

**Central Valley Regional Water Quality Control Board
25/26 October 2007 Board Meeting**

**Response to Comments for City of Jackson Wastewater Treatment Plant
Tentative Waste Discharge Requirements (NPDES No. CA0079391)**

The following are Central Valley Regional Water Quality Control Board (Regional Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (NPDES Permit renewal) for the City of Jackson Wastewater Treatment Plant. Public comments regarding the proposed NPDES permit were required to be submitted to the Regional Water Board by 1 October 2007. The Regional Water Board received timely comments regarding the proposed permit by the following parties:

- City of Jackson (Discharger)
- Central Valley Clean Water Association (CVCWA)
- East Bay Municipal Utility District (EBMUD)
- New Faze Development
- Nolte and Associates, Inc.
- California Department of Public Health (DPH)

Written comments from the above interested parties are summarized below, followed by Regional Water Board staff responses.

CITY OF JACKSON (DISCHARGER) COMMENTS

CITY OF JACKSON - COMMENT #1:

The Discharger requests that the following language on page 1 of the permit,

“...The Discharger submitted a Report of Waste Discharge, dated 7 December 2004, and applied for a NPDES permit renewal to discharge up to 0.71 mgd of treated wastewater from their Wastewater Treatment Plant, hereinafter Facility. The application was deemed complete on 16 January 2006.”

Be replaced with the following language:

“The Discharger submitted a Report of Waste Discharge, dated 7 December 2004, and applied for a NPDES permit renewal to discharge up to 0.71 mgd (ADWF basis) of treated wastewater from their Wastewater Treatment Plant, hereinafter Facility. Effluent discharge rates are substantially greater than 0.71 mgd during flowing wet weather as a result of inflow and infiltration (I/I) of rain water and groundwater into the collection system.”

RESPONSE: The language in the proposed permit has been revised as follows:

“The City of Jackson (hereinafter Discharger) is currently discharging pursuant to Order No. 5-00-173 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0079391. The Discharger submitted a Report of Waste Discharge, dated 7 December 2004, and applied for a NPDES permit renewal to discharge an annual dry weather flow of up to 0.71 mgd of treated wastewater from their Wastewater Treatment Plant, hereinafter Facility.”

Note that the effluent limitation for flow established in Part IV.A.1.k of the proposed permit is based on Average Dry Weather Flow (ADWF). ADWF is defined in Part VII.E. of the permit.

CITY OF JACKSON - COMMENT #2:

The Discharger requests that the following language be inserted in Section B., Facility Description:

“The facility is designed to provide filtered, disinfected, secondary treatment to wastewater flows up to 2.0 mgd. The facility is also designed to provide filtered, disinfected, secondary treatment of flows greater than 2.0 mgd up to peak flows of about 3.0 mgd.”

RESPONSE: The Facility’s rated capacity is 0.71 mgd as an average dry weather flow, based on the design capacity of the filters (2.0 mgd) divided by the wet weather peaking factor of 2.8. The design flow referenced in the proposed permit is specific to the average dry weather flow and not to the instantaneous maximum flow rate of the process’s limiting factor.

Table 4 and Finding II.A. of the proposed permit have been revised to clarify that the 0.71 mgd regulated flow is an average dry weather flow.

CITY OF JACKSON - COMMENT #3:

The Discharger is questioning whether the tertiary treatment requirements referred to on Page 2, Section G, (Water Quality Based Effluent Limitations, 1st paragraph, last sentence) of the proposed permit is referring to advanced secondary treatment.

RESPONSE: Tertiary treatment is defined in Part IV.C.3.r of the Fact Sheet. Tertiary treatment is based on Title 22 requirements established by the California Department of Public Health. The proposed permit contains effluent limitations and a Title 22 tertiary level of treatment, or equivalent, necessary to protect the beneficial uses of the receiving water.

CITY OF JACKSON - COMMENT #4:

The Discharger requests that the word “authorizes” in the text that reads, “Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports.”, be changed to “authorize”.

RESPONSE: The language in the proposed permit has been corrected.

CITY OF JACKSON - COMMENT #5:

The Discharger requested that the following Discharge Prohibition proposed on Page 9, Section III.E. of the proposed permit,

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging into Jackson Creek when the receiving water flow does not provide a minimum of 20:1 dilution of the Facility’s final effluent.”

Be changed to one of the two following suggested text:

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging effluent into Jackson Creek in amounts that exceed 1 part in 20 (i.e., 5 percent) of the resulting downstream average daily flow of Jackson Creek.”

Or

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging effluent into Jackson Creek in amounts that exceed 1 part in 20 (i.e., 5 percent) of the resulting downstream average daily flow of Jackson Creek unless the Discharger has demonstrated to the satisfaction of the Regional Water Board that limiting the effluent discharge in this manner is feasible.”

RESPONSE: The proposed Discharge Prohibition has been revised as follows to address the above comments and other related comments:

Five years following the adoption date of this Order, the Discharger is prohibited from discharging wastewater into Jackson Creek in amounts that cause the downstream Lake Amador water to exceed greater than five percent volume of wastewater in Lake Amador (one part wastewater in 20 parts of lake water, or 20:1 dilution).

The proposed Special Provision requiring a Jackson Creek Beneficial Use Attainment Study has been revised to require the consultation of the State Water

Resources Control Board's Division of Water Rights (State Board) while developing the work plan. A re-opener in Part VI.C.1.9 of the permit has been revised to allow for the permit to be reopened based on the feasibility of State Board approval for a decrease or elimination of City of Jackson WWTP discharge to the receiving water. If the State Board determines that it is not legally feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the permit may be reopened by the Regional Water Board for appropriate revisions.

CITY OF JACKSON - COMMENT #6:

The Discharger requests that the proposed effluent limitations in the permit be rounded off to two-place accuracy per the State Water Resources Control Board's State Implementation Policy (SIP). The Discharger also requests that a footnote be inserted that states the limitations only apply during average dry weather flow period of each year.

RESPONSE:

The California Toxic Rule (CTR) specifies that CTR criteria used in the calculations of reasonable potential and water quality based effluent limitations are to be rounded to two significant figures. This accuracy is incorporated into the effluent calculations. Best professional judgment was used to determine the number of significant digits for the calculated effluent limitations.

Mass effluent limitations are applicable at all flows. As proposed in Section VII of the proposed permit, compliance with mass effluent limitations is determined during dry weather periods when groundwater is at or near normal and runoff is not occurring.

CITY OF JACKSON - COMMENT #7:

The Discharger requests that the proposed iron and manganese effluent limitations be expressed in dissolved concentrations rather than total recoverable concentrations.

RESPONSE: Federal regulations contained in 40 CFR 122.45(c), require effluent limitations to be expressed in terms of "total recoverable".

CITY OF JACKSON - COMMENT #8:

The Discharger states that incorrect effluent pH values were used to calculate effluent limitations.

RESPONSE: During the permit development process, the Discharger requested an instantaneous maximum pH effluent limitation of 7.5 standard units, which would in turn be used in the calculations of the proposed ammonia effluent

limitations. However, since pH effluent data collected during the previous permit term indicates that the Discharger cannot reliably meet an effluent pH limitation of 7.5, an effluent pH limitation of 8.0 is proposed based on the observed maximum effluent pH. The proposed ammonia effluent limitations were calculated accordingly.

CITY OF JACKSON - COMMENT #9:

The Discharger requests that the wording of the Average Dry Weather Effluent Flow on Page 11, Section IV.K. of the proposed permit be worded as defined in a manner consistent with Section VII.E.

RESPONSE: The proposed permit has been revised.

CITY OF JACKSON - COMMENT #10:

The Discharger states that it is planning on requesting dilution to be considered per the consideration of Intake Credits in accordance with the SIP, and requests that the proposed monthly mercury mass limitation be revised to consider the amount of mercury removed from the environment via the potable water supply intake.

RESPONSE: Since the City's potable water supply is not surface water diverted from the Jackson Creek watershed, the City's request does not meet the SIP requirement that "the intake water must be from the same water body as the receiving water body" (SIP, Section 1.4.4 (3)). The proposed monthly mercury mass limitation remains unchanged.

CITY OF JACKSON - COMMENT #11:

The Discharger disagrees with the proposed electrical conductivity (EC) effluent limitations due to increased State water conservation mandates in which more water conserved results in higher salinity levels in the effluent.

RESPONSE:

The proposed EC effluent limitation is a performance-based limitation based on EC levels observed in the effluent. The intent of the performance-based EC effluent limitation is to cap the discharger at its current EC discharge. The proposed permit also contains a Special Provision for the Discharger to conduct a Salinity Evaluation and Minimization Plan that will lead to the minimization of existing salinity sources. Therefore, although water conservation efforts are in place, the proposed permit does not allow the Discharger to increase its existing discharge of salinity on a concentration basis.

CITY OF JACKSON - COMMENT #12:

The Discharger states that it is not likely to be able to comply with the Receiving Water Limitations on Page 15 and 16 of the proposed permit during cold dry winters.

RESPONSE: Receiving water limitations in the proposed limitations are those established in the Central Valley Regional Water Quality Control Board's Basin Plan. The Discharger is expected to comply with all receiving water limitations.

CITY OF JACKSON - COMMENT #13:

The Discharger comments that the Standard Provisions language on Page 18, Section VI.A.2.b. that reads "The Regional Water Board may review and revise this Order at any time upon application of any affected person or the Regional Water Board's own motion", should be changed to "The Regional Water Board may review and revise this Order at any time upon application of the Discharger, any affected person, or the Regional Water Board's own motion.

RESPONSE: The current language in the proposed permit allows for the Regional Water Board to reopen the Order based on application by any affected person, which includes the Discharger. Therefore, the language remains as proposed.

CITY OF JACKSON - COMMENT #14:

The Discharger requests that the annual date in which the Facility's waste flow capacity information is required to be submitted, as specified on the Standards Provisions Section VI.A.2.I. of the proposed permit, should be changed from 31 January to 1 February, and make it part of the Annual Report.

RESPONSE: The proposed permit language is consistent with NPDES permits issued by this Regional Water Board. The Discharger retains the ability to submit this information in its Annual Report, identify on the Annual Report cover letter that this information is included, and submit the Annual Report by 31 January, one day prior to the Annual Report due date of 1 February.

CITY OF JACKSON - COMMENT #15:

Special Provision in Section VI.C.1.b.ii. states the permit may be reopened "*when new information not available at the time of the permit issuance would have justified different permit conditions at the time of issuance.*" The Discharger states that the wording should also include specific new information that the Discharger has proposed to investigate as a means to achieve compliance that may include a mixing zone and dilution study, and water effect ratio studies.

RESPONSE: The existing language in the proposed permit allows the permit to be reopened based on any new information that was not available at the time of permit issuance, which includes mixing zone studies, dilution studies, water effects ratio studies, and other pertinent studies submitted by the Discharger. The language remains unchanged.

CITY OF JACKSON - COMMENT #16:

The Discharger requests that the wording of the Special Provisions, Reopener Provisions, allowing the permit to be reopened based on information gathered through the required Jackson Creek Beneficial Use Attainment Study, should state that the permit may be reopened for addition and/or modification of effluent limitations, prohibitions, and/or other requirements.

RESPONSE: The Order has been revised to include the modification of prohibitions as well as effluent limitations and other requirements.

CITY OF JACKSON - COMMENT #17:

The Discharger requests that the wording of the Initial Investigative Toxicity Reduction Evaluation (TRE) Work Plan Special Study in VI.C.2.a.i.a) which states, "*A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of effluent toxicity, effluent variability, and treatment system efficiency;*" be revised to include bioassay test result variability as one of the potential causes of a toxicity result.

RESPONSE: The Order has been revised to reflect the proposed change.

CITY OF JACKSON - COMMENT #18:

The Discharger requests that the wording of the Initial Investigative Toxicity Reduction Evaluation (TRE) Work Plan Special Study in VI.C.2.a.i.c) which states "*A discussion of who will conduct the Toxicity Identification Evaluation, if necessary (i.e., an in-house expert or outside contractor).*" be revised to state:

- c) A discussion of who will conduct the Toxicity Reduction Evaluation, if necessary (i.e., an in-house expert or outside contractor).

RESPONSE: A toxicity identification evaluation may be part of a TRE, however is not the TRE itself. TIE is defined in Attachment A as part of the TRE. No change was made to the Order based on this comment.

CITY OF JACKSON - COMMENT #19:

The Discharger requests that the wording of the chronic whole effluent toxicity accelerated monitoring specifications in Section VI.C.2.a.iv.c) which states “...*the Discharger shall submit to the Regional Water Board a TRE Work Plan for approval by the Executive Officer.*” be revised to state:

“... the Discharger shall submit to the Regional Water Board an event-specific TRE Work Plan for approval by the Executive Officer.”

Further, the Discharger requests that the wording of the chronic whole effluent toxicity accelerated monitoring specifications in Section VI.C.2.a.iv.c) which states, “...*The TRE Work Plan must be developed in accordance with USEPA guidance.*” be revised to state:

...This event-specific TRE Work Plan must be developed in accordance with USEPA guidance.

RESPONSE: The current language included in the proposed permit implies the inclusion of “event-specific” or event driven. No change to the permit has been made based on these comments.

CITY OF JACKSON - COMMENT #20:

The Discharger comments that Special Provision 6.a of the proposed permit references “Chapter 3” in its entirety, which denotes the requirement for all monitoring, alarms, and redundancy, and that the term “or equivalent” is not common to the industry and does not specify specific relaxation of the Title 22 requirements if discharged but not reclaimed. Special Provisions VI.C.6.a states, “*Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the Department of Public Health (DPH) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3, (Title 22), or equivalent.*”

RESPONSE: For disposal purposes, the requirements included in the proposed permit do not include the requirements for unrestricted beneficial reuse. For disposal, the Discharger is required to meet Title 22-quality effluent, but not the redundancy and storage requirements for beneficial reuse that is the full suite of Title 22 requirements.

For clarification, the above statement was added to Section IV.C.3.v. of the Fact Sheet.

CITY OF JACKSON - COMMENT #21:

The Discharger requests that the wording of the reporting schedule (requiring semi-annual reporting) in Section VI.C.7.a., which establishes a compliance schedule for meeting final effluent limitations, be revised to be consistent with the reporting schedule contained in Section X.D.1 of the Monitoring and Reporting Program (which requires annual reporting).

RESPONSE: The language in Provision VI.C.7.a has been revised to state:

“As these compliance schedules are greater than 1 year, the Discharger shall submit annual progress reports in accordance with the Monitoring and Reporting Program (Attachment E, Section X.D.1.)”

CITY OF JACKSON - COMMENT #22:

The Discharger commented on the requirements for the compliance schedule to ensure compliance with the prohibition to discharge into Jackson Creek when receiving water flows do not provide a minimum of 20:1 dilution located in Section VI.C.7.c which states:

“The Discharger shall evaluate and implement alternative wastewater handling and disposal methods that will ensure compliance with Discharge Prohibition III.E of this Order, which prohibits the discharge of wastewater into Jackson Creek when a minimum of 20:1 receiving water to effluent dilution is not available.”

The Discharger has requested that the Order be revised to state:

“The Discharger shall evaluate and implement, if feasible, alternative wastewater handling and disposal methods that will ensure compliance with Discharge Prohibition III.E of this Order, which conditionally prohibits the discharge of effluent into Jackson Creek in amounts exceeding 5 percent of the resulting downstream creek flow.”

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A reopener in Part VI.C.1.9 of the proposed permit has been revised to allow for the permit to be reopened based on the feasibility of State Board approval for a decrease of City of Jackson WWTP discharge to the receiving water. If the State Board determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the permit may be reopened by the Regional Water Board for appropriate revisions.

Further, Discharge Prohibition III.E has been revised to state:

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging wastewater into Jackson Creek in amounts that cause the downstream Lake Amador water to exceed greater than five percent volume of wastewater in Lake Amador (one part wastewater in 20 parts of Lake water, or 20:1 dilution).”

This revision of Discharge Prohibition III.E alters the compliance point for achieving 20:1 dilution from the point of discharge into Jackson Creek, to Lake Amador. The corresponding portions of the proposed permit, Monitoring and Reporting Program, and Fact Sheet have been revised to reflect this change.

CITY OF JACKSON - COMMENT #23:

The Discharger identified edits to the proposed permit for Section VII.B. Section VII.B states, “

“BOD and TSS Effluent Limitations (IV.A. 1.a.). Compliance with the effluent limitations for BOD and TSS required in sections IV.A. 1.a shall be ascertained by 24-hour composite samples. Compliance with effluent limitations <subsection> for percent removal shall be calculated using the arithmetic mean of 20°C BOD (5-day) and total suspended solids in effluent samples collected over a monthly period as a percentage of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.”

The Discharger has proposed the following language:

“Compliance with the final effluent limitations for BOD and TSS required in Section IV.A.1.b...collected over a calendar monthly period as a percentage of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.”

RESPONSE: The missing reference was revised as requested. The permit has been revised to state:

“BOD and TSS Effluent Limitations (IV.A. 1.a.). Compliance with the final effluent limitations for BOD and TSS required in sections IV.A. 1.a shall be ascertained by 24-hour composite samples. Compliance with effluent limitations IV.A. 1.b for percent removal shall be calculated using the arithmetic mean of 20°C BOD (5-day) and total suspended solids in effluent samples collected over a monthly period as a percentage of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.”

Further, it should be noted that the use of “monthly period” implies a calendar month, not a 30-day average.

CITY OF JACKSON - COMMENT #24:

The Discharger comments regarding Section VII.F of the proposed permit, which states:

“Mass Effluent Limitations. Compliance with the mass effluent limitations will be determined during average dry weather periods only when groundwater is at or near normal and runoff is not occurring.”

The Discharger has requested that language been revised to state:

“Mass Effluent Limitations (IV.A.1.a). Compliance with the mass effluent limitations will be determined during average dry weather periods only when groundwater is at or near normal and runoff is not occurring. Mass effluent limitations do not apply outside of the average dry weather period of three months.”

RESPONSE: Mass effluent limitations apply at all times, however compliance with the effluent limitations will only be determined during average dry weather periods when groundwater is at or near normal and runoff is not occurring.

CITY OF JACKSON - COMMENT #25:

The Discharger has requested an additional monitoring location be added to Table E-1 of the Monitoring and Reporting Program. The proposed monitoring location is provided below:

---	SPL-002	A location where a representative sample of the surface water removed for potable water use can be obtained
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RESPONSE: The monitoring proposed by the Discharger above is specific for intake credits for mercury. Because mercury intake credits do not apply to this permitted discharge, the requested monitoring is not necessary and has not been added to the Monitoring and Reporting Program. The Discharger may proceed in collecting samples in support of possible future requests for Permit modification if it chooses to do so.

CITY OF JACKSON - COMMENT #26

The Discharger comments that the daily monitoring frequency for pH, ammonia total (as N), and temperature seems excessive since the treatment process does not change that much from day to day.” The Discharger has requested the monitoring frequency for pH, ammonia total (as N), and temperature be revised to twice a week.

RESPONSE: Due to concerns over high ammonia concentrations in the effluent over the previous permit term, daily monitoring for ammonia has been established to determine compliance with the interim effluent limitations for ammonia. Because these interim limitations are “floating” limits, concurrent pH and temperature monitoring on a daily basis is required during the interim period. The monitoring frequency for ammonia, pH, and temperature of twice a week has been retained from Order No. 5-00-173 to determine compliance with the final effluent limitations for ammonia beginning 18 May 2010.

It should be noted that although facility processes do not change greatly from day to day, the quality of effluent may (and does) change based on a number of other factors. Due to the relatively low monitoring costs of these parameters, and past facility performance, daily monitoring for pH, temperature, and ammonia appear reasonable.

CITY OF JACKSON - COMMENT #27:

The Discharger submitted comments regarding Table E-3, Effluent Monitoring requirements. The Discharger states the following:

Part 1) Parameter Total Dissolved Solids should read Total Dissolved Fixed Solids.

Part 2) The Discharger requests that footnote 4, which provided the formula for calculating lbs/day based on effluent flow and concentration, be revised to state the equation is only applicable during the average dry weather flow period of each calendar year.

Part 3) The Discharger requests that footnote 11, which states, “*Total residual chlorine must be monitored with a method sensitive to and accurate at the permitted level of 0.01 mg/L*”, be revised to state:

“Total residual chlorine must be monitored with a method sensitive to and accurate at the permitted level of 0.01 mg/L. A continuous monitoring analyzer for dechlorination agent residual is an acceptable alternative, see Section VII.H”

RESPONSE:

Part 1) The water quality criteria are expressed as total dissolved solids and not total dissolved fixed solids. Monitoring for total dissolved solids is necessary to determine compliance with the water quality criteria.

Part 2) Mass effluent limitations and monitoring and reporting requirements apply at all times, however compliance with the effluent limitations will only be determined during dry weather periods when groundwater is at or near normal and runoff is not occurring.

Part 3) Table E-5 establishes the minimum sampling frequency for total residual chlorine based on reasonable potential, previous effluent quality history, and the requirements of Order No. 5-00-173 (previous Order). Continuous effluent monitoring is more frequent than the specified minimum sampling frequency of twice weekly, thus would fulfill the monitoring requirements contained in Table E-5. It should further be noted that continuous effluent monitoring is multiple instantaneous grab samples taken at specified intervals, thus the requirement for "grab sample" is met.

CITY OF JACKSON - COMMENT #28:

The Discharger has requested that requirements for sample types of the chronic toxicity testing contained in Section V.B.2 be revised. Section V.B.2 states:

"2. Sample Types-...The effluent samples shall be taken at the effluent monitoring location specified in the Monitoring and Reporting Program. The receiving water control shall be a grab sample obtained from the RSW-001 sampling location, as identified in the Monitoring and Reporting Program."

The Discharger has proposed the following language:

"The effluent samples shall be taken at the effluent monitoring location EFF-001. The receiving water control shall be a grab sample obtained from the RSW-001 sampling location."

RESPONSE: The proposed permit has been revised to reflect the proposed language.

CITY OF JACKSON - COMMENT #29:

In reference to the units for radionuclides contained in Table E-5 of the Monitoring and Reporting Program, the Discharger has requested they be corrected from PCi/l to PCi/L.

Further, the Discharger states that the monitoring frequency for total residual chlorine (2/week) is not needed due to the fact that they have continuous effluent monitoring. The Discharger also suggests that the monitoring frequency for radionuclides be once per year.

RESPONSE:

The units for radionuclides have been changed from PCi/l to PCi/L.

Table E-5 establishes the minimum sampling frequency for total residual chlorine based on reasonable potential, previous effluent quality history, and

the requirements of Order No. 5-00-173 (previous Order). Continuous effluent monitoring is more frequent than the specified minimum sampling frequency of twice weekly, thus would fulfill the monitoring requirements contained in Table E-5. It should further be noted that continuous effluent monitoring is multiple instantaneous grab samples taken at specified intervals, thus the requirement for “grab sample” is met.

Table E-5 currently requires 1/year monitoring for radionuclides.

CITY OF JACKSON - COMMENT #30:

The Discharger has requested, in reference to Table E-6, Municipal Water Supply Monitoring Requirements portion of the Monitoring and Reporting Program that Total Dissolved Solids should be Total Dissolved Fixed Solids.

RESPONSE: The water quality criteria are expressed as total dissolved solids and not total dissolved fixed solids. Monitoring for total dissolved solids is necessary to determine compliance with the water quality criteria.

CITY OF JACKSON - COMMENT #31:

The Discharger has requested the following monitoring requirements be added to the Monitoring and Reporting Program at Section IX.B.1:

2. Monitoring Location SPL-002

The Discharger shall monitor the Municipal Raw Water Supply at SPL-002 as follows. A sampling station shall be established where a representative sample of the raw water can be obtained. Raw water supply samples shall be collected at approximately the same time as the effluent samples.

Table E-7 Municipal Raw Water Supply Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Mercury, Total Recoverable	ug/L	Grab	1/Quarter	(1)
	lbs/month	Calculate	1/Quarter	
Flow (2)	mgd	Meter	Continuous	(1)

(1) As required by 40 CFR Part 136.

(2) That portion of the total water intake serving the needs of the City of Jackson.

RESPONSE: The monitoring proposed by the Discharger above appears to be specific for intake credits for mercury. Because mercury intake credits have not

been granted in this permit at this time, this monitoring is not necessary and has not been added to the Monitoring and Reporting Program.

CITY OF JACKSON - COMMENT #32:

The Discharger has requested that based on Comment #31, Table E-8 be revised to Table E-9.

RESPONSE: Please see response to Comment #31. Because the proposed monitoring requirements were not added to the Monitoring and Reporting Program, the renumbering of the tables is not necessary.

CITY OF JACKSON - COMMENT #33:

The Discharger has requested that based on Comment 31, Table E-9 be revised to Table E-10.

RESPONSE: Please see response to Comment #31. Because the proposed monitoring requirements were not added to the Monitoring and Reporting Program, the renumbering of the tables is not necessary.

CITY OF JACKSON - COMMENT #34:

The Discharger has requested that the due date for the annual operations report contained in Section X.D.4 of the Monitoring and Reporting Program be change from 30 January to 1 February and be made part of the Annual Report.

RESPONSE: The proposed permit language is consistent with NPDES permits issued by this Regional Water Board. The Discharger retains the ability to submit this information with the Annual Report on 30 January.

CITY OF JACKSON - COMMENT #35:

The Discharger has requested that the facility design flow in Table F-1 of the Fact Sheet be revised from 0.71 mgd to: 2.0 mgd with filters, 3.0 mgd without filters.

RESPONSE: The Facility's rated capacity is 0.71 mgd as an average dry weather flow, based on the design capacity of the filters (2.0 mgd) divided by the wet weather peaking factor of 2.8. The design flow referenced in the Order is specific to this average dry weather flow and not the instantaneous maximum flow rate of the process's limiting factor. Table F-1 has been revised to indicate the design flow of 0.71 mgd is an average dry weather flow.

CITY OF JACKSON - COMMENT #36:

The Discharger has commented regarding the facility description contained in Section II of the Fact Sheet which states:

“...The Facility design flow capacity is 0.71 mgd. Information collected during a site visit on 25 August 2006 indicated an average daily flow of approximately 0.63 mgd at the facility, with an average dry weather flow of approximately 0.55 mgd...”

The Discharger would like the above language to be revised as stated below:

“...The Facility rated capacity is 0.71 mgd, ADWF. Its actual treatment capacity is 2.0 mgd with filters and 3.0 mgd for all processes other than the filters...”

Further, The Discharger comments on the language which states:

“...the Facility representative stated that the Facility is capable of meeting Title 22 tertiary effluent with current facilities plus minor upgrades to achieve the necessary redundancy and reliability of treatment.”

The Discharger proposed revised language for the text above:

“...the Facility is capable of meeting “equivalent” Title 22 tertiary effluent with current facilities, however, upgrades are required to achieve the necessary redundancy and reliability of treatment for reuse.”

RESPONSE: Please see response to Comment #35 in response to design flow.

The proposed permit has been revised to reflect the proposed language in regards to meeting “equivalent” Title 22 tertiary effluent requirements for “reuse”. It should be noted that this Order applies equivalent Title 22 based effluent limitations for the protection of the receiving water and human health, and not “reuse”. Redundancy and reliability of treatment are requirements of Title 22 reuse. This Order establishes equivalent Title 22 requirements for chemical coagulation, filtration, disinfection, and effluent limitations for pathogens, turbidity, BOD₅, and TSS for the protection of human health.

CITY OF JACKSON - COMMENT #37:

The Discharger comments regarding a portion of Section II.A of the Fact Sheet (Description of Wastewater and Biosolids Treatment and Controls) which states:

“Two letters from DPH, dated 13 July 2007 and 12 June 2003, signed by Joseph Spano, PE, District Engineer, Drinking Water Field Operations Branch of the Stockton

Branch, suggests that DPH is concerned with the site-specific impact of the City of Jackson discharge may have on the beneficial use of the surface water as a domestic water supply source, particularly when the flow in Jackson Creek does not provide 20:1 dilution. The 13 July 2007 DPH letter recommends Title 22 tertiary treatment of the wastewater plus a 20:1 dilution ratio (creek-to discharge flow) to address a downstream trailer residential park and recreation area in which the residents use Jackson Creek water for drinking water purposes. In addition to water quality needed to protect human health, the DPH letters address perception of providing residents relatively undiluted treatment plant effluent as a domestic drinking water source. The recommendation in the letters specified above is site-specific recommendations, not DPH department policy.”

The Discharger has proposed the following revision:

“... Drinking Water Field Operations Branch that the Stockton Branch,...to address a downstream trailer residential park and recreation area in which the residents use Jackson Creek water from Lake Amador...”

RESPONSE: The proposed permit has been revised to reflect the proposed language.

CITY OF JACKSON - COMMENT #38:

The Discharger commented regarding a portion of Section II.A of the Fact Sheet (Description of Wastewater and Biosolids Treatment and Controls) which states:

“DFG based this assessment on the contributed flow to the creek, and not from a public health perspective.”

The Discharger asserts that the Fact sheet should state that it is unlawful for the Discharger to reduce its discharge to Jackson Creek without the approval of the State Board’s Division of Water Rights.

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A re-opener in Part VI.C.1.9 of the Order has been revised to allow for the permit to be reopened based on the feasibility of State Board approval for a decrease of discharge by the Discharger to the receiving water. If State Board determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the Order may be reopened by the Regional Water Board for appropriate revisions.

CITY OF JACKSON - COMMENT #39:

The Discharger has requested that Section II.B.2 be revised to correct the use of “Lake Amador” in place of just “Amador” as the final receiving water.

RESPONSE: The proposed permit has been revised to reflect the proposed language.

CITY OF JACKSON - COMMENT #40:

The Discharger has requested that units for flow contained in Table F-2 of the Fact Sheet be revised from MGD to mgd.

RESPONSE: The proposed permit has been revised to reflect the proposed language.

CITY OF JACKSON - COMMENT #41:

The Discharger commented on a portion of Section III.C.1 of the Fact Sheet that states:

“This Order contains effluent limitations requiring a tertiary level of treatment, or equivalent, which is necessary to protect the beneficial uses of the receiving water. The Regional Water Board has considered the factors listed in CWC section 13241 in establishing these requirements, as discussed in more detail in the Fact Sheet, Attachment F, section IV.B.”

The Discharger has requested the language be revised to:

“This Order contains effluent limitations requiring a level of treatment which is necessary to protect the beneficial uses of the receiving water...”

RESPONSE: As explained in Parts IV.B.2.a and IV.C.3.r of the fact sheet, a tertiary level of treatment (or equivalent) has been found necessary by staff for the protection of the beneficial uses of the receiving water. Staff does not find this revision necessary and believes that it offers a less specific explanation of how the effluent limitations were derived.

CITY OF JACKSON - COMMENT #42:

The Discharger has requested that the acronym, contained in Section III.C.4 of the Fact Sheet, of EPCRA be changed to EPCRKA.

RESPONSE: EPCRA (and not EPCRA) is the USEPA acronym used for the Emergency Planning and Community Right to Know Act. The proposed permit was not revised as proposed above.

CITY OF JACKSON - COMMENT #43:

The Discharger has commented on Section IV.A.2 of the Fact Sheet which states

“2...Discharge Prohibition III.E prohibits the discharge of wastewater by the Discharger to Jackson Creek, five (5) years following the adoption date of the Order, when a minimum dilution of 20:1 is not provided by the receiving water.”

The Discharger has proposed the language be revised as proposed:

“Discharge Prohibition III.E conditionally prohibits the discharge of wastewater by the Discharger to Jackson Creek, five (5) years following the adoption date of the Order, when a minimum dilution of 20:1 is not provided by the receiving water.”

Further, the Discharger states:

“The conditional nature of the prohibition is necessary because the Discharger may not be able to comply with the DPH recommended prohibition and comply with CWC section 1211. Compliance with State law supercedes compliance with recommendations if no means to comply with both is practicable.”

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board Division of Water Rights (DWR) while developing the work plan. A re-opener in Part VI.C.1.9 of the Order has been revised to allow for the permit to be reopened based on the feasibility of DWR approval for a decrease of discharge by the Discharger to the receiving water. If DWR determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the Order may be reopened by the Regional Water Board for appropriate revisions.

Further, Discharge Prohibition III.E has been revised to state:

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging wastewater into Jackson Creek in amounts that cause the downstream Lake Amador water to exceed greater than five percent volume of wastewater in Lake Amador (one part wastewater in 20 parts of Lake water, or 20:1 dilution).”

Lake Amador is the water body that provides the domestic water supply for surrounding residents. Therefore, the public health concern in regards to

maintaining a 20:1 dilution ratio for protection of the domestic water supply applies to Lake Amador, not Jackson Creek (tributary to Lake Amador). Therefore, the revision of Discharge Prohibition III.E in response to the above comment alters the compliance point for achieving 20:1 dilution from the point of discharge into Jackson Creek, to Lake Amador. The corresponding portions of the Order, Monitoring and Reporting Program, and Fact Sheet have been revised to reflect this change.

CITY OF JACKSON - COMMENT #44:

Regarding Section IV.B.2.b of the Fact Sheet, which references an upper pH limitation of 8.0 standard units, the Discharger states that the upper limitation contained in the Order is 7.5 standard units. The Discharger further states that they will provide acid addition if necessary.

RESPONSE: Staff acknowledges an editorial error in correctly carrying over the correct upper level pH limitation of 8.0 standard units from the Fact Sheet to the Order (which stated 7.5 standard units). The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet.

It is presumed that the statement by the Discharger that they will provide acid addition if necessary is in regards to meeting an upper pH limitation of 7.5 standard units. The instantaneous maximum effluent limitation for pH of 8.0 is based on the technological ability of the Facility demonstrated over the previous permit term.

CITY OF JACKSON - COMMENT #45:

The Discharger commented regarding Section IV.B.2.d of the Fact Sheet which states:

“d. Flow. The Facility is designed to provide a tertiary level of treatment for up to a design flow of 0.71 mgd. Therefore, this Order contains an average dry weather flow effluent limit of 0.71 mgd.”

The Discharger proposes the following revision:

“d. Flow. The Facility is rated by the Discharger to provide a tertiary level of treatment for a flow of 0.71 mgd. The actual design flow is 2.0 mgd.”

RESPONSE: The Facility’s rated capacity is 0.71 mgd as an average dry weather flow, based on the design capacity of the filters (2.0 mgd) divided by the wet weather peaking factor of 2.8. The design flow referenced in the Order is specific to this average dry weather flow and not the instantaneous maximum flow rate of the process’s limiting factor.

CITY OF JACKSON - COMMENT #46:

Regarding Table F-3, the summary of technology-based effluent limitations, the Discharger submitted two comments:

Part 1) Instantaneous minimum of the pH should be 6.5, and an instantaneous maximum should be 7.5. The Discharger references the Limitations and Discharge Requirements Section of the Order which incorrectly contained an instantaneous maximum of 7.5 standard units for pH.

Part 2) Regarding footnote 2 of Table F-3, which states how mass-based effluent limitations were calculated, the Discharger proposes additional language to state:

“Mass based effluent limitations are established for the average dry weather flow period using the following formulas.”

RESPONSE:

Part 1) Table F-3 is specific to technology-based effluent limitations that must be considered as well as water quality-based effluent limitations. Staff acknowledges there was an editorial error transferring the correct pH limitations from the Fact Sheet to the Order. The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet.

Part 2) Footnote “2” is specifically to demonstrate how mass-based effluent limitations have been established. The use of 0.71 mgd as an average dry weather flow has been adequately specified throughout the permit and fact sheet. Section VII.F (Compliance determination for mass effluent limitations) specifies that compliance with the mass effluent limitations is determined during average dry weather periods only when groundwater is at or near normal and runoff is not occurring.

CITY OF JACKSON - COMMENT #47:

The Discharger commented regarding Section IV.C.2.b of the Fact Sheet which states:

“b. Discharge Conditions. This Order includes a compliance schedule of 5 years, after which, the Discharger shall be prohibited from discharging to Jackson Creek when a 20:1 dilution of the effluent in the receiving water for all discharges to Jackson Creek is not available. This prohibition has been established for protection of downstream domestic beneficial water supply uses in accordance with DPH site-specific guidance for this facility’s discharge and impacts on existing downstream water user. In the interim period, the Discharger is permitted to discharge Title-22 quality effluent to the receiving water regardless of flow ratio. Current flow data indicate that, at times, Jackson Creek is dominated by effluent water downstream of the discharge. The

criteria for constituents such as metals and ammonia that are independent of pH, temperature, and hardness under this year-round discharge condition were calculated using effluent data. At the end of the compliance schedule, when the Discharger is prohibited from discharging to Jackson Creek at less than 20:1 dilution of the effluent, mixing of the effluent with the receiving water will occur and downstream receiving water will not be dominated by the effluent. Under this conditions, the most protective criteria for pH, temperature, and hardness.”

The Discharger proposes the following revision:

“b. Discharge Conditions. This Order includes a compliance schedule of 5 years, after which, the Discharger shall be prohibited, conditionally, from discharging effluent to Jackson Creek in amounts exceeding a 20:1 dilution in the receiving water. This conditional prohibition...impacts on existing downstream water users...At the end of the Compliance schedule, when the Discharger is prohibited, conditionally, from...”

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A specific re-opener provision has been added at Part VI.C.1. of the Order to allow the permit to be reopened based on the feasibility of State Board approval for a decrease of discharge by the Discharger to the receiving water. If the State Board determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the Order may be reopened by the Regional Water Board for appropriate revisions.

Further, Discharge Prohibition III.E has been revised to state:

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging wastewater into Jackson Creek in amounts that cause the downstream Lake Amador water to exceed greater than five percent volume of wastewater in Lake Amador (one part wastewater in 20 parts of Lake water, or 20:1 dilution).”

Lake Amador is the water body that provides the domestic water supply for surrounding residents. Therefore, the public health concern in regards to maintaining a 20:1 dilution ratio for protection of the domestic water supply applies to Lake Amador, not Jackson Creek (tributary to Lake Amador). Therefore, the revision of Discharge Prohibition III.E in response to the above comment alters the compliance point for achieving 20:1 dilution from the point of discharge into Jackson Creek, to Lake Amador. The corresponding portions of the Order, Monitoring and Reporting Program, and Fact Sheet have been revised to reflect this change.

CITY OF JACKSON - COMMENT #48:

The Discharger commented regarding Section IV.C.2.b of the Fact Sheet (Discharge Conditions), which states:

“... due to the uncertainty of upstream assimilative capacity and sufficient flow data as described in Section IV.C.2.d below, no dilution credits will be granted for the calculation of effluent limitations.”

The Discharger proposed the following revision:

“...be considered or granted for the calculation of effluent limitations until such time that the Discharger submits a mixing zone and dilution study.”

RESPONSE: Re-opener Provision VI.C.1.b.ii allows for the reopening of the Order based on the availability of new information that was not available at the time of permit issuance.

CITY OF JACKSON - COMMENT #49:

The Discharger commented regarding Section IV.C.2.c of the Fact Sheet, which discusses the applicable beneficial uses and water quality criteria and objectives, and states:

“...after which the Discharger is prohibited from discharging to Jackson Creek when 20:1 dilution within the receiving water for all discharges to Jackson Creek is not available...”

The Discharger proposed the following revision:

“...after which the Discharger is prohibited conditionally...”

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A specific re-opener provision has been added at Part VI.C.1.9 of the Order to allow the permit to be reopened based on the feasibility of State Board approval for a decrease of discharge by the Discharger to the receiving water. If the State Board determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the Order may be reopened by the Regional Water Board for appropriate revisions.

CITY OF JACKSON - COMMENT #50:

Regarding the discussion of assimilative capacity and mixing zones contained in Section IV.C.2.d of the Fact Sheet, the Discharger states:

“For all criteria other than aquatic life, the long-term dilution is used and therefore a mixing zone and dilution study are not needed. But, Discharger does have to provide an estimate of:

Jackson Creek harmonic mean flow
Long-term permitted effluent flow”

RESPONSE: Dilution credit is granted by the Regional Water Board as specified in Section 1.4.2 of the SIP.

CITY OF JACKSON - COMMENT #51:

Regarding the use of the upper pH limitation of 8.0 standard units used for the calculation of the ammonia effluent limitation contained in Section IV.C.3.f of the Fact Sheet, the Discharger states that the maximum permitted effluent pH is stated as 7.5 in the Limitations and Discharge Requirements.

RESPONSE: Staff acknowledges there was an editorial error transferring the correct pH limitations from the Fact Sheet to the Order. The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #52:

Regarding the use of the upper pH limitation of 8.0 standard units used for the calculation of the ammonia effluent limitation contained in Section IV.C.3.f of the Fact Sheet, the Discharger states the maximum permitted effluent pH is stated as 7.5 in the Limitations and Discharge Requirements, and the 2.14 mg/L (as N) amount that is referenced needs to be revised.

RESPONSE: Staff acknowledges there was an editorial error transferring the correct pH limitations from the Fact Sheet to the Order. The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet. Staff used the actual observed and more conservative pH value of 8.0 standard units for the calculation of the ammonia effluent limitations. The reference to the acute criterion for ammonia of 2.14 mg/L (as N) (which is based on the use of 7.5 standard units) has been revised based on the use of a pH value of 8.0 standard units for the calculation of ammonia criterion and has been changed to 5.62 mg/L (as N).

CITY OF JACKSON - COMMENT #53:

Part 1) The Discharger commented that the calculation of the 30-day chronic criterion for ammonia in Section IV.C.3.f. of the Fact Sheet be revised to use a 30-day average pH which is used for temperature. Paragraph 4 of Section IV.C.3.f. states:

“Because of the possibility for the effluent to dominate the downstream receiving waters, the maximum observed 30-day rolling average temperature and the maximum observed pH of the effluent were used to calculate the 30-day chronic criterion for the period until the Discharger achieves 20:1 dilution for all discharges. The maximum observed 30-day effluent temperature was 75°F (23.9°C), for the rolling 30-day period ending 10 August 2005. The maximum observed effluent pH value was 8.0 on 13 October 2005. Using a pH value of 8.0 and the worst-case temperature value of 75°F (23.9°C) on a rolling 30-day basis, the resulting 30-day CCC is 1.33 mg/L (as N) under the condition that the effluent does not receive 20:1 dilution in the receiving water. Under the condition when all discharges to Jackson Creek receive 20:1 dilution, the maximum observed 30-day rolling average temperature and the maximum observed pH of the downstream receiving water were used to calculate the 30-day chronic criteria. The maximum observed 30-day R-2 temperature was 70.88°F (21.6°C), for the rolling 30-day period ending 10 August 2005. The maximum observed R-2 pH value was 8.2 on 18 March 2004. Using a pH value of 8.2 and the worst-case temperature value of 70.88°F (21.6°C) on a rolling 30-day basis, the resulting 30-day CCC is 1.14 mg/L (as N) under the condition that all discharges receive 20:1 dilution.”

Part 2) In regards to the calculation of the 30-day chronic criterion for ammonia referenced above, the Discharger comments that a lower ammonia limit is needed when dilution is available. Therefore, the Discharger claims that having no dilution is not a “worst-case” condition.

RESPONSE:

Part 1) The MEC for pH is used to calculate ammonia effluent limitations due to the acute effects of pH on aquatic life.

Part 2) Dilution credit can only be granted as specified in Section 1.4.2 of the SIP. Further explanation regarding the availability of dilution is provided in Section IV.C.d of the Fact Sheet.

CITY OF JACKSON - COMMENT #54:

The Discharger commented that the MDEL in the Limitations and Discharge Requirements of the Order for total copper is 6.7 µg/L, while Section IV.C.3.h. of the Fact Sheet states:

“...An AMEL and MDEL for total copper of 3.22 µg/L and 6.46 µg/L, respectively, are included in this Order based on CTR criteria for the protection of freshwater aquatic life (see Attachment F, Table F-8 for WQBEL calculations).”

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the correct effluent limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #55:

The Discharger commented on the establishment of reasonable potential for iron as discussed in Section IV.C.3.n. of the Fact Sheet, which states:

Iron. The Basin Plan water quality objectives for chemical constituents requires that water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in Title 22 of the California Code of Regulations. The Secondary MCL - Consumer Acceptance Limit for iron is 300 µg/L. Based on input from DPH and the fact that secondary MCLs are designed to protect consumer acceptance, effluent limitations based on secondary MCLs are applied as an annual average concentration.

The MEC (maximum observed effluent concentration) for iron was 60 µg/L based on four samples collected between 30 January 2002 and 14 November 2002, while the maximum observed upstream receiving water iron concentration was 360 µg/L, based on four samples collected between 30 January 2002 and 14 November 2002. Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the Secondary MCL for iron. The receiving water has exceeded the Secondary MCL for iron. Therefore, no assimilative capacity is available in the receiving water for iron. An annual average effluent limitation of 300 µg/L for iron is included in this Order based on protection of the Basin Plan’s narrative chemical constituents objective. Based on the sample results for the effluent, it appears the Discharger can meet this new limitation.”

The Discharger argues that the MEC of 60 µg/L is much lower than the water quality objective of 300 µg/L and questions how it exhibits reasonable potential to do anything other than to reduce the potential for an exceedance.

RESPONSE: The MEC for iron in the effluent was 60 µg/L. The maximum concentration in the receiving water was 360 µg/L. The secondary MCL (i.e. applicable water quality criteria) for iron is 300 µg/L. As specified in Step 6 of Section 1.3 of the SIP, when the background concentration (receiving water concentration) is above the water quality criteria, and the pollutant is detectable

in the effluent, as is in the case here, the discharge demonstrates reasonable potential to exceed water quality criteria and an effluent limitation is required.

CITY OF JACKSON - COMMENT #56:

The Discharger commented on the levels of manganese in the receiving water which is discussed in Section IV.C.3.o. of the Fact Sheet, in part, as follows:

“...Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the Secondary MCL for manganese. The receiving water has exceeded the Secondary MCL for manganese...”

The Discharger has requested that the Order be revised to state:

“...Therefore, the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the Secondary MCL for manganese. The receiving water has been at the Secondary MCL for manganese at times...”

RESPONSE: The Fact Sheet has been revised as stated below:

“The receiving water has equaled the Secondary MCL for manganese.”

CITY OF JACKSON - COMMENT #57:

The Discharger commented on the impact of discharges of mercury to surface waters draining into the Delta which is discussed in Section IV.C.3.p. of the Fact Sheet, in part, as follows:

“...and have impacts on beneficial uses in the Sacramento San Joaquin Delta. Thus, the discharge of mercury to the surface waters in the Central Valley draining into the Delta is being limited.”

The Discharger has requested that the Order be revised to state:

“...and have impacts on beneficial uses in the Sacramento San Joaquin Delta. However, the Discharger’s potable water supply removes water and associated mercury from the watershed flowing to the Delta. Thus, the incremental increase in mercury discharged to the surface waters in the Central Valley draining into the Delta over and above the mercury removed from the watershed draining into the Delta by the potable water supply intake is being limited.”

RESPONSE: No intake credits have yet been applied for and approved for the Discharger for mercury.

CITY OF JACKSON - COMMENT #58:

The Discharger commented on the performance-based mass effluent limitation which is discussed in Section IV.C.3.p. of the Fact Sheet, in part, as follows:

“This Order contains a performance based mass effluent limitation of 0.0016 lbs/month for mercury for the effluent discharged to the receiving water. This limitation...”

The Discharger has requested that the Order be revised to state:

“This Order contains a performance based mass effluent limitation of 0.0016 lbs/month for mercury above the mercury mass removed by the potable surface water supply intake (i.e., the intake credit). This...”

RESPONSE: No intake credits have yet been applied for and approved for the Discharger for mercury.

CITY OF JACKSON - COMMENT #59:

The Discharger commented on the requirements of treating effluent to meet Title 22 disinfection criteria, which is discussed in Section IV.C.3.r. of the Fact Sheet, in part, as follows:

“treated to a level equivalent to that recommended by DPH. In addition, to coliform testing, a turbidity effluent limitation has been included as a second indicator of the effectiveness of the treatment process and to assure compliance with the required level of treatment. The previous Order included effluent limitations of 2 NTU as a monthly average and 5 NTU as a daily maximum. However, a tertiary treatment process or equivalent, must be capable of reliably meeting a turbidity limitation of 2 nephelometric turbidity units (NTU) as a daily average, 5NTU no more than 5% of the time in a 24-hour period, and 10 NTU at any time. This Order includes the more stringent effluent limitations for turbidity to ensure compliance with Title 22 requirements. Failure of the filtration system such that virus removal is impaired would normally result in increased particles in the effluent, which result in higher effluent turbidity. Turbidity has a major advantage for monitoring filter performance, allowing immediate detection of filter failure and rapid corrective action Coliform testing, by comparison, is not conducted continuously and requires several hours to days, to identify high coliform concentrations. Therefore, to ensure compliance with the DPH recommended Title 22 disinfection criteria, weekly average effluent limitations are impracticable for turbidity.”

The Discharger has requested that the Order be revised to state:

“Treated to a level equivalent to that recommended by DPH, but without the higher monitoring, alarms and redundancy required when reclaimed.”

The Discharger further comments that ONLY if the State of California accepts the current City treatment facilities as producing a Title 22 tertiary equivalent effluent can the City accept the language that refers to “equivalent” treatment.

RESPONSE: The proposed permit has been revised to reflect the proposed language in regards to meeting “equivalent” Title 22 tertiary effluent requirements for “reuse”. It should be noted that this Order applies equivalent Title 22 based effluent limitations for the protection of the receiving water and human health, and not “reuse”. Redundancy and reliability of treatment are requirements of Title 22 reuse. This Order establishes equivalent Title 22 requirements for chemical coagulation, filtration, disinfection, and effluent limitations for pathogens, turbidity, BOD₅, and TSS for the protection of human health.

CITY OF JACKSON - COMMENT #60:

The Discharger commented on the CWC section 13241 considerations for the requirement of effluent limitations and a Title 22 tertiary level of treatment which is discussed in Section IV.C.3.r.ii. of the Fact Sheet as follows:

“The environmental characteristics of the hydrographic unit, including the quality of the available water, will be improved by the requirement to provide tertiary treatment for this wastewater discharge. Tertiary treatment will allow for the reuse of the undiluted wastewater for food crop irrigation and contact recreation activities that would otherwise be unsafe according to recommendations from the DPH.”

The Discharger has requested that the Order be revised to state:

“...to provide equivalent tertiary treatment for this wastewater discharge.”

The Discharger further argues that “Equivalent tertiary treatment” will not allow reuse. Only if the State of California accepts the current City treatment facilities as producing a Title 22, tertiary equivalent effluent can the City accept the language that refers to “equivalent” treatment.

RESPONSE: The Order has been revised to reflect the proposed language in regards to meeting “equivalent” Title 22 tertiary effluent requirements for “reuse”. It should be noted that this Order applies equivalent Title 22 based effluent limitations for the protection of the receiving water and human health, and not “reuse”. Redundancy and reliability of treatment are requirements of

Title 22 reuse. This Order establishes equivalent Title 22 requirements for chemical coagulation, filtration, disinfection, and effluent limitations for pathogens, turbidity, BOD₅, and TSS for the protection of human health.

CITY OF JACKSON - COMMENT #61:

The Discharger commented on the ability to meet effluent limitations for salinity which is discussed in Section IV.C.3.t.v. of the Fact Sheet, in part, as follows:

“...Based on the sample results for the effluent, it appears the Discharger can meet these new limitations.”

The Discharger has requested that the Order be revised to state:

“Based on the sample results for the effluent, it appears the Discharger can meet these new limitations as long as neither the Discharger nor the potable water supplier implements any further water conservation measures that will naturally increase the salinity of the Discharger’s influent wastewater and effluent.”

RESPONSE: This permit specifies effluent limitations that must be met to protect the quality of the receiving water. These limitations are not conditional on the water conservation methods or other changes that may take place within the service area.

CITY OF JACKSON - COMMENT #62:

The Discharger commented on the rationale for the monitoring requirement for salinity in the water supply which is discussed in Section IV.C.3.t.v. of the Fact Sheet, in part, as follows:

“... Also water supply monitoring is required to evaluate the relative contribution of salinity from the source water to the effluent.”

The Discharger has requested that the Order be revised to state:

“... Also water supply monitoring is required to evaluate the relative contribution of salinity from the source water to the effluent, and from water conservation measures.”

RESPONSE: This permit specifies effluent limitations that must be met to protect the quality of the receiving water. These limitations are not conditional on the water conservation methods or other changes that may take place within the service area.

CITY OF JACKSON - COMMENT #63:

The Discharger commented that the effluent limitations for silver included in Section IV.C.3.u. of the Fact Sheet were not included in the Limitations and Discharge Requirements. Section IV.C.3.u., in part, states:

“The MEC for silver was 1.2 µg/L, based on four samples collected between 30 January 2002 and 14 November 2002, while the maximum observed upstream receiving water silver concentration was non-detect (<0.02 µg/L), based on four samples collected between 30 January 2002 and 14 November 2002. The discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for silver for the period until the Discharger attains 20:1 dilution. An AMEL and MDEL for silver of 0.49 µg/L and 0.99 µg/L, respectively, are included in this Order based on CTR criteria for the protection of freshwater aquatic life (see Attachment F, Table F-15 for WQBEL calculations). Although silver does not demonstrate reasonable potential when the discharge receives 20:1, these effluent limitations are established in this Order under both discharge conditions in order to prevent backsliding.”

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #64:

The Discharger commented on the difference in effluent limitations for zinc in the Limitations and Discharge Requirements and Section IV.C.3.y. of the Fact Sheet, which states, in part:

“An AMEL and MDEL for zinc of 30 µg/L and 60 µg/L, respectively, are included...”

The Discharger requested the Order be revised to reflect the effluent limitations included in the Limitations and Discharge Requirements to state:

“An AMEL and MDEL for zinc of 31 µg/L and 62 µg/L, respectively, are included in...”

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #65:

The Discharger commented on the calculation of ammonia effluent limitations included Section IV.C.4., Table F-6 of the Fact Sheet. Table F-6 reads as follows:

**Table F-6. WQBEL Calculations for Ammonia
 (until all discharges receive 20:1 dilution)**

	Acute	Chronic (4-day)	Chronic (30-day)	Human Health
pH	8.0 ⁽¹⁾	N/A	8.0 ⁽²⁾	N/A
Temperature °C	N/A	N/A	23.9 ⁽³⁾	N/A
Criteria (mg/L) ⁽⁴⁾	5.62	3.33	1.33	1.5
Dilution Credit	No Dilution	No Dilution	No Dilution	No Dilution
ECA	5.62	3.33	1.33	1.5
ECA Multiplier	0.21	0.39	0.68	--
LTA	1.18	1.3	0.9	--
AMEL Multiplier (95 th %)	⁽⁵⁾	⁽⁶⁾	1.31	--
AMEL (mg/L)	⁽⁵⁾	⁽⁶⁾	1.2	1.5
MDEL Multiplier (99 th %)	⁽⁵⁾	⁽⁶⁾	4.68	2.01
MDEL (mg/L)	⁽⁵⁾	⁽⁶⁾	4.2	3.0

⁽¹⁾ Maximum permitted effluent pH

⁽²⁾ Maximum reported effluent pH

⁽³⁾ Maximum reported 30-day rolling average effluent temperature

⁽⁴⁾ USEPA National Recommended Ambient Water Quality Standard

⁽⁵⁾ Limitations based on $LTA_{\text{chronic (30-day)}} (LTA_{\text{chronic (30-day)}} < LTA_{\text{acute}})$

⁽⁶⁾ Limitations based on $LTA_{\text{chronic (30-day)}} (LTA_{\text{chronic (30-day)}} < LTA_{\text{chronic (4-day)}})$

Part 1) The Discharge commented that the pH used to calculate the Acute and Chronic (30-day) should be modified to 7.5 according to the maximum permitted pH allowed in the Limitations and Discharge Requirements.

Part 2) The Discharger commented that the calculation of the Chronic (30-day) AMEL Multiplier (95th %) of 1.31 and the Chronic (30-day) MDEL Multiplier (99th %) of 4.68 may be calculated incorrectly using different coefficients of variation (CV).

Part 3) The Discharger commented that the Human Health MDEL of 3.0 mg/L is less than the 4.2 mg/L and should be the governing effluent limitation.

Part 4) The Discharger commented that effluent limitations cannot be set based on the assumption that another effluent limit will be exceeded.

RESPONSE:

Part 1) Staff acknowledges there was an editorial error transferring the correct pH limitations from the Fact Sheet to the Order. The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet. Staff

used the actual observed and more conservative pH value of 8.0 standard units for the calculation of the ammonia effluent limitations.

Part 2) A CV of 0.95 was used to calculate the AMEL and MDEL multipliers.

Part 3) The AMEL for ammonia based on chronic criteria is more stringent than the human health criteria.

Part 4) See answer to Part 1.

CITY OF JACKSON - COMMENT #66:

The Discharger commented on the calculation of ammonia effluent limitations included Section IV.C.4., Table F-7 of the Fact Sheet. Table F-7 reads as follows:

**Table F-7. WQBEL Calculations for Ammonia
 (when all discharges receive 20:1 dilution)**

	Acute	Chronic (4-day)	Chronic (30-day)	Human Health
<i>pH</i>	8.0 ⁽¹⁾	N/A	8.2 ⁽²⁾	N/A
<i>Temperature °C</i>	N/A	N/A	21.6 ⁽³⁾	N/A
<i>Criteria (mg/L)</i> ⁽⁴⁾	5.62	2.85	1.14	1.5
<i>Dilution Credit</i>	No Dilution	No Dilution	No Dilution	No Dilution
<i>ECA</i>	5.62	2.85	1.14	1.5
<i>ECA Multiplier</i>	0.21	0.39	0.68	--
<i>LTA</i>	1.18	1.11	0.78	--
<i>AMEL Multiplier (95th %)</i>	⁽⁵⁾	⁽⁶⁾	1.31	--
AMEL (mg/L)	⁽⁵⁾	⁽⁶⁾	1.0	1.5
<i>MDEL Multiplier (99th %)</i>	⁽⁵⁾	⁽⁶⁾	4.68	--
<i>MDEL/AMEL Multiplier</i>	--	--	--	2.01
MDEL (mg/L)	⁽⁵⁾	⁽⁶⁾	3.7	3.0

⁽¹⁾ Maximum permitted effluent pH

⁽²⁾ Maximum reported effluent pH

⁽³⁾ Maximum reported 30-day rolling average effluent temperature

⁽⁴⁾ USEPA National Recommended Ambient Water Quality Standard

⁽⁵⁾ Limitations based on $LTA_{\text{chronic (30-day)}} (LTA_{\text{chronic (30-day)}} < LTA_{\text{acute}})$

⁽⁶⁾ Limitations based on $LTA_{\text{chronic (30-day)}} (LTA_{\text{chronic (30-day)}} < LTA_{\text{chronic (4-day)}})$

Part 1) The Discharge commented that the pH used to calculate the Acute and Chronic (30-day) should be modified to 7.5 according to the maximum permitted pH allowed in the Limitations and Discharge Requirements.

Part 2) The Discharger commented that the calculation of the Chronic (30-day) AMEL Multiplier (95th %) of 1.31 and the Chronic (30-day) MDEL Multiplier (99th %) of 4.68 may be calculated incorrectly using different coefficients of variation (CV).

Part 3) The Discharger commented that effluent limitations cannot be set based on the assumption that another effluent limit will be exceeded.

RESPONSE:

Part 1) Staff acknowledges there was an editorial error transferring the correct pH limitations from the Fact Sheet to the Order. The pH limitations in the Order have been edited to reflect the pH limitations described in the Fact Sheet. Staff used the actual observed and more conservative pH value of 8.0 standard units for the calculation of the ammonia effluent limitations.

Part 2) A CV of 0.95 was used to calculate the AMEL and MDEL multipliers.

Part 3) The AMEL for ammonia based on chronic criteria is more stringent than the human health criteria.

CITY OF JACKSON - COMMENT #67:

The Discharger commented on the difference in the AMEL and MDEL for copper included in the Limitations and Discharge Requirements and Section IV.C.4., Table F-8 of the Fact Sheet, which reads as follows:

**Table F-8. WQBEL Calculations for Copper
 (under both discharge conditions)**

	Acute	Chronic	Human Health
Criteria (µg/L)	6.46 ⁽¹⁾	4.63 ⁽¹⁾	1,300 ⁽²⁾
Dilution Credit	No Dilution	No Dilution	No Dilution
ECA	6.46	4.63	1,300
ECA Multiplier	0.32	0.53	--
LTA	2.07	2.44	--
AMEL Multiplier (95 th %)	1.55	⁽³⁾	--
AMEL (µg/L)	3.22	⁽³⁾	1,300⁽³⁾
MDEL Multiplier (99 th %)	3.11	⁽³⁾	--
MDEL/AMEL Multiplier	--	--	2.01
MDEL (µg/L)	6.46	⁽³⁾	2608⁽³⁾

⁽¹⁾ USEPA CTR Criteria calculated using the lowest reported effluent hardness value of 44 mg/L
⁽²⁾ CA Department of Health Primary MCL
⁽³⁾ Limitations based on acute LTA (Acute LTA < Chronic LTA)

The Discharger points out that the AMEL for Acute of 3.22 µg/L is 3.3 µg/L on page 10 of the Limitations and Discharge Requirements.

The Discharger also points out that the MDEL for Acute of 6.46 µg/L is 6.7 µg/L on Page 10 of the Limitations and Discharge Requirements.”

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet

that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #68:

The Discharger commented that the effluent limitations that are included in Section IV.C.4., Table F-15 of the Fact Sheet, are absent in the Limitations and Discharge Requirements. Table F-15 reads as follows:

Table F-15. WQBEL Calculations for Silver (until all discharges receive 20:1 dilution)

	<i>Acute</i>	<i>Human Health</i>
<i>Criteria (µg/L)</i>	0.99 ⁽¹⁾	100 ⁽²⁾
<i>Dilution Credit</i>	<i>No Dilution</i>	<i>No Dilution</i>
<i>ECA</i>	0.99	100
<i>ECA Multiplier</i>	0.32	--
<i>LTA</i>	0.32	--
<i>AMEL Multiplier (95th%)</i>	1.55	--
AMEL (µg/L)	0.49	100 ⁽³⁾
<i>MDEL Multiplier (99th%)</i>	3.11	--
<i>MDEL/AMEL Multiplier</i>	--	--
MDEL (µg/L)	0.99	--

⁽¹⁾ USEPA CTR Criteria calculated using the lowest reported effluent hardness value of 44 mg/L
⁽²⁾ CA Department of Health Primary MCL
⁽³⁾ Final WQBEL based on CTR Criteria.

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #69:

The Discharger commented on the difference in the AMEL and MDEL for zinc included in the Limitations and Discharge Requirements and Section IV.C.4., Table F-17 of the Fact Sheet, which reads as follows:

Table F-17. WQBEL Calculations for Zinc (under both discharge conditions)

	Acute	Chronic	Human Health
Criteria (µg/L)	59.76 ⁽¹⁾	59.76 ⁽¹⁾	5,000
Dilution Credit	No Dilution	No Dilution	No Dilution
ECA	59.76	59.76	5,000
ECA Multiplier	0.32	0.53	--
LTA	19.19	31.52	--
AMEL Multiplier (95 th %)	1.55	⁽³⁾	--
AMEL (µg/L)	30	⁽³⁾	5,000⁽³⁾
MDEL Multiplier (99 th %)	3.11	⁽³⁾	--
MDEL/AMEL Multiplier	--	--	2.01
MDEL (µg/L)	60	⁽³⁾	10,030⁽³⁾

⁽¹⁾ USEPA CTR Criteria calculated using the lowest reported effluent hardness value of 44 mg/L

⁽²⁾ CA Department of Health Primary MCL

⁽³⁾ Aquatic life limitations based on acute LTA (Acute LTA < Chronic LTA)

The Discharger points out that the AMEL for Acute of 30 and the MDEL for Acute of 60 are different from those on page 10 of the Limitations and Discharge Requirements Sections.

RESPONSE: Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

CITY OF JACKSON - COMMENT #70:

The Discharger commented on the difference in effluent limitations for copper, 2,6-dinitrotoluene, and pH in Section IV.C.4., Table F-18 of the Fact Sheet and those included in the Limitations and Discharge Requirements. Table F-18 reads, in part, as follows:

Table F-18. Summary of Water Quality-based Effluent Limitations (until all discharges receive 20:1 dilution)

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	3.22	--	6.46	--	--
2,6-Dinitrotoluene	µg/L	0.05	--	0.10	--	--
pH	s.u.	--	--	--	6.5	8.5

1) The Discharger pointed out that the effluent limitations for total recoverable copper were different than those included on page 10 of the Limitations and Discharge Requirements.

2) The Discharger pointed out that the maximum daily effluent limitation for 2-6-dinitrotoluene is different than those included on page 10 of the Limitations and Discharge Requirements and those included in Section IV.C.4., Table F-12 of the Fact Sheet.

3) The Discharger requested that the instantaneous maximum for pH be revised to 7.5 to reflect the limitation included on page 10 of the Limitations and Discharge Requirements.

RESPONSE: 1) and 3) Staff acknowledges there was an editorial error transferring the correct effluent limitations for pH, copper, zinc, and silver from the Fact Sheet that was issued for public review to the Order. The effluent limitations for these parameters in the Order have been edited to reflect the limitations described in the Fact Sheet.

2) Staff acknowledges there was an editorial error. The maximum daily effluent limitation for 2,6-Dinitrotoluene was not transferred from the narrative portion of the Fact Sheet to the summary tables for water quality-based effluent limitations, these effluent limitations were however transferred correctly to the Order. The maximum daily effluent limitation has been added to the summary tables of water quality-based effluent limitations.

CITY OF JACKSON - COMMENT #71:

Regarding Table F-18 of the Fact Sheet, the Discharger states:

“See Page 10 of the Limitations and Discharge Requirements Section for Average Monthly and Maximum Daily.”

RESPONSE: The specific parameter the Discharger is referring to is not clearly stated. For additional information, please see response to comment No. 70.

CITY OF JACKSON - COMMENT #72:

The Discharger commented on the difference in effluent limitations for copper, 2,6-dinitrotoluene, pH, silver, and zinc in Section IV.C.4., Table F-19 of the Fact Sheet and those included in the Limitations and Discharge Requirements. Table F-19 reads, in part, as follows:

**Table F-19. Summary of Water Quality-based Effluent Limitations
 (when all discharges receive 20:1 dilution)**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	3.22	--	6.46	--	--
2,6-Dinitrotoluene	µg/L	0.05	--	0.10	--	--
pH	s.u.	--	--	--	6.5	8.5
Silver, Total Recoverable	µg/L	0.49	--	0.99	--	--
Zinc, Total Recoverable	µg/L	30	--	60	--	--

Part 1) The Discharger pointed out that the effluent limitations for total recoverable copper were different than those included on page 10 of the Limitations and Discharge Requirements.

Part 2) The Discharger pointed out that the effluent limitations for 2,6-dinitrotoluene were different than those included on page 10 of the Limitations and Discharge Requirements.

Part 3) The Discharger requested that the instantaneous maximum for pH be revised to 7.5 to reflect the limitation included on page 10 of the Limitations and Discharge Requirements.

Part 4) The Discharger commented that the effluent limitations for silver in Table F-19 were absent in the Limitations and Discharge Requirements.

Part 5) The Discharger pointed out that the effluent limitations for zinc were different than those included on page 10 of the Limitations and Discharge Requirements.

RESPONSE: Please see response to comment No. 70.

CITY OF JACKSON - COMMENT #73:

The Discharger commented on the rationale for mass-based effluent limitations included in Section IV.D.1. of the Fact Sheet, which reads as follows:

“Mass-based effluent limitations were calculated based upon the permitted average daily discharge flow allowed in Section IV.A.1.g of the Limitations and Discharge Requirements.”

Comment:

- 1) The Discharger requested that 'daily discharge' be changed to 'dry weather discharge.'
- 2) The Discharger pointed out that the reference to Section IV.A.1.g. was incorrect.

RESPONSE: These items have been corrected in the proposed permit.

CITY OF JACKSON - COMMENT #74:

The Discharger commented on the difference in effluent limitations for pH, copper, silver, and zinc in Section IV.D.5., Table F-20 of the Fact Sheet and those included in the Limitations and Discharge Requirements. Table F-20 reads, in part, as follows:

Table F-20. Summary of Final Effluent Limitations (when the discharge receives 20:1 dilution for all discharges)

Parameter	Units	Effluent Limitations					Basis ⁽¹⁾
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
CONVENTIONALS							
pH	s.u.	--	--	--	6.5	8.0	BP
INORGANICS							
Copper, Total Recoverable	µg/L	3.22	--	6.46	--	--	CTR
Silver, Total Recoverable	µg/L	0.49	--	0.99	--	--	CTR
Zinc, Total Recoverable	µg/L	30	--	60	--	--	CTR

Part 1) The Discharger requested that the instantaneous maximum for pH be revised to 7.5 to reflect the limitation included on page 10 of the Limitations and Discharge Requirements.

Part 2) The Discharger pointed out that the effluent limitations for total recoverable copper were different than those included on page 10 of the Limitations and Discharge Requirements.

Part 3) The Discharger commented that the effluent limitations for silver in Table F-20 were absent in the Limitations and Discharge Requirements.

Part 4) The Discharger pointed out that the effluent limitations for zinc were different than those included on page 10 of the Limitations and Discharge Requirements.

RESPONSE: See response to Comment No. 70.

CITY OF JACKSON - COMMENT #75:

The Discharger commented that the wrong citation was used for the receiving water limitation for dissolved oxygen included in Section V.A.1.e. of the Fact Sheet, which states:

*“**Dissolved Oxygen.** The Basin Plan includes a water quality objective that “[W]ithin the legal boundaries of the Delta, the dissolved oxygen concentrations shall not be reduced below: 7.0 mg/L in the Sacramento River (below the I Street Bridge) and in all Delta waters west of the Antioch Bridge; 6.0 mg/L in the San Joaquin River (between Turner Cut and Stockton, 1 September through 30 November); and 5.0 mg/L in all other Delta waters except those bodies of water which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use.” Numeric Receiving Water Limitations for dissolved oxygen are included in this Order and are based on the Basin Plan objective.”*

RESPONSE: The Discharger is correct in its comment. Regional Water Board staff acknowledges that this citation in the Fact Sheet is not applicable to Jackson Creek. The incorrect citation is in the Fact Sheet only and does not effect the proposed permit requirements. The correct dissolved oxygen (DO) objective, as listed on Page III-5.0 of the Basin Plan, continues to apply to Jackson Creek, regardless of the error in the Fact Sheet. Regional Water Board Staff will recommend a late revision to the Fact sheet for the proposed permit.

CITY OF JACKSON - COMMENT #76:

The Discharger commented that the receiving water limitation for temperature included in Section V.A.1.o. of the Fact Sheet should mention the allowance of averaging. Section V.A.1.o. states:

*“**Temperature.** Jackson Creek has the beneficial uses of cold freshwater habitat. The Basin Plan includes the objective that “[a]t no time or place shall the temperature of COLD or WARM intrastate waters be increased more than 5°F above natural receiving water temperature.” This Order includes a receiving water limitation based on this objective.”*

RESPONSE: Comment noted.

CITY OF JACKSON - COMMENT #77:

Regarding the discussion of receiving water effluent limitations, the Discharger states:

“This should mention that averaging is allowed.”

RESPONSE: It is unclear exactly what receiving water parameter the Discharger is referring, however it appears it may be pH. The second paragraph of Section V.A.h allows for monthly averaging period for determining compliance with the 0.5 receiving water pH limitation included in the Order.

CITY OF JACKSON - COMMENT #78:

Regarding the discussion of daily effluent monitoring requirements for pH, temperature, and ammonia contained in Section VI.B of the Fact Sheet, the Discharger states, "This seems excessive. Process doesn't change that much day to day."

RESPONSE: Due to concerns over high ammonia concentrations in the effluent over the previous permit term, daily monitoring for ammonia has been established to determine compliance with the interim effluent limitations for ammonia. Because these interim limitations are "floating" limits, concurrent pH and temperature monitoring on a daily basis is required during the interim period. The monitoring frequency for ammonia, pH, and temperature of twice a week has been retained from Order No. 5-00-173 to determine compliance with the final effluent limitations for ammonia beginning 18 May 2010.

CITY OF JACKSON - COMMENT #79:

The Discharger proposes a discussion of additional monthly water supply monitoring requirements of a raw water supply for mercury in Section VI.E.2 of the Fact Sheet (Water Supply Monitoring).

RESPONSE: Intake credits for mercury have not been granted in this proposed permit, thus the change is not warranted at this time.

CITY OF JACKSON - COMMENT #80:

The Discharger has commented on Section VII.B.7.e of the Fact Sheet which discusses the compliance schedule with Provision III.E. of the Order.

The Discharger has requested that the use of "conditionally" be used when referring to the prohibition to discharge when 20:1 dilution is not available. The specific portion of Section VII.B.7.e the Fact Sheet the discharger is referring states:

"...Discharge Prohibition which prohibits the discharge of wastewater by the Discharger to Jackson Creek..."

The Discharger has proposed the following revision:

“...Discharge Prohibition which prohibits, conditionally, the discharge of wastewater by the Discharge to Jackson Creek...”

RESPONSE: The requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A reopener in Part VI.C.1.9 of the Order has been revised to allow for the permit to be reopened based on the feasibility of State Board approval for a decrease of discharge by the Discharger to the receiving water. If the State Board determines that it is not feasible for the Discharger to remove or reduce the discharge of effluent to Jackson Creek due to downstream water rights, the Order may be reopened by the Regional Water Board for appropriate revisions.

Further, Discharge Prohibition III.E has been revised to state:

“Five years following the adoption date of this Order, the Discharger is prohibited from discharging wastewater into Jackson Creek in amounts that cause the downstream Lake Amador water to exceed greater than five percent volume of wastewater in Lake Amador (one part wastewater in 20 parts of Lake water, or 20:1 dilution).”

Lake Amador is the water body that provides the domestic water supply for surrounding residents. Therefore, the public health concern in regards to maintaining a 20:1 dilution ratio for protection of the domestic water supply applies to Lake Amador, not Jackson Creek (tributary to Lake Amador). Therefore, the revision of Discharge Prohibition III.E in response to the above comment alters the compliance point for achieving 20:1 dilution from the point of discharge into Jackson Creek, to Lake Amador. The corresponding portions of the Order, Monitoring and Reporting Program, and Fact Sheet have been revised to reflect this change.

CITY OF JACKSON - COMMENT #81:

Regarding the listing of iron as having reasonable potential in Attachment G, the Discharger states:

“Reasonable potential should be “No”. See Comment for Page F-29, 2nd paragraph.

RESPONSE: The MEC for iron in the effluent was 60 µg/L. The secondary MCL (i.e. applicable water quality criteria) for iron is 300 µg/L. The maximum concentration in the receiving water was 360 µg/L. As specified in Step 6 of Section 1.3 of the SIP, when the background concentration (receiving water concentration) is above the water quality criteria, and the pollutant is detectable

in the effluent – as is the case here - the discharge demonstrates reasonable potential to exceed water quality criteria and an effluent limitation is required.

CENTRAL VALLEY CLEAN WATER ASSOCTION (CVCWA) COMMENTS

CVCWA - COMMENT #1:

CVCWA is concerned with provisions contained in the proposed permit regarding the discharge prohibition unless 20:1 dilution is available. CVCWA states that California law requires the Regional Water Board to regulate activities that may affect water quality “to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.” The permit proposes a discharge prohibition within five years of the effective date of the permit unless 20:1 dilution of the effluent in the receiving water is available. According to the fact sheet, the discharge prohibition is based on a guidance letter issued to the Regional Board from the California Department of Public Health (CDPH). The CDPH letter does not cite to any references or studies that indicate risk is avoided at 20:1. CVCWA is concerned with the implication of CDPH’s action and the Regional Board’s response in proposing to adopt a discharge prohibition to implement CDPH guidance that is not adopted law or policy.

CVCWA states that the Regional Board must base its decision on an evaluation of all of the information contained in the record and consider the efficacy of CDPH’s proposed 20:1 dilution requirement.

RESPONSE: Staff acknowledges the necessity of the Regional Water Boards to collaborate and cooperate with sister agencies, such as CDPH and DFG. In doing so, guidance from other agencies is evaluated and applied with best professional judgment as it applies to protection of surface water beneficial uses. Staff has reviewed the guidance issued by CDPH in regards to the recommended 20:1 dilution ratio necessary to limit human health risk, and determined that this site-specific concern regarding the City of Jackson WWTP discharge and the downstream use of Lake Amador water for a domestic water supply is valid. The proposed permit specifies that the 20:1 dilution requirement is applied on a site-specific basis, considering downstream beneficial uses of the receiving water and the protection of public health. Regional Water Board’s staff consideration of CDPH’s recommendation is not applied on a region-wide or policy basis. A tentative Discharge Option that does not propose a 20:1 dilution discharge ratio was also proposed, allowing full consideration of this issue by the Regional Water Board.

Further, the requirements of the Jackson Creek Beneficial Use Attainment Study have been revised to require the consultation of the State Water

Resources Control Board, Division of Water Rights (State Board) while developing the work plan. A re-opener in Part VI.C.1.9 of the proposed permit has been revised to allow for the permit to be reopened based on the feasibility of State Board approval for a decrease or elimination of City of Jackson WWTP discharge to Jackson Creek. If the State Board determines that it is not feasible for the Discharger to remove or reduce the discharge to Jackson Creek due to existing downstream water rights, the permit may be reopened by the Regional Water Board for appropriate revisions

EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD) COMMENTS

EBMUD - COMMENT #1:

The City of Jackson has identified potential discharges of treated wastewater to the Mokelumne River above Pardee Reservoir as one of the options it may pursue in its effort to meet the proposed discharge dilution requirements proposed in this draft NPDES permit. EBMUD has expressed its concern regarding the Mokelumne River, which is the water supply source for 1.3 million East Bay residents. The concern revolves around potential Mokelumne River water quality degradation of this water supply due to a potential future City of Jackson WWTP discharge directly into the Mokelumne River. EBMUD states that it will take all actions necessary to protect the public health of its customers, and that identification and proper analysis of other potential discharge alternatives is required under CEQA.

RESPONSE: The potential discharge from the City of Jackson into the Mokelumne River is not within the scope of this NPDES permit. Concerns related to a potential future alternative of WWTP discharge into the Mokelumne River shall be considered when appropriate.

NEW FAZE DEVELOPMENT COMMENTS

NEW FAZE DEVELOPMENT - COMMENT #1:

The best wastewater discharge solution for the City of Jackson is beneficial reuse of properly treated effluent.

RESPONSE: A 5-year compliance schedule is included in the permit for the proposed Discharge Prohibition. The Discharger must continue investigating the feasibility of land disposal, water recycling, storage and/or surface water discharge. A number of variables, including but not limited to economic considerations, downstream water rights, and the protection of downstream aquatic life must be considered prior to determining the most feasible wastewater discharge alternative.

NEW FAZE DEVELOPMENT - COMMENT #2:

The City's best opportunity to achieve compliance with the proposed Discharge Prohibition in the permit is to work with stakeholders, partnering to provide a site for required additional treatment facilities, providing fair share funding and additional support.

RESPONSE: Comment noted.

NEW FAZE DEVELOPMENT - COMMENT #3:

A focus on 20:1 dilution is a concern that should be further analyzed and refined in the required Beneficial Use Attainment Study. The study should consider all issues, including the benefit of dilution, and analysis of total volumetric constituent concentration at the site of the beneficial use.

RESPONSE: Staff has reviewed the guidance issued by CDPH regarding a 20:1 dilution ratio necessary to limit human health risk, and determined that in this site-specific situation concerning the WWTP discharge into Jackson Creek and Lake Amador, this guidance is appropriately considered in the proposed permit. Again, consideration of the proposed 20:1 dilution discharge requirement and the requirement for a site-specific stream study has been evaluated on a case-by-case basis, considering downstream beneficial uses of the receiving water and the protection of public health.

See Response to CVCWA Comment #1 for further details regarding the Jackson Creek Beneficial Use Attainment Study.

NEW FAZE DEVELOPMENT - COMMENT #4:

Concerns for down stream users are important and best served by reducing total effluent discharge to Jackson Creek.

RESPONSE: Comment noted.

NEW FAZE DEVELOPMENT - COMMENT #5:

The Tentative Discharge Option is not realistic as it de-emphasizes the downstream human health concerns in favor of an enhanced aquatic and wildlife habitat, perpetuating relatively recent human influences on the Creek. This option would obviate the beneficial reuse opportunity of the golf course, as the course needs all the summer effluent that the plant is expected to generate. Reduced or no summer effluent for irrigation will eliminate this beneficial reuse option.

RESPONSE: Comment noted.

NOLTE AND ASSOCIATES, INC. COMMENTS

NOLTE AND ASSOCIATES, INC - COMMENT #1:

Nolte and Associates states that the proposed permit requires treatment of all effluent to Title 22 tertiary standards for unrestricted reuse, prior to discharge to Jackson Creek. The existing WWTP site would not afford sufficient room to construct the necessary additional filtration and disinfection facilities to meet the final effluent limitations for unrestricted reuse.

RESPONSE: The proposed permit requires Title 22-quality effluent for disposal into the receiving water and does not apply Title 22 tertiary standards for unrestricted reuse. Special Provision 6.A of the proposed permit states, "Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the Department of Public Health (DPH) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3, (Title 22), **or equivalent.**"

NOLTE AND ASSOCIATES, INC - COMMENT #2:

Nolte and Associates, Inc. comments that to comply with the proposed final tertiary effluent limitations, it will be necessary to construct Title 22, tertiary level filtration and disinfection facility. The existing treatment plant site does not provide sufficient room for construction of such a facility. Thus, it will be necessary to seek an alternative site for the facility, which will probably require a modification of the specific discharge point. We do not see specific reopener provisions, starting at page 22 of the proposed permit, that allows modification of the discharge point should it be necessary to do so as a result of a change in site location for the tertiary treatment facility Water Reclamation Plant. We specifically suggest that sufficient flexibility in the discharge point (in the form of a distance up stream or down stream of the existing discharge point) be included in the permit to accommodate the actual implementation of the proposed requirements.

One discharge alternative, which has been discussed with the Discharger, is the proposed Jackson Hills Gold Course Community plan. This is a logical alternative location because it would be close to the intended point of beneficial reuse, the proposed golf course. A logical discharge point from this site is at a point along Jackson Creek, approximately 2,000 feet upstream of the existing discharge point.

If sufficient flexibility in discharge location cannot be included in the permit to allow modification of the discharge location for the stated reasons, then additional reopener clauses should be added, thus allowing for the discharge location to be modified as a result of the needed efforts to implement compliance with the permit's requirements."

RESPONSE: The proposed permit requires Title 22-quality effluent for disposal into the receiving water and does not apply the full suite of Title 22 standards for unrestricted reuse of treated wastewater. Special Provision 6.A of the proposed permit states, "Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the Department of Public Health (DPH) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3, (Title 22), **or equivalent.**" Additional language has been added to the Special Provision for clarification.

Regional Water Board staff has inspected the existing tertiary treatment process at the City of Jackson WWTP. The tertiary treatment process in place is a well operating facility that currently treats water to existing tertiary treatment requirements in the Discharger's existing WDR Order. The proposed permit does not include requirements that would require major tertiary treatment system upgrades, as mentioned by the commenter. The notion of having to incorporate storage ponds and expensive redundancy processes applies only if the Discharger chooses to reclaim the treated wastewater for unrestricted beneficial reuse, such as irrigation of a golf course. For purpose of discharge into surface water, such storage and redundancy facilities are not required.

Any proposed modification of the discharge location as an alternative to the existing discharge location is not in the scope of this permit. A change in discharge location is an alternative that the Discharger may consider in their compliance feasibility study.

NOLTE AND ASSOCIATES, INC - COMMENT #3:

Nolte and Associates, Inc. concurs that subsequent technical studies, providing new information relating to flows in Jackson Creek, can be the basis for reopening the permit as it relates to the prohibition of discharges to Jackson Creek, only during periods when 20:1 dilution flows are present. This required Beneficial Use Attainment Study should include an analysis of potential positive additional benefits in reduced discharge that can be achieved by beneficial reuse of the effluent for irrigation of the proposed Jackson Hills golf course.

The full extent of the required Beneficial Use Attainment Study should include recognition of the substantial positive effects of dilution that result during winter months due to existing Inflow and Infiltration in the collection system."

RESPONSE: Comment noted. The Jackson Creek Beneficial Use Attainment Study is specific to 1) determine the characteristics needed in Jackson Creek downstream of the discharge to support applicable non-human health beneficial uses, and 2) identify the minimum flow necessary to meet downstream existing water rights.

See Response to CVCWA Comment #1 for further details regarding the Jackson Creek Beneficial Use Attainment Study.

NOLTE AND ASSOCIATES, INC - COMMENT #4:

Nolte and Associates Inc. comments that a study should be considered that recognizes the substantial dilution that will be realized from the increase in daily, weekly and monthly flows resulting from inflow and infiltration into any sanitary sewer collection system. Pollutant concentrations should be measured and reported based on the Daily Discharge and Maximum Daily Effluent Limitation criteria, with full recognition of the increase in dilution at the discharge point (as a percentage of total flow).

The 20:1 dilution criteria appear to result largely from concerns expressed by DPH, for the protection of downstream beneficial municipal users. The entire premise of the dilution ratio is itself, based on the recognized benefit of dilution. This required special Jackson Creek Beneficial Use Attainment Study can include consideration and recognition of the positive benefits of actual concentration of pollutant constituents that are deemed harmful to beneficial uses-at the point of those uses as they related to the total volume.

The existing WDR Order state that dilution credits will not be granted (page F-16, section VI [C.2.b] Discharge Conditions). The proposed Beneficial Use Attainment Study should allow re-examination of the dilution credits, and full consideration of total constituent mass load or concentration by total volume at the point of the down stream MUN beneficial use.”

RESPONSE: The Jackson Creek Beneficial Use Attainment Study is specific to 1) determine the characteristics needed in Jackson Creek downstream of the discharge to support applicable non-human health protection beneficial uses, and 2) identify the minimum flow necessary to meet downstream existing water rights.

See Response to CVCWA Comment #1 for further details regarding the Jackson Creek Beneficial Use Attainment Study.

The Discharger may apply for dilution credit and the Regional Water Board may reopen the proposed permit, under Reopener Provision 1.b.ii, to apply dilution credits if warranted, based on new information (i.e. a study or additional data that was not available at the time of permit issuance).

NOLTE AND ASSOCIATES, INC - COMMENT #5:

Nolte and Associates, Inc. comments that the Compliance Determination section of the proposed permit appropriately recognizes the time and schedule constraints in achieving the idealistic final discharge prohibition of instantaneous flow rate dilution of

20:1, total effluent flow to receiving water flow. It provides five years before complete implementation of this prohibition, allowing instantaneous discharges in excess of the 20:1 dilution for that five year period. The opportunity to fully analyze potential down stream impacts through the Beneficial Use Attainment Study should include the full benefit that can be realized from the potential beneficial reuse option available for irrigation on a golf course, which would substantially reduce the total annual volume of treated effluent discharged to the creek, and therefore Lake Amador.

We realize that strict compliance with the discharge prohibition will require a substantial investment in planning, design, permitting, land acquisition, and construction of large open water volume storage facilities in effort to attenuate winter discharges during periods when 20:1 dilution is not achievable. This potentially expensive investment in storage volume facilities would result in facilities available to regulate and attenuate summer discharges, as well as intermittent winter discharges.

It seems that a better solution is full consideration of the beneficial reuse option provided by the Jackson Hills Golf Course. A required investment in storage facilities would tend to discourage the focus on, and investment in, such beneficial reuse opportunities. It must be recognized that the proposed golf course will need to receive the total projected summer discharge from the City's treatment plant at build out conditions in order to eliminate a need for supplemental potable water. Provision of supplemental potable water for irrigation purposes is not permitted by Amador Water Agency policy. Thus, any solution that has the potential to reduce the likelihood of the golf course being constructed, eliminating the beneficial reuse opportunity entirely. While all or nothing predictions sound harsh, this scenario is a reality. Any situation that can result in a reduction of peak summer effluent to irrigate the proposed golf course may well result in a no-solution scenario, as the golf course could not be maintained without long term supplemental supply of potable water. Other beneficial reuse options provide little true benefit, and really constitute land disposal."

RESPONSE: Comment noted. See Responses to above comments for further detail.

NOLTE AND ASSOCIATES, INC - COMMENT #6:

Nolte and Associates, Inc. comments that the Facility Description in the Fact Sheet indicates that the current facility may have sufficient capability to produce Title 22 tertiary effluent consistent with the final effluent limitations, with minor upgrades. It is clear from the effluent limitation that additional filtration and disinfection to Title 22 tertiary levels for unrestricted reuse would require additional treatment. The City states that their existing treatment plant site does not have sufficient room to accommodate the needed additional facilities. That discussion has prompted Jackson Hills, LLC to investigate the possibility of providing sufficient room on its project site for construction of such facilities. It may be beneficial to clarify this statement by provided the basis definition of Title 22 tertiary treated effluent as used in this specific context."

RESPONSE: In response to comments submitted by the City of Jackson, the Fact Sheet has been revised for clarification to state:

‘During an additional site visit conducted on 9 August 2007, the Facility representative stated that the Facility is capable of meeting “equivalent” Title 22 tertiary effluent with current facilities, however, upgrades are required to achieve the necessary redundancy and reliability of treatment for reuse.’

The proposed permit requires Title 22 quality effluent for disposal into the receiving water and does not apply Title 22 tertiary standards for unrestricted reuse. Special Provision 6.A of the Order states, “Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the California Department of Public Health (DPH) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3, (Title 22), **or equivalent.**”

NOLTE AND ASSOCIATES, INC - COMMENT #7:

Nolte and Associates, Inc. comments that the Fact Sheet discusses two letters from DPH, and adequately characterizes the level of consideration and concern of DPH in absence of specific effluent concentration discussions. This is the stated basis for inclusion of the final discharge prohibition on page 9 (section III, Discharge Prohibitions, paragraph E), requiring both tertiary treatment and 20:1 dilution. The level of concern expressed in these letters does not appear to be strictly based upon the positive effects of dilution at the point of beneficial use, but is focused on perceptive health concerns at the specific downstream trailer residential park and recreational area at Lake Amador. The required Beneficial Use Attainment Study should focus on this specific downstream user, and should include consideration of total constituent loading or concentration at average annual conditions, or average monthly effluent limitations (AMEL) conditions.

With the potential future implementation of beneficial reuse of effluent on a golf course, instantaneous discharge dilution requirement of 20:1 may not be required, as the required additional treatment to meet the final effluent limitations included in these WDRs, and the substantial reduction in total annual effluent discharge, should result in substantially reduced total monthly and annual constituent concentrations. Such beneficial reuse would eliminate tertiary treated effluent (properly filtered and disinfected to meet unrestricted reuse standards) to the creek in other months of the year, and significantly reuse total annual effluent discharge to Jackson Creek.”

RESPONSE: The Jackson Creek Beneficial Use Attainment Study is specific to 1) determine the characteristics needed in Jackson Creek downstream of the discharge to support applicable non-human health protection beneficial uses,

and 2) identify the minimum flow necessary to meet downstream existing water rights.

See Responses to above Comments for further detail.

NOLTE AND ASSOCIATES, INC - COMMENT #8:

Nolte and Associates, Inc. comments that the Fact Sheet discussion regarding pathogens states that tertiary treatment facilities capable of meeting Title 22, or equivalent, requirements are currently installed and operating at the facility'. The additional filtration and disinfection required to treat effluent limitation contained in the WDRs, will require more land than is available at or adjacent to the current WWTP. This apparent discrepancy may benefit from clarification of the statement by providing the definition of Title 22 tertiary treatment as it is used in this context."

RESPONSE: The proposed permit requires Title 22 quality effluent for disposal into the receiving water and does not apply Title 22 tertiary standards for unrestricted reuse. Special Provision 6.A of the Order states, "Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the Department of Public Health (DPH) reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3, (Title 22), **or equivalent.**"

NOLTE ASSOCIATES, INC - COMMENT #8:

Nolte and Associates, Inc. comments that the stated genesis of the proposal to allow discharge of treated effluent without benefit of 20:1 dilution is based upon a letter from Department of Fish and Game regarding their desire to maintain in-stream summer flow in Jackson Creek for the protection of aquatic life and wildlife. Consideration of this option requires discounting the potentially higher level concerns over municipal beneficial use from DPH. While the treatment plant has historically discharged to the creek since its construction, true historical period consideration of the aquatic habitat in this creek would realize that prior to artificial discharges to the creek, summer flows in the creek would have been very low to non-existent. This option would actually increase the total annual effluent discharge to Jackson Creek and downstream municipal users.

As started above, any proposal that would result in a reduction in available summer effluent flows for the beneficial reuse irrigation of a golf course would eliminate the potential for that beneficial reuse. We concur that there is merit in eliminating the requirement for instantaneous 20:1 dilution, but based on a full consideration in the required Beneficial Use Attainment Study, that includes the value of additional treatment, reduction of total effluent discharge, and determination of annual and monthly constituent concentrations at the specified downstream point of concern at Lake Amador (including the effects of dilution resulting from total annual effluent volume to total annual rainfall runoff volume)."

RESPONSE: Comment noted.

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH COMMENTS

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH - COMMENT #1:

Please reference comments to the Regional Water Board, dated 1 October 2007 by the California Department of Public Health. The body of the letter is provided below:

The Department is in receipt of a copy of the letter of September 18, 2007, from the East Bay Municipal Utility District to Kenneth Landau regarding the tentative waste discharge requirements in NPDES Permit No. CA0079391 for the City of Jackson. The letter is basically focused on a key concept in the public health program related to the provision of drinking water that is safe, wholesome, and potable. That concept is Source Water Protection. Although the Department has always directed domestic water utilities toward the use of the highest quality, best available sources when selecting water sources intended to meet potable water demands, that concept was formalized by the Federal government in the 1996 Amendments to the Safe Drinking Water Act. In response to those amendments, the United States Environmental Protection Agency initiated its Source Water Protection program, and the Department, as a primacy agency, adopted Source Water Protection as an element of the California Safe Drinking Water program.

In its letter of September 18, 2007, the East Bay Municipal Utility District (EBMUD) emphasizes its commitment to Source Water Protection in its statement, "The District is committed to protecting the Mokelumne River water quality from degradation and will take all actions necessary to protect the public health of its customers."

The EBMUD is a large entity with extensive resources. In contrast, the domestic water customers in the Jackson Valley are few in number and have very limited resources that prevent them from making a similar commitment to protect their source water, Jackson Creek, from degradation. However, the public health of the domestic water consumers in the Jackson Valley deserves to receive protection equal to that afforded to water consumers in the service area of EBMUD.

The Regional Water Quality Control Board (RWQCB) should also consider that the average annual discharge of the City of Jackson of about 600 acre feet of treated wastewater is only diluted by an average annual flow of from 10,000 to 12,000 acre feet of water that flow in Jackson Creek on the way to Lake Amador. In contrast, the average annual flow in the Mokelumne River is about 700,000 acre feet which would afford over 50 times as much wastewater dilution of the Jackson discharge as is possible in Jackson Creek. As a result, the Jackson discharge has an enormously greater impact on the water stored in Lake Amador, with its capacity of 22,000 acre feet than the same discharge would have on the Mokelumne River system and Pardee Reservoir, which has a storage capacity of 209,000 acre feet. Therefore, while the Department agrees with EBMUD in its opposition to the discharge of the City of Jackson's wastewater into the Mokelumne River, it is worth noting that the same discharge into Jackson Creek, without at least 20 to 1 dilution, greatly enhances the

public health risks related to the very discharge that EBMUD opposes into the Mokelumne River.

The Department is in favor of water recycling and urges the RWQCB to adopt an approach that would maximize the recycling of the City's treated wastewater. Such an approach would also conserve alternate water resources that would be offset by the recycling. Perhaps some of the fresh water saved through the substitution of recycled water could be released into Jackson Creek to benefit an ecosystem that is now subjected to a flow of 100% wastewater effluent during the driest months of each year. If complete recycling of the discharge is not possible, the discharge to Jackson Creek should be allowed only during the wet season when adequate (20 to 1) dilution is available. During the rest of the year, a discharge to land should be required of the City of Jackson.

RESPONSE: The DPH letter (in addition with previous letters dated 13 July 2007, 12 June 2003, and 12 May 2000), expresses concern over the discharge from the City of Jackson Wastewater Treatment Plant into Jackson Creek without receiving a dilution of 20:1. The proposed permit discharge prohibition III.E addresses the DPH concern for public health stated in these letters.

The potential discharge from the City of Jackson into the Mokelumne River is a separate issue that is not within the scope of this permit. Concerns related to the NPDES discharge from Jackson Creek into the Mokelumne River shall be considered when appropriate.