August 17, 2007

Jim Marshall  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive, Ste. 200  
Rancho Cordova, CA 95670-6114

SUBJECT: Tentative Waste Discharge Requirements for the City of Lodi  
White Slough Water Pollution Control Facility

Enclosed are the City’s comments regarding the Tentative Waste Discharge Requirements for the City’s White Slough Water Pollution Control Facility (WPCF).

We appreciate the time you and Gayleen Perreira have taken to discuss with us the City’s facility operation and data, as well as the Board’s position on various permit details. Improving understanding is very helpful in arriving at a reasonable and environmentally protective permit.

Having reviewed the tentative permit, we do have comments and concerns that are described in the enclosed material.

Key issues addressed in the enclosure include:

- Appropriate mass limitations for mercury  
- Revision of ammonia limit  
- The need for five-year compliance schedules for ammonia, nitrate and nitrite  
- Revision of BOD loading limits

In addition, there are a number of technical/editorial comments. If you have any questions on the comments, please contact me at your convenience. Also, the City would prefer the hearing take place in Sacramento rather than Fresno and will readvertise the hearing notice at our expense if it is rescheduled.

Sincerely,

Richard C. Prima, Jr.  
Public Works Director

RCP/pmf  
Enclosure  
cc: Blair King, City Manager  
    Charlie Swimley, Water Services Manager  
    Bruce West, West Yost Associates  
    Kathryn Gies, West Yost Associates
Major Comments/Discussion items

Total Mercury Loading Limitations

1. The City’s mercury load was capped in the previous permit based on the performance at that time. The loading limit included in the previous permit was 0.113 lb/month. As shown in the enclosed Figure 1, at the WPCF build out flow rate of 8.5 mgd, the maximum allowable discharge concentration would be 0.0515 µg/L.

2. During the previous permit term, the City improved its effluent quality (by providing a tertiary treatment upgrade and implementing a public outreach program).

3. The maximum pre-upgrade effluent mercury concentration (based on data collected using ultra clean techniques) was 0.0368 µg/l. The maximum observed effluent mercury concentration since the upgrade is 0.0072 µg/L (effluent data collected from 2/2/05 to 8/8/06). Figure 2 shows the total mercury concentrations in the WPCF effluent measured between January 2002 and March 2007.

4. The Regional Board is proposing to set the limit based on data only collected since the upgrade was completed.

5. As shown in the following summary table, the current mercury effluent concentrations for the WPCF are amongst the lowest for dischargers to the Delta.

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Maximum Concentration, ng/l</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brentwood WWTP</td>
<td>2.2</td>
<td>15</td>
</tr>
<tr>
<td>Rio Vista Trilogy WWTP</td>
<td>3.7</td>
<td>1</td>
</tr>
<tr>
<td>Deuel Vocational institute WWTP</td>
<td>4.6</td>
<td>4</td>
</tr>
<tr>
<td>West Sacramento WWTP</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Lodi WWTP</td>
<td>7.2</td>
<td>15</td>
</tr>
<tr>
<td>Discovery Bay WWTP</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Stockton WWTP</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Flag City WWTP</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Tracy WWTP</td>
<td>18.6</td>
<td>13</td>
</tr>
<tr>
<td>Rio Vista WWTP</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Manteca WWTP</td>
<td>20.3</td>
<td>14</td>
</tr>
<tr>
<td>SRCSD Sacramento River WWTP</td>
<td>24.9</td>
<td>302</td>
</tr>
<tr>
<td>SRCSD Walnut Grove WWTP</td>
<td>29.4</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Sacramento-San Joaquin Delta TMDL for Methylmercury - Draft Report, Revised June 2006. Table G.1
6. The City contends that the proposed new limit has the effect of penalizing the City for improving performance over the last five years. In addition, this sends the message that every time a discharger makes an improvement with regard to mercury concentrations, the loading limit will be further "ratcheted down." This approach will discourage, rather than encourage, aggressive actions to reduce loadings.

7. The City believes we are in a position that is very unique from most Central Valley dischargers because: (a) we received one of the first mercury loading limitations applied in our 2000 NPDES permit in the Central Valley and have been working toward reducing loads for over seven years; and (b) we have upgraded our WPCF to provide a tertiary level of treatment. Other dischargers that have not improved their water quality by providing tertiary treatment and are just now receiving their first mercury loading requirements would receive a much higher loading allowance than is currently being proposed for the WPCF.

8. The SIP states that: “For bioaccumulative priority pollutants for which the receiving water has been included on the CWA Section 303(d) list, the RWQCB should consider whether the mass loading of the bioaccumulative pollutant(s) should be limited to representative, current levels pending TMDL development in order to implement the applicable water quality standard.” (p.22). The purpose of this provision is to preserve the status quo in advance of TMDL development and to ensure that POTWs are not required to make significant investments in new treatment or infrastructure before a TMDL is completed and appropriate wasteload allocations are developed.

9. The revised draft Basin Plan Amendment on Methylmercury TMDLs (Feb 2007) provides that upstream tributary watershed dischargers who are not subject to the Delta mercury control program but may be subject to future mercury control programs could receive “credit” for early improvements as follows: “The Regional Board will acknowledge early implementation of mercury controls by Central Valley dischargers and grant credit towards meeting future allocations and implementation requirements as they are developed for sources upstream of the Delta.” The City contends that such “credits” should be considered for the WPCF discharge by adopting a limit based on flows and concentrations that were occurring prior to the tertiary upgrade.

10. As shown in the enclosed Figure 1, for the City to maintain compliance with the proposed loading limit of 0.013 lb/month at the WPCF build out flow rate of 8.5 mgd, the effluent discharge concentration would need to be reduced to 0.0059 µg/L. This would require a 18 percent decrease over current conditions. Based on the information developed as part of the City’s mercury outreach program and available data from other dischargers to the Delta, the City contends that it would be very difficult to lower the current effluent concentrations. Thus, the proposed limit would act as a de facto limitation on growth in the City’s service area. This is of great concern to the City as options for offset programs have not been established. Therefore, the City contends that if the loading limit is to be based only on water quality data collected since the upgrade, the limit should also be based on the current treatment capacity of 8.5 mgd.

11. Also, the City is planning to accept up to 0.2 mgd of wastewater from the Flag City Service Area No. 31, eliminating the current discharge from the Flag City WWTP. Based on data previously provided by the City to the Regional Board staff, the maximum effluent mercury concentration in the Flag City discharge is 0.2 µg/L.
Therefore, the City requests that our mercury loading limit be modified to allow for additional loading associated with this source.

12. One possible approach (Approach A) would be to provide a limit based on a discharge flow of 7.0 mgd and concentrations that were occurring prior to the tertiary upgrade. This limit would be equivalent to 0.064 lb/month. As shown in Figure 1, this is approximately half of the loading limit provided in the previous permit and would allow an effluent concentration of 0.0293 µg/L at the 8.5 mgd build out conditions. This limit would be on par with the effluent water quality being discharged by other POTWs in the Delta region and would allow for additional loading associated with Flag City.

13. Another approach (Approach B) would be to provide a limit based on the current WPCF capacity of 8.5 mgd but to assume that 0.2 mgd of this capacity would consist of contributions from Flag City. This limit would be equivalent to 0.026 lb/month. As shown in Figure 1, this would allow an effluent concentration of 0.0117 µg/L at the 8.5 mgd conditions. This limit would be in the middle of the range of the effluent water quality being discharged by other POTWs in the Delta region.

14. Finally, the City believes it would be appropriate to express the mercury requirements as an annual load instead of a monthly load. This will preserve the option of offsetting loads in the future by increasing reuse. This is also appropriate for a constituent such as mercury, where the concern is long-term bioaccumulation rather than acute toxic effects.

**Monthly Average Effluent Ammonia Limits**

The City appreciates the RWQCB staff's diligent efforts in using an appropriate approach for deriving effluent limitations for ammonia that are both protective of the receiving water and consider actual site-specific conditions. However, we believe we have identified one minor error in the calculations presented.

The Regional Board has used the equations in Box 5-2 (Page 100) of the Technical Support Document for Water Quality-Based Toxics Control (TSD) to develop the ammonia limits. As stated in Footnote 3 of Table F-7 in the Tentative Order, the Regional Board correctly applied the TSD formulas in calculating the chronic LTA (\( LTA_c \)) from the chronic criterion (or Waste Load Allocation, \( WLA_c \)) using the following equations:

\[
LTA_c = WLA_c \times \exp[0.5\sigma_{30}^2 - z \sigma_{30}]
\]

where \( \sigma_{30}^2 = \ln(CV_{30}^2/30 + 1) \)

However, as outlined on page F-44 of the TWDRs, the acute LTA is the most limiting condition. Therefore, the permit limit was derived based on this LTA (also called \( LTA_{\text{MIN}} \)). As outlined in the TSD, the Average Monthly Effluent Limits (AMEL) should be calculated from the \( LTA_{\text{MIN}} \) using the following equation:

\[
AMEL = LTA_{\text{MIN}} \times \exp[0.5\sigma_n^2 - z \sigma_n]
\]

Where: \( \sigma_n^2 = \ln(CV_n^2/n + 1) \)

“\( n \)” = sampling frequency

The required effluent sampling frequency for ammonia provided in the Monitoring and Reporting Program (MRP) is once a week. However, the Regional Board used an “\( n \)”
value of 30 in the AMEL equations. Therefore, the City requests that the monthly average limitation be recalculated to reflect the weekly monitoring frequency ("n" value of 4).

We would note that the December 22, 1999 Federal Register states that if the ammonia limits were based on the chronic criterion (which has a 30-day averaging period), it would be appropriate to calculate the AMEL using an “n” value of 30. This is because the “n” value should “not be less than the averaging period upon which the criterion value is based.” However, in this case the ammonia limits are based on the acute criterion. Therefore, this exception does not apply.

The revised monthly average ammonia limit should be set to 2.5 mg/L.

**Time Schedule Order Compliance Deadline**

The Tentative Order and associated Time Schedule Order require that the City comply with the ammonia, nitrate, and nitrite limits by May 17, 2010. The May 17, 2010 deadline applies to effluent limitations derived from California Toxics Rule criteria but does not apply to effluent limitations that implement Basin Plan narrative or numeric criteria such as those for ammonia, nitrate and nitrite.

The Regional Board has stated that the proposed deadline is appropriate because it will be approximately six months after the upgrade project is currently planned to be completed. However, the ammonia limits in the Tentative Order are more stringent than anticipated when the design for the current project was being developed. At that time, the Regional Board was directly applying “floating” ammonia limits in permits and during the cooler weather months (when nitrification rates are low and wastewater influent loadings are highest) the applicable limits would likely range between 2.5 and 6.1 mg/L.

The City will need time to evaluate the impacts of the proposed limits on the current design. Moreover, because treatment performance for ammonia reduction is interrelated with nitrate removal, the lower ammonia limits could also affect the City’s ability to comply with the proposed nitrate and nitrite limits. If substantial design changes are necessary to achieve the more stringent limits, the completion date for the current project could be extended. However, until we complete the initial analysis, we cannot predict how long of an extension is needed. Therefore, the City requests the original five-year compliance schedule be provided. While the additional time is needed to ensure that the City has adequate time to design, construct and start-up new facilities (if necessary), it is in the City’s best interest to meet the new nitrogen limits as soon as possible, given that increasing the discharge flow is dependent on meeting these requirements.

**BOD Field Loading Limitations**

This comment is three fold. 1) The City contends that a BOD field loading limits should be based on a seasonal average, not a cycle average as currently stated in the Tentative Order. 2) The City will need at least five years to assess and implement the measures needed to meet a seasonal BOD loading limit for the individual field areas. 3) The City believes an approach similar to the Regional Board’s approach to salinity regulation is an appropriate approach for implementing the EPA guidelines for BOD loadings (see Management Guidance for Salinity in Waste Discharge Requirements, issued on April 26, 2007).
1) The BOD loading limit should be stated on a seasonal average for the following reasons:

- The proposed limitation is based on the recommended USEPA guidelines, *Pollution Abatement in the Fruit and Vegetable Industry*, July 1977 (USEPA Guidelines), which contain a 100 lbs/acre/day “estimated recommended maximum BOD load to be added on well-aerated soil” as an average summer season load (see Table IV-3. BOD Loading Rates on p. 66 of the USEPA Guidelines).

- Page F-57 of Tentative Order states: “In this guideline, USEPA recommends a maximum BOD loading to a well-aerated soil of 100 lbs/acre/day as a seasonal average. Because the majority of BOD loading to The Agricultural Fields is associated with cannery waste, this Order contains a maximum BOD loading limit of 100 lbs/acre/day as a cycle average based on these recommended guidelines.”

- The City contends that the seasonality of the cannery discharge to the WPCF is not an appropriate justification for providing a more stringent cycle average limit because most canning facilities experience seasonal flows. For a typical canning facility, the canning season irrigation flows would be supplemented by other sources of irrigation water during the months when process flows are low. Nevertheless, the EPA recommended loading limit is clearly supposed to be applied as a seasonal average, despite the likely variability in applied BOD loads.

- The City’s current practice of blending the cannery flows with municipal effluent is likely to result in conditions that are better than a typical discharge from a canning facility.

- If a cycle average were applied, the City would be out of compliance during most of the canning season. During previous years, some cycle average loadings have been as high as 200 lbs/acre/day.

2) The City will need at least five years to assess and implement the measures needed to meet a seasonal BOD loading limit for the individual field areas for the following reasons:

- The City has never measured directly the applied BOD loading rates. Therefore, the ability to comply and/or the means to achieve compliance with even a seasonal limit of 100 lbs/acre/day on a per field basis cannot be determined at this time.

- As documented in the Tentative Order, the City has provided data that demonstrates that a 100 lbs/acre/day limit as a seasonal average over the entire irrigation area can currently be met. However, this data also shows that there may be occasional loadings above 100 lbs/acre/day (max of 160 lbs/acre/day) for individual fields in some years.

- The City will require at least one year of monitoring data to assess current BOD loadings to determine whether we can meet the proposed limit on a per field basis.

- If the limit cannot be achieved, the City will need to evaluate whether operational practices can be employed to reduce loadings to the required levels. At least one to two years is needed to make such an assessment.
Finally, if operational practices are not adequate to achieve the limit, it may be necessary to expand the land application area to achieve this goal. This could be costly and such an effort could take at least two years to complete.

3) Finally, the Regional Board’s approach for applying salinity objectives would be appropriate for application of the field BOD loading limit of 100 lbs/acre/day as a seasonal average for the following reasons:

- Like the salinity goals, the proposed BOD loading limit is based on a general guidance not an adopted criteria.
- The proposed loading limit does not take into account site specific conditions.
- No evidence has been provided that historic loadings of BOD have lead to nuisance odor conditions or groundwater degradation.
- Like the salinity goals, compliance with this guideline could require significant expenditures.

The City proposes the following approach for establishing the proposed seasonal BOD loading limit:

- Replace the proposed limit of 100 lbs/acre/day as a cycle average with a performance-based limit of 100 lbs/acre/day as a seasonal average for the entire irrigated area.
- Establish a goal of 100 lbs/acre/day as a seasonal average for each individual field area.
- Allow the City to complete an optional site-specific study to evaluate the appropriate BOD loading rate for the site that ensures nuisance odor conditions and/or degradation of groundwater will not occur. Similar studies were allowed in the WDRs for SK Foods and Colusa County Canning Company, Williams Tomato Processing Facility. The purpose of this study would be to:
  - Define current irrigation water BOD concentrations and associated field loadings.
  - Define the impacts to groundwater and/or soil due to historic BOD loadings. (Note that the groundwater studies already included in the Tentative Order require that the City evaluate impacts associated with the City’s current practices to groundwater metals concentrations.)
  - Define the potential for the creation of nuisance odor conditions based on the current (performance-based) loadings.
  - Define the appropriate BOD loading limits to prevent odors and/or groundwater degradation.
- In the absence of completing a site-specific study, the final goal of 100 lbs/acre/day as a seasonal average for each field area would become applicable in the next permit.

The interim seasonal average limit would be defined as follows:

**BOD5.** The maximum BOD5 loading to the any individual agricultural fields (1A through 6G as shown in Attachment C-2) shall not exceed any of the following:
a. 100 lbs/acre/day as a cycle seasonal average

20°C Biological Oxygen Demand, 5-day (BOD5) (Section IV.B.3.).
BOD5 loading rates shall be calculated for each irrigation field on a monthly basis using the total volume applied on the days of application, the number of days between applications, the total application period, application area, and a running average of the three most recent results of BOD5 for the applicable source wastewater. A running average for the entire irrigation season of the loadings to each of the individual fields shall be calculated. For compliance determination with the interim limit, the cycle season-long running average BOD5 loading rates for each irrigation field shall be averaged together to calculate the loading rate to the entire irrigated area. Using the total volume applied on the day of application, the number of days between applications, the total application period, application area, and a running average of the three most recent results of BOD5 for the applicable source wastewater. When reporting, include the daily BOD5 loading rates, which shall be calculated using the total volume applied on the day of application, estimated application area, and a running average of the three most recent results of BOD5 for the applicable source water.

The loading limit goal would be defined as follows:

BOD5. The maximum BOD5 loading to any individual agricultural field (1A through 6G as shown in Attachment C-2) shall not exceed any of the following:

a. 100 lbs/acre/day as an irrigation cycle season average
b. The daily and seasonal cycle average loading rate that ensure compliance with Discharge Prohibition III.B and Groundwater Limitations V.
TECHNICAL/EDITORIAL Comments

1. **Average Daily Discharge Flow**

The City contends that the average daily discharge flow should be defined as the average dry weather flow. **Page 35, Item VII.F and G** should be modified as follows:

**Mass Effluent Limitations.** Compliance with the mass effluent limitations will only be determined during average dry weather periods during months when rainfall has not occurred, groundwater is at or near normal, and runoff is not occurring.

**Average Dry Weather Daily Discharge Flow Effluent Limitations.** The Average Dry Weather Daily Discharge Flow represents the daily average flow when groundwater is at or near normal and runoff is not occurring. Compliance with the Average Dry Weather Daily Discharge Flow effluent limitations will be determined annually based on the average daily flow over three consecutive dry weather months (e.g., July, August, and September) and will be measured at times when groundwater is at or near normal and runoff is not occurring.

Similar changes would be required to the following:

- **Page 10. Item IV.A.1.g Final Effluent Limitations (7.0 mgd), Average Daily Discharge Flow**
- **Page 10. Item IV.A.2 Final Effluent Limitations (7.2 mgd)**
- **Page 10. Item IV.A.2.b Final Effluent Limitations (7.2 mgd), Average Daily Discharge Flow**
- **Page 10. Item IV.A.3 Final Effluent Limitations (8.5 mgd)**
- **Page 11. Item IV.A.3.b Final Effluent Limitations (8.5 mgd), Average Daily Discharge Flow**
- **Page 33. Item VI.C.7.b, Compliance Schedules, Phase III Improvements Fact Sheet Page F-48, IV.D Final Effluent Limitations**

2. **Compliance Schedules**

The City contends that compliance with the final effluent limitations should be based solely on the schedule allowed in the permit. Therefore, **Page 9. Item IV.A.1.a Final Effluent Limitations, Table 6, Footnote 2** should be modified as follows:

This Order includes interim effluent limitations for aluminum, ammonia, chlorodibromomethane, and dichlorobromomethane (section IV.A.4.a.). Effective immediately, the interim effluent limitations shall apply in lieu of the respective final effluent limitations. The final effluent limitations for aluminum, chlorodibromomethane, and dichlorobromomethane become effective 18 May 2010, and the final effluent limitations for ammonia, chlorodibromomethane, and dichlorobromomethane become effective five years from the effective date of this order when the Discharger complies with Special Provisions VI.C.7.b, or 18 May 2010, whichever is sooner.
3. **Field Metals Loading Limits**

For clarification, the City requests the following change on Page 12, Item IV.B.4 Land Discharge Specifications:

**Metals.** Wastewater applied to any agricultural field (1A through 6G as shown in Attachment C-2) shall not exceed the following cumulative metals loading rate limits:

4. **Groundwater Monitoring Plan Due Date**

Permit requires that the Groundwater Monitoring Workplan be submitted by November 1, 2007. The City requests that the compliance deadline be changed on Page 25. Item VI.C.2.d.i to **90 days from the effective date of the permit.** This change would not affect the other compliance deadlines related to the background groundwater quality and groundwater degradation assessment study.

5. **Effluent and Receiving Water Characterization Study**

Receiving water characterization should be completed for a site outside the influence of the discharge. Therefore, the City contends that the receiving water monitoring under this study should be completed at R-005. As such, Page 26. Item VI.C.2.f should be modified as follows:

An effluent and receiving water monitoring study is required to ensure adequate information is available for the next permit renewal. During the third year of the permit term, the Discharger shall conduct quarterly monitoring of the effluent at EFF-001 and of the receiving water at RSW-004005.

6. **Wastewater Applications During Precipitation Events**

In the area of the WPCF, precipitation events can occur during the typical irrigation season and only provide a very small portion of the total irrigation demand. Therefore, it is the common practice during these types of rainfall events to irrigate the agricultural fields prior to, during and just following precipitation. The City requests that the restrictions on irrigation provided on Page 30. Items VI.C.5.d.ii be modified as follows:

iii. Wastewater may not be used for irrigation purposes, or Biosolids may not be applied, to any agricultural field 24 hours before forecasted precipitation, during periods of precipitation, and for at least 24 hours after cessation of precipitation, or when soils are saturated.

iv. Wastewater may not be used for irrigation purposes when soils are saturated.

7. **Influent Water Quality Monitoring**

Page E-3. Item III.A. Table E-2 Footnote 2

The first sentence in the footnote states: “Influent flow shall be determined from a time-weighted composite sample.” This does not make sense. The footnote does not refer to the influent flow measurement; it refers to influent water quality sampling. Either this sentence should be modified or deleted from the footnote.
8. **Acute Toxicity Testing Frequency**

The City previously requested that the frequency for acute toxicity monitoring be reduced from weekly to monthly. Monthly monitoring is still requested.

9. **Fixed Dissolved Solids Monitoring**

The City does not have the capability to measure Fixed Dissolved Solids for the cannery wastewater only (unless it is done at the cannery). The cannery wastewater is blended with other flows in the industrial sewer line and once they reach City property (before they are land applied). Therefore, the City requests that Page E-8, Item VI.A.1 Table E-6. Monitoring Location LND-001, Footnote 2 be modified as follows:

2. Fixed dissolved solids monitoring is required for only when cannery wastewater only is being discharged to the field areas (e.g. Pacific Coast Producers cannery wastewater).

10. **The Agricultural Field Inspections**

The City previously commented that the MRP requirements for the land application areas were too onerous. In response to this comment, the Regional Board has removed the requirement for daily measurements of the dissolved oxygen in the wastewater at the field. The City greatly appreciates this change.

However, there is still a requirement for daily checks of each field being irrigated. There are many fields that cannot be accessed during irrigation events due to the wet soil conditions. Moreover, the City leases the irrigation area to local farmer(s) who are responsible for coordinating irrigation events. As such, the fields being irrigated on any given day can change without immediate notification to City staff. For these reasons, the City suggests the following modifications on Page E-8. Item VI.B.:

1. The Discharger shall inspect the land application areas at least once daily during irrigation events, and observations from those inspections shall be documented for inclusion in the monthly self-monitoring reports. Each field that receives irrigation water will be monitored at least once during each monthly period. The following items shall be documented for each field to be irrigated on that day if observed:

   In addition the City requests the following clarifications be provided. The City will develop an inspection checklist based on the approved permit language.

   a. Evidence of erosion;
   b. Evidence of berm condition damage or erosion;
   c. Evidence Condition of damage to each standpipes and flow control valves (if applicable);
   d. Evidence of improper Proper use of valves;
   e. Evidence of damage or excessive erosion in the Condition of head ditches;
   f. Soil saturation; *(Note that because surface irrigation is employed, soil will be saturated both during and following irrigation events.)*
   g. Ponding 24-hours after last irrigation application; *(Note that because surface irrigation is employed, ponding will occur during irrigation events.)*
h. Evidence of damage to tailwater ditches and evidence of potential and actual runoff to off-site areas;

i. Evidence of potential and actual discharge to surface water;

j. Accumulation of organic solids in ditches and at soil surface;

k. Soil clogging. (Note that it is not clear how the City would evaluate this other than to look for ponding 24-hours after last irrigation application.)

l. Odors that have the potential to be objectionable at or beyond the property boundary; and

m. Excessive insect populations or swarms.

11. Municipal Water Supply Monitoring

The requested quarterly sampling for TDS, EC and Standard Minerals is a twelve-fold increase over current Department of Health Services’ requirements for drinking water wells (once every three years). With over 26 wells in service, this is a significant increase in sampling time and cost, as well as data evaluation. Because run-times and run-days for each well vary considerably (but they are recorded), a flow-weighted average can be calculated. In addition, within this permit term, the City plans to begin utilization of a surface water supply which will significantly reduce discharge salinity. Thus, past groundwater usage and data will be of less importance.

The City will be evaluating the municipal water supply quality to determine its influence on the WPCF wastewater quality when completing both the required Pollution Prevention Plans and the Salinity Evaluation and Minimization Plan. Therefore, the City requests that the quarterly water supply monitoring be changed. The following specific changes are requested to Page E-13. Item IX.A.1 Table E-9:

The Discharger shall establish characterize source water adequately to evaluate compliance with salinity goals, where a representative sample of the municipal water supply can be obtained. Municipal water supply samples shall be collected at approximately the same time as effluent samples, and Monitoring shall include at least the following.

<table>
<thead>
<tr>
<th>Table E-9. Municipal Water Supply Monitoring Requirements</th>
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</thead>
<tbody>
<tr>
<td>Parameter</td>
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<tr>
<td>-----------</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
</tr>
<tr>
<td>Electrical Conductivity @ 25°C</td>
</tr>
<tr>
<td>Standard Minerals</td>
</tr>
</tbody>
</table>

1. If the water supply is from more than one source, these constituents EC shall be reported as a weighted average and include copies of supporting calculations.

2. Standard minerals shall include all major cations and anions and include verification that the analysis is complete (i.e., cation/anion balance).
12. Measuring Pathogens

The City requests that the following phrase be changed on Page F-33. Item IV.C.3.t to clarify the fact that coliform testing cannot be conducted continuously:

Coliform testing, by comparison, is not can not be conducted continuously and requires several hours…
Figure 1. Potential Mass Loading Limits for Total Mercury

- Mass Loading Limit
- Maximum Allowable Concentration at 3.5 mg/L

Limit Description:
- July 1977 TMDL proposed limit (2.7 mg/L)
- Approach A (mg/L) at 1.2 mg/L + 1.0 mg/L at 1.2 mg/L
- Approach A (mg/L) at 2.7 mg/L
- LCR-2001 WFD Loading Limit (1.5 mg/L)

Loading Limits, /month

Concentration, mg/L

0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.01
0.03
0.05
0.07
0.09
0.11
0.13

0.0059
0.013
0.026
0.0329
0.064
0.113
0.045

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Figure 2. Total Mercury Effluent Concentration Before and After the Upgrades

- Drinking Water Standard = 0.05 ng/L
- Total Hg Conc (01/15/02 - 1/15/05) Average (0.00836 ug/L)
- Total Hg Conc (2/05-3/14/07) Average (0.00284 ug/L)
Figure 1. Potential Mass Loading Limits for Total Mercury

Limit Description

- Mass Loading Limit
- Maximum Allowable Concentration at 8.5 mgd