more moderate growth. Construction of any new facilities would place an additional financial burden on the existing users. Requiring total nitrogen limits will require some re-evaluation of the existing plant's ability to denitrify and possibly explore the ability to irrigate on the City's adjacent feed and fodder crops. The domestic plant effluent water quality and existing nitrogen value is better utilized on nitrogen-consuming crops grown on the City farm. However, the political will to irrigate the farm with domestic plant effluent may take some time to develop. With an annual water demand of approximately 840 acre feet (on the 140 acre farm) and an IWWTF effluent production of 338, there is a need for additional crop water at the City farm. Supplemental water is typically used to satisfy the crop water deficiency. If the City develops the political will for irrigating the adjacent farmland, the proper CEQA requirements will be followed. Alternatively, the City may explore the possibility to containing the effluent within the Lincoln ponds in lieu of de-nitrification at the plant. Restricting the effluent at the plant will not allow for this alternative which will protect groundwater.
3. PROVISION F.20, GROUNDWATER LIMITIATIONS. The time frames appear too aggressive for these requirements. All six monitoring wells have gone dry due to the dropping water table in the vicinity. Only Well No. 3 groundwater was collected for the 2013 annual testing as a result of the dried wells. Well No. 3 has since gone dry as well. In order to assess the groundwater, further monitoring well installation will likely be required along with further monitoring. The

determination of proper well locations and well installation could take as long as 2 years followed by a few years of quarterly well sampling. Therefore, provision F.20.a. should be a minimum of 4 years with F.20.b. a minimum of 7 years, F.20.c. a minimum of 7.5 years and F.20.d. at 14 years. Although the groundwater can be assessed with the historic groundwater data, it may not mean much with such a drastic change in the water tables.

The City is not opposed to the Central Valley Clean Water Association's approach to deleting this provision until the ongoing CV-Salts efforts are further along at which time regional solutions may be explored.

4. Additional Comments. There are a few comments and edits that are needed to the TWDR.
 - i. Findings 8: The second sentence should be replaced with the following two sentences; "The design influent average annual and maximum month biological oxygen demand (BOD) is 224 milligrams per liter (mg/L) and 276 mg/L, respectively. The design influent average annual and maximum month total suspended solids (TSS) concentrations are 226 mg/L and 308 mg/L, respectively."
 - ii. Please add a Finding to Groundwater Conditions: As a result of the ongoing drought and dropping water table, five monitoring wells went dry in early 2013 and the last remaining MW No. 3 went dry during the last quarter of 2013.
 - iii. Finding 44: Sentence after 44.h referencing Provision F.16 should be eliminated. See comments above to Pretreatment Program requirements. Reference to the City's Municipal Code and Ordinance 990 can/should be made in place of reference to Provision F.16. Also, second sentence after 44.h., eliminate reference to Provision F.19 (see comments above). The City may consider alternatives in lieu of constructing/modifying the treatment units to comply with the groundwater limitations.
 - iv. Fining 48: Second Sentence indicates that the TWDR requires that the City is required to evaluate potential reclamation of the effluent from the Domestic WWTF. The requirement for this could not be found. Please eliminate this sentence if there is no such requirement.
 - v. Effluent Limitation B.1: The monthly average daily dry discharge limit should be 3.0 mg. This matches the 1998 WDR and the plants current capacity. Footnote 1 refers to INF-001, but this term is not defined until later in the document and should be defined at this point.
 - vi. Groundwater Limitations: The footnote in D.1.a.ii. should be clarified. There is a difference between instantaneous versus running average testing and how compliance will be determined.
 - vii. Information Sheet: The RWQCB should add a paragraph to the issue of all the wells going dry and how that groundwater result may be entirely different once new wells are drilled.

5. Monitoring and Reporting Requirements-Requested Changes:
 - i. Page 2 Influent Monitoring: If acceptable, change the frequency of BOD and TSS to equal the Effluent Monitoring frequency to twice monthly instead of weekly.
 - ii. Page 2 Influent Monitoring: To keep consistent with prior sampling, use composite pH monitoring instead of grab sampling.

- iii. Page 3 Effluent Monitoring: Please drop the sampling of these constituents as previous data over the years shows very small or no changes in the analysis, especially the new constituents, which have been sampled since 2006 and are non-detect in the effluent.
- iv. Page 4 Groundwater Monitoring: Quarterly monitoring will dramatically increase the cost to the City for the groundwater monitoring. The 98 WDR only required annual sampling frequency. The City also provides more frequent testing as a requirement to a previous groundwater evaluation requirement. The City respectfully requests annual sampling in lieu of quarterly sampling.
- v. Page 4 Source Water Monitoring: Is there a need to compute the Average for General Minerals? The City requests that the “computed average” requirement be eliminated.
- vi. Page 4, Sludge/Biosolids Monitoring: At the present flow of 1.6 mg, the City generates approximately 450 tons/year. Historic practice has been to contract with a licensed hauler every other year to haul sludge. The sludge hauler tests the sludge per 503 regulations every six months. To comply with their requirement. There has never been an issue with the sludge being hauled away at this frequency and with the 6 month sampling and testing. Therefore, quarterly testing of the sludge will increase costs to the City which would result in no foreseeable benefit other than having more sludge sampling data. The City request that they continue the current practice of sampling every six months and hauled every two years
- vii. Page 7 Groundwater Reporting Item 3: Please clarify that the contour map is only needed once every quarter of the previous year and not 4 contour maps (one for each quarter).

Should you have any questions regarding these comments feel free to call me at the City or call Amando Garza of Cannon Corporation at 661-616-6219.

Sincerely,



John Mulligan,
Public Works Director
City of Sanger