

include BOD, TSS or pH limits, and the Fact Sheet does not justify including them, these limits should not be included. Therefore, the City again requests removal of Sections IV.C.2.a. and IV.C.2.b. Alternatively, the language in Section IV.C.2 should be revised reflect the applicable requirements for reclamation projects

Proposed Revisions to Draft Order:

WDR Sections IV.C.2.a. and IV.C.2.b

2. Reclamation Specifications

a. All treated effluent delivered to the recycled water system is from on-site recycled water storage ponds, therefore, the Permittee shall maintain compliance with the following reclamation specifications at Monitoring Location EFF-001 for deliveries to the Geysers Recharge Project and to the recycled water system (Distribution Points 001 and 002):

Table 6. Water Reclamation Specifications

Parameter	Units	Effluent Limitations				
		Average Monthly ¹	Average Weekly ¹	Maximum Daily ¹	Instantaneous Minimum ¹	Instantaneous Maximum ¹
BOD (5-day @ 20°C)	mg/L	10	15	--	--	--
Total Suspended Solids	mg/L	10	15	--	--	--
pH ¹	s.u.	--	--	--	6.0	9.0

Table Notes:
 1. See Definitions in Attachment A and Compliance Determination discussion in section VII of this Order.

b. Disinfection. The disinfected effluent, sampled in each of the disinfection channels, shall not contain concentrations of total coliform bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-001:

i. The median concentration of the disinfection channels shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (mL), using the daily bacteriological results of the last 7 days for which analyses have been completed; and

ii. The number of coliform bacteria shall not exceed an MPN of 23 per 100 mL in more than one daily result in any 30-day period. iii. One daily result shall exceed an MPN of 240 total coliform bacteria per 100 mL.

ea. Diversions. ...

Attachment E, Table E-7

Table E-7. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Biological Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	2x/Week	Standard Methods ^a
Total Suspended Solids	mg/L	24-hr Composite	Daily	Standard Methods
pH	s.u.	Continuous Grab	Daily	Standard Methods

OR

Delete WDR Section IV.C.2.b and revise WDR Section IV.C.2.a as follows:

a. All treated effluent delivered to the recycled water system is from on-site recycled water storage ponds, therefore, the Permittee shall maintain compliance with the following reclamation specifications in Section IV.C. at Monitoring Location EFF-001 for deliveries to the Geysers Recharge Project and to the recycled water system (Distribution Points 001 and 002):

Table 6. Water Reclamation Specifications

Parameter	Units	Effluent Limitations				
		Average Monthly [†]	Average Weekly [†]	Maximum Daily [†]	Instantaneous Minimum [†]	Instantaneous Maximum [†]
BOD (5-day @ 20°C)	mg/L	10	15	—	—	—
Total Suspended Solids	mg/L	10	15	—	—	—
pH [†]	s.u.	—	—	—	6.0	9.0

Table Notes:
 1. See Definitions in Attachment A and Compliance Determination discussion in section VII of this Order.

Table E-7. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Biological Oxygen Demand (5-day@20C)	mg/L	24-hr Composite	2x/Week	Standard Methods ₂
Total Suspended Solids	mg/L	24-hr Composite	Daily	Standard Methods
pH	s.u.	Continuous Grab	Daily	Standard Methods

Comment 13. WDR Page 11, Section IV.C.2.b.iii.

Typographical Error. Should the Regional Water Board elect to keep the Reclamation Specifications discussed in Comment 12, a typographical error is in Section IV.C.2.b.iii. - “o” should be “No”

Proposed Revisions to Draft Order:

iii. No one daily result shall exceed an MPN of 240 total coliform bacteria per 100 mL.

Comment 14. WDR Page 11, Section IV.C.2.c.

Disposal of Partially Treated Waste in the Event of a Treatment Plant Upset or Failure. In the unlikely event of a Laguna Treatment Plant filtration or UV disinfection failure or upset, the procedure is to capture the water in Reclamation ponds Alpha or Brown (see the Laguna Treatment Plant emergency response procedure section 4.b.). The water captured in the City’s reclamation ponds Alpha or Brown is then used for City farm irrigation only. The City requests that this section be modified to permit disposal of partially treated waste on City-owned land. The City owns property, in part, so such waste can be managed in situations such as this. The City controls access to and use of the land so public health will be adequately protected.

Section IV.C.2.c is contradictory in that it allows for partially-treated water to be discharged to City land but requires such water to meet all conditions in Attachment G which, in turn, includes the reclamation requirements in Section IV.C.2. Partially treated water by definition does not meet the reclamation requirements in Section IV.C.2. Title 22 recognizes allowable uses for recycled water that does not receive full tertiary treatment described in Section IV.C.2. The City proposes modifications to Section IV.C.2.c to recognize this as follows:

Proposed Revisions to Draft Order:

“c. Diversions. In the event of treatment plant failure such that the disinfected effluent does not meet water Reclamation Specifications in section IV.C.2.b, the Permittee is authorized to divert the partially-treated waste to City-owned land provided that all diversions of partially-treated waste comply with ~~Reclamation Requirements in section~~

IV.C.1 and the Laguna Treatment Plant emergency response procedure and consistent with Title 22 requirements.”

Comment 15. WDR Page 12 and 13, Sections IV.D.1. and IV.D.2.

Filtration and Disinfection Process Requirements. In the City’s December 3, 2012 Comment Letter, the City requested that the Draft Order should include language clarifying that these filtration process requirements are not effluent limitations, and subject to mandatory minimum penalties. The City requests that the Tentative Order specify that Filtration Process Requirements are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d). This request was accommodated as footnotes in Attachment E Sections IX.B. and IX.C, but not in the WDR Section IV.D. The presence of a footnote indicator, but no footnote, in Section IV.D indicates it may have been the Regional Water Board’s intention to include the language requested by the City as a footnote. Therefore, the City requests that footnotes be added to WDR Section IV.D. 1. and 2., stating that Filtration Process Requirements and Disinfection Process Requirements are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d).

Proposed Revisions to Draft Order:

Section IV.D.1

1. Filtration Process Requirements¹

¹ Filtration Process Requirements are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d).

Section IV.D.2

2. Disinfection Process Requirements for UV Disinfection System²

² Disinfection Process Requirements for UV Disinfection System are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d).

Comment 16. WDR Pages 12-15, Section IV.D; Appendix E Pages E-23 to E-24 Sections IX.B, IX.C.2., IX.C.3; and Attachment F Pages F-60 to F-62, Sections IV.G.3.c and IV.H.1.

Filtration and Disinfection Process Requirements. The Draft Order violates Water Code §13360(a)’s prohibition on mandating the manner of compliance and is inconsistent with other permits adopted in this region. For these reasons, the language of this section should only include the effluent requirements to be met, not the manner in which those effluent requirements must be met. The Regional Water Board should resist the urge to regulate the internal workings of the treatment plant and allow the certified operators to operate the plant in a manner that meets the effluent requirements. For these reasons, section IV.D.1.a. and D.2. should be removed, or at the

very least, the Draft Order must be modified to conform to the language adopted in other region permits (e.g., Order No. R1-2012-0031 at pg. 10). Provision IV.D.1.b. should also be amended.

In addition, similar provisions of Attachment E, including Section IX.B. Filtration Process Monitoring, and IX.C.2. and 3., UV System Monitoring, should also be removed because the filtration and UV systems should be considered compliant so long as the turbidity and disinfection effluent and reclamation requirements are met. Similarly, Attachment F Sections IV.G.3.b and H.2.a. and VII.G.1. should be removed as these relate to internal workings of the treatment system, not the discharge itself.

Proposed Revisions to the Draft Order:

Remove WDR Sections IV.D.1.a and D.2, Attachment E, Sections IX.B, IX.C.2, IX.C.3, and Attachment F, Sections IV.G.3.c and IV.H.1

Alternatively, remove Attachment E, Sections IX.B, IX.C.2, IX.C.3, and Attachment F, Sections IV.G.3.c and IV.H.1 revise WDR Sections IV.D.1.b as follows:

- b. Turbidity.** The effluent from the filtration system shall ~~at all times be filtered such that the filtered effluent does~~ not exceed any of the following specifications at Monitoring Location INT-001B, prior to transfer to the disinfection unit.
- i. An average of 2 Nephelometric Turbidity Units (NTU) during a 24-hour period;
 - ii. 5 NTU more than 5 percent of the time during a 24-hour period; and
 - iii. 10 NTU at any time.

In addition, similar provisions of the MRP should also be removed or amended accordingly, including: MRP, Section IX.B. Filtration Process Monitoring, and IX.C.2. and 3., UV System Monitoring.

Comment 17. WDR Page 13, Section IV.D.2.b.

UV System Flow Monitoring. This section requires monitoring of flow in each channel. As per Comment 22a of the City's December 3, 2012 Comment Letter, channel flow meters are not reliable due to weir configuration. Flow is measured at a combined channel. A bioassay was conducted by Carollo engineers (and accepted by CDPH this year) using MS2 coliphage that has demonstrated even flow to all channels. ("Laguna Water Reclamation Facility UV Checkpoint Bioassay Results, Final, June 2012").

Proposed Revisions to Draft Order:

b. The Permittee shall provide continuous, reliable monitoring of flow ~~per channel~~, UV transmittance, UV dose, UV power, and turbidity. The Permittee must demonstrate compliance with the UV dose requirement.

Comment 18. WDR Page 13, Section IV.D.2.d. and Attachment E Page E-24, Sections IX.C.2 and 3.

UV Transmittance. This section requires that the UV Transmittance (UVT at 254 nanometers) in the wastewater shall not fall below 50 percent of maximum at any time, unless otherwise approved by CDPH. As per Comment 22b of the City's December 3, 2012 Comment Letter, the City's UV system controls dose using a calculation (accepted by CDPH) in which UVT as one of the factors in determining the ballast power level needed to provide the required dose. Thus, the dose would account for low UVT, and a minimum UVT is unnecessary.

Proposed Revisions to Draft Order:

WDR Section IV.D.2.d.

~~d. The UV transmittance (at least 254 nanometers) in the wastewater shall not fall below 50 percent of maximum at any time, unless otherwise approved by CDPH~~

Attachment E Page E-24 Section IX.C.2:

~~2. Compliance. The UV transmittance shall not fall below 50 percent of maximum at any time, unless otherwise approved by CDPH.~~ The operational UV dose shall not fall below 100 millijoules per square centimeter (mJ/cm²) at any time, unless otherwise approved by CDPH.

Attachment E Section IX.C.3:

~~3. Reporting. ... The Permittee shall report daily average and lowest daily transmittance and operational UV dose on its monthly monitoring reports. If the UV transmittance falls below 50 percent or UV dose falls below 100 mJ/cm²,...~~

Comment 19. WDR Page 13, Section IV.D.2.d. and Attachment E Page E-24 Sections IX.C.2 and 3.

Maximum UVT. The Carollo bioassay referenced in Comment 17 determined that the percent of maximum UVT should be 49%. Should the Regional Board decline the City's requested change in Comment 18 above, the City requests the Draft Order reflect the findings of this study.

Proposed Revisions to Tentative Order:

WDR Section IV.D.2.d.

d. The UV transmittance (at least 254 nanometers) in the wastewater shall not fall below ~~50~~ 49 percent of maximum at any time, unless otherwise approved by CDPH

Attachment E Page E-24 Section IX.C.2:

2. Compliance. The UV transmittance shall not fall below ~~50~~ 49 percent of maximum at any time, unless otherwise approved by CDPH. The operational UV dose shall not fall below 100 millijoules per square centimeter (mJ/cm²) at any time, unless otherwise approved by CDPH.

Attachment E Section IX.C.3:

3. Reporting. ... The Permittee shall report daily average and lowest daily transmittance and operational UV dose on its monthly monitoring reports. If the UV transmittance falls below 5049 percent or UV dose falls below 100 mJ/cm²,...

Comment 20. WDR Page 13, Section IV.D.2.h.iii.

Plant Operations Data Sheet. This section states that a quick reference plant operations data sheet should be posted at the treatment plant and include operational limits and responses required for critical alarms, including the values of high daily and weekly median total coliform when flow must be diverted to waste. As per Comment 22c of the City's December 3, 2012 Comment Letter, diverting flow to waste as a response to high daily and weekly median total coliform values is operationally impossible. Flow is beyond recall by the time the 2-4 day test is complete.

Proposed Revisions to Draft Order:

~~iii. The values of high daily and weekly median total coliform when flow must be diverted to waste.~~

Comment 21. WDR Page 15, Section IV.D.2.m and Attachment E Section E.II. Table E-2.

UV Dose Calculation. Section IV.D.2.m states that "If the measured UV dose goes below the minimum UV dose...". Table E-2 states that location INT-002 is the location for measuring ultraviolet (UV) radiation dose. However, the UV dose is calculated rather than measured. Calculating UV dose is consistent with Attachment E Section IX.1 which states "The operational UV dose shall be calculated from UV transmittance, flow per channel, UV power, and using lamp age and sleeve fouling factors, in accordance with CDPH recommendations."

Proposed Revisions to Draft Order:

m. The Trojan UV4000 UV system must be operated with a built-in automatic reliability feature that must be triggered when the system is below the target UV dose. If the ~~measured~~ calculated UV dose goes below the minimum UV dose, the UV reactor in question must alarm and startup the next available UV lamp bank or reactor.

Table E-2. Monitoring Station Locations

Discharge/Distribution Point Name	Monitoring Location Name	Monitoring Location Description
	Int-002	Location for monitoring <u>calculating</u> ultraviolet (UV) radiation dose and UV transmittance of the UV Disinfection System

Comment 22. WDR Page 15, Section V.A.2

Bacteriological Receiving Water Limitation. This section states that “The discharge shall not cause bacteriological water quality to be degraded beyond natural background levels”. This Receiving Water Limitation is unnecessary and duplicative because the Draft Order already contains water quality-based effluent limitations for bacteria that will adequately protect beneficial uses. (See Draft Order at page 8, section IV.A.1.b.) The proposed effluent requirements of 2.2 per 100 milliliters (/100 ml) are well below the Basin Plan objectives of 50/100 ml and will ensure that the discharge itself does not cause adverse bacteriological water quality impacts. (NCRWQCB Basin Plan at page 3-4.00 (2011).)

A narrative receiving water requirement for bacteria has not been demonstrated to be necessary. If the discharge has a reasonable potential for any constituent for which a receiving water limitation is proposed, then the appropriate regulation is an effluent limit. If there is no reasonable potential, then no regulation of these substances is required. Similarly, where an effluent limit is being proposed, as in the case of bacteria, a receiving water limitation is unnecessary. For these reasons, the Regional Water Board should remove the proposed receiving water limitation for bacteria.

Further, the proposed bacteria receiving water limitation is unclear since neither the Basin Plan at page 3-4.00, nor the permit defines “natural background”¹² and, therefore, determining compliance with this limitation would be difficult, if not impossible. Traditionally, the evaluation of discharge impacts on bacteriological water quality has been made by using treatment plant effluent bacteria concentrations (e.g., IRWP/DCP EIRs, other EIRs Merritt Smith has worked on). However, this provision could be interpreted as requiring compliance with unspecified bacteriological requirements¹³ upon storage pond discharge. The storage ponds have natural populations of aquatic organisms, waterfowl, etc., which all add bacteria to the ponds and are wholly unrelated to the City’s discharges. It is possible that during the discharge season, when the Laguna is flowing, storage pond bacteria concentrations could be above the levels seen in the Laguna. Because of the uncertainty in what is being regulated, if this receiving water limitation is retained, the Draft Order or Fact Sheet must clarify that any additions of bacteria by

¹² In the context of Dissolved Oxygen (“DO”), the Basin Plan discusses the ability of States to establish site specific objectives equal to natural background. (NCRWQCB Basin Plan at 3-9.00, fn 1 (2011).) However, this acknowledgement also recognizes that such objectives are appropriate only “where the natural background condition for a specific parameter is documented.” (*Id.*) There is no evidence that the natural background levels of bacteria have been determined or documented in this case.

¹³ The Basin Plan in its discussion of “bacteriological water quality” and its reference to “natural background levels” fails to specify the type of bacteria being regulated. See Basin Plan at 3-4.00. Further, the only reference in that Bacteria section of the Basin Plan refers to “fecal coliform concentration” so it is unclear whether that is the only indicator to be regulated. USEPA has issued guidance recently modifying the national water quality criteria guidance for bacterial indicators to protect recreational uses, and moving away from fecal coliform. (See <http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/index.cfm>.) The Regional Water Board should defer imposition of this receiving water limitation based on outdated water quality standards and should defer such a permit requirement until the Regional Water Board modifies and updates the bacteria water quality objectives based on the most recent and applicable science.

natural sources to the ponds should expressly be considered to be part of “natural background levels.”

Proposed Revisions to Draft Order:

~~2. The discharge shall not cause bacteriological water quality to be degraded beyond natural background levels.~~

Comment 23, WDR Page 17, Section V.A.12.d, and Attachment F Page F-63

Temperature Receiving Water Limitation. The Draft Order contains a new receiving water limitation for temperature, which is not based on federal or state law, or even the Basin Plan, but is based on a guidance document from EPA Region 10, not Region 9 that has jurisdiction over the City’s NPDES permit. (See Draft Order at page F-63.) This temperature criteria set to protect salmonids in the extreme Northwest of the United States has not been adopted or justified for use in Northern California. Use of this inapplicable guidance constitutes an improper underground regulation. (*Iowa League of Cities v. EPA*, ___ F.3d ___, 2013 WL 1188039 (8th Cir., March 25, 2013); *Appalachian Power v. EPA*, 208 F.3d 1015, 1022 (D.C. Cir. 2000).) Therefore, the new temperature requirement should be removed since not based on properly adopted and approved temperature objectives in the Basin Plan.

Proposed Revisions to Draft Order.

WDR Provision V.A.12.d

12. The following temperature limitations apply to the discharge to the receiving waters:

- a. When the receiving water is below 58°F, the discharge shall cause an increase of no more than 4°F in the receiving water, and shall not increase the temperature of the receiving water beyond 59°F. No instantaneous increase in receiving water temperature shall exceed 4°F at any time.
- b. When the receiving water is between 59°F and 67°F, the discharge shall cause an increase of no more than 1°F in the receiving water. No instantaneous increase in receiving water temperature shall exceed 1°F at any time.
- c. When the receiving water is above 68°F, the discharge shall not cause an increase in temperature of the receiving water.
- ~~d. Additionally, the discharge shall not cause the 7-day average of the daily maximum receiving water temperature to exceed 64.4°F.~~

Attachment F Page F-63

The receiving water limitation for temperature in this Order includes a requirement that the 7-day average of daily maximum measurements of the receiving water not exceed 64.4°F (or 18°C). This numeric limitation is not contained in the Basin Plan, but is necessary to ensure that

~~any alteration to the natural receiving water temperature caused by the discharge does not adversely affect beneficial uses. USEPA Region 10 Guidance (EPA 910-B-03-002) sets a temperature standard for support of salmonids at a 7-day average of the daily maximum temperature of 18°C for non-core rearing habitat. This receiving limitation in this Order is consistent with USEPA guidance and fully protects beneficial uses.~~

Comment 24. WDR Page 18, Section V.B.3.

Groundwater Limitation for Radionuclides. The Draft Order contains a requirement that the “collection, treatment, storage or disposal of the treated wastewater shall not cause or contribute to levels of radionuclides in groundwater...”

Because of the other modifications made at the City’s request, this is the only provision contained in Provision V. that contains the qualifier “or contribute.” This phrase should be removed since the concept of contribution is only required in relation to a reasonable potential analysis performed to determine if effluent limitations are required under federal law (40 C.F.R. §122.44(d)(1)(i)), not when imposing receiving water or groundwater limitations. Because no authority or legal justification has been provided for applying this contribution concept from the federal reasonable potential analysis process to groundwater limitations has been provided, the language regarding contribution should be removed. Therefore, consistent with the previous changes made, the City requests the removal of the words “or contribute to” from Provision V.B.3.

Proposed Revisions to Draft Order:

3. The collection, treatment, storage and disposal of the treated wastewater shall not cause ~~or contribute to~~ levels of radionuclides in groundwater in excess of the limits specified in title 22, division 4, chapter 15, article 5, section 64443 of the CCR.

Comment 25. WDR Page 21, Provision VI.C.2.a.ii.

TRE Update. This provision states that the TRE workplan should be reviewed and updated as necessary every five years. The City requests that this statement be revised for clarification.

Proposed Revisions to Draft Order:

ii. Toxicity Reduction Evaluations (TRE) Workplan. The Permittee submitted a TRE workplan to the Regional Water Board on May 7, 2007. This plan shall be reviewed within 180 days of the adoption of this Order ~~at least once every 5 years~~ and updated as necessary in order to remain current and applicable to the discharge and discharge facilities.

Comment 26. WDR Page 22, Provision VI.C.2.b.

Storage Pond Leak Monitoring Program Commencement. Provision VI.C.2.b states that the Storage Pond Leak Monitoring Program is to commence on December 1, 2013. Since the time the Monitoring Program was written, the USGS (Hydrologic and Geochemical Characterization of the Santa Rosa Plain Watershed, Sonoma County, California, USGS Scientific Investigations

Report 20013-5118) has produced a groundwater study that provides significant new information. The City requests a time extension to review and revise the Storage Pond Leak Monitoring Program in light of this new information.

Proposed Revisions to Draft Order:

b. Storage Pond Leak Monitoring Program. By ~~December~~ March 1, 2014, the Permittee shall ~~commence implementation of review and revise as appropriate and resubmit for approval by Regional Water Board Executive Officer~~ its Storage Pond Leak Monitoring Program ~~that was submitted to the Regional Water Board on May 13, 2011, as an attachment to the Report of Waste Discharge.~~ The Storage Pond Leak Monitoring Program shall commence within 90 days of Executive Officer approval of the Program.

Comment 27. WDR Pages 23 and 24, Provisions VI.C.4 and VI.C.5.a.i (and corresponding parts of the Fact Sheet) and Attachment E, Page E-3 Section I.D.

Duplicative Requirements. The Draft Order includes several provisions that duplicate the Standard Provisions and could cause the City to incur more than one permit violation for the same event. For example, Provisions VI.C.4 (*Construction, Operation and Maintenance Specifications*) and VI.C.5.a.i. (*Proper Operation and Maintenance*), duplicate the provisions contained in Attachment D at page D-1, Provision I.D. (*Proper Operation and Maintenance*). Provision VI.C.5.a.i. also duplicates Standard Provisions I.E. (*Duty to Mitigate*), V.E. (*Twenty-Four Hour Reporting*) and V.H. (*Other Noncompliance*). It is already clear from Attachment F at pages F-4 and F-5 that “[t]he Permittee’s collection system is part of the treatment system that is subject to this Order.” Therefore, this statement and the recitation to Standard Provisions in Provision VI.C.5.a.i. is unnecessary and duplicative. For these reasons, the City requests removal of Provisions VI.C.4. and VI.C.5.a.i. A similar argument applies to the new section in Attachment E, Section I.D., which requires maintenance and calibration of monitoring instruments - these too would fall under the Standard Provision for “Proper Operation and Maintenance” and need not be included.

Proposed Revisions to Draft Order:

WDR Provision VI.C.4

4. ~~Construction, Operation and Maintenance Specifications~~

~~a. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Permittee only when necessary to achieve compliance with the conditions of this Order.~~

~~b. The Permittee shall maintain an updated Operation and Maintenance (O&M) Manual for the operational components of the Subregional System. The Permittee shall update the~~

O&M Manual, as necessary, to conform to changes in operation and maintenance of the Facility. The O&M Manual shall be readily available to operating personnel onsite and for review by state or federal inspectors. The O&M Manual shall include the following:

- i. Description of the Subregional System's organizational structure showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc.). The description should include documentation that the personnel are knowledgeable and qualified to operate the Subregional System so as to achieve the required level of treatment at all times.
- ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
- iii. Description of laboratory and quality assurance procedures.
- iv. Process and equipment inspection and maintenance schedules.
- v. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Permittee will be able to comply with requirements of this Order.
- vi. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

WDR Provision VI.C.5.a.i

i. Proper Operation and Maintenance

The Permittee's collection system is part of the treatment system that is subject to this Order. As such, pursuant to federal regulations, the Permittee must properly operate and maintain its collection system [40 CFR 122.41(e)], report any non-compliance [40 CFR 122.41(l)(6) and (7)], and mitigate any discharge from the collection system that might violate this Order [40 CFR 122.41(d)].

Attachment E Section I.D.

D. All monitoring instruments and devices used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated no less than the manufacturer's recommended intervals or one year intervals, (whichever comes first) to ensure continued accuracy of the devices.

Comment 28. WDR Page 24.

References to Other Permits. In its previous comments, the City had requested that the Order not include requirements contained in other permits to which the City is subject, such as the Sanitary Sewer Overflows General WDRs (SSO WDR), SWRCB Order No. 2006-003-DWQ, the Industrial General Stormwater Permit, SWRCB Order No. 97-03-DWQ, and the General WDRs for the Discharge of Biosolids, SWRCB Order No. 2004-0012-DWQ. The City greatly appreciates that, for the most part, these recommended changes were made. However, some problematic language remains that must be changed to be consistent with the intent of the City's comments, as follows:

- 1) The second sentence in Provision VI.C.5.a.ii must be modified so as not to incorporate the requirements of the SSO WDR. That sentence should read: "As such, the Permittee shall provide notification and reporting of SSOs in accordance with the requirements of Order No. 2006-003-DWQ and any revisions thereto for operation of its wastewater collection system." This would also be more consistent with the language on page F-71 related to this provision.
- 2) The MRP at Section X.E.2. on page E-35 should be modified to state the following: "Notification and reporting of sanitary sewer overflows ~~shall be is~~ conducted in accordance with the requirements of Order No. 2006-0003-DWQ (Statewide General WDRs for Sanitary Sewer Systems), and any revisions thereto, which is not incorporated herein by reference for operation of its wastewater collection system.
- 3) The Fact Sheet at page F-72, Section VII.B.5.d. states that the "Permittee is required to obtain coverage under the State Water Board Order No. 2004-0012-DWQ...." This should not read as a requirement, and should instead state that the "Permittee ~~is required to~~ has obtained coverage under the State Water Board Order No. 2004-0012-DWQ...."
- 4) The Fact Sheet at page F-72, Section VII.B.6. should be modified as follows: "This provision ~~requires acknowledges~~ the Permittee's ~~to continue~~ coverage under the State Water Board's Water Quality Order...."

Comment 29. WDR Page 27, Section VI.C.5.c.vii.

Adequate Protection Definition. This subsection defines adequate protection for the solids and sludge treatment and storage sites as "protection from at least a 100-year storm." The City questions the authority and justification for this protection level, and also requests clarity as to the duration. Most design storms are set by recurrence interval and duration (e.g., 2 year, 24-hour storm), not just a recurrence interval as set forth here. Because this provision lacks justification and inserts confusion and uncertainty into the permit, the last sentence of this section should be removed.

Proposed Revisions to Draft Order:

vii. Solids and sludge treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. ~~Adequate protection is defined as protection from at least a 100-year storm.~~

Comment 30. WDR Page 27-28, Provision VI.C.5.d.i and Attachment F, page F-18, Section III.D.3.

NOI for Discharges of Biosolids. These sections state that for existing discharges of biosolids, an NOI to comply with the State Water Board Water Quality Order No. 2004-0012-DWQ General Waste Discharge Requirements for the Discharge of Biosolids to Land or Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities must be submitted within 180 days. The City is already enrolled for existing biosolids application on an NOI submitted in May 2006. Thus, the existing discharge of biosolids is covered under Order No. 2004-0012-DWQ. In addition, the Lakeville Highway sites are Bay Conservation and Development Commission lands and as such are specifically exempt from the General Order and only need to comply with 40CFR503.

Proposed Revisions to Draft Order:

WDR Provision VI.C.5.d.i

For existing discharges of biosolids to land, the Permittee ~~shall~~ submitted where applicable a Notice of Intent to Comply and is covered under Order No. 2004-0012-DWQ ~~within 180 days of the effective date of this Order.~~

Attachment F Section III.D.3.

3. On July 22, 2004, the State Water Board adopted State Water Board Order No. 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities. This Order requires the Permittee to continue to maintain coverage under the General Order for land application of Class B biosolids on City property ~~and at~~ excluding the Lakeville Highway sites located in Regional Water Board 2 that are specifically exempt from the General Order.

Comment 31. WDR Pages 29-31, Section VIII.

Compliance Determination Language. Some of the proposed language in this section unlawfully presumes that the permittee has incurred a "violation, or "shall be deemed out of compliance," even though there may be an explanation or affirmative defense for such noncompliance (*see e.g.*, Standard Provisions D.1.G. (*Bypass*) and H. (*Upset*)). Further, the language eliminates due process prior to a finding of non-compliance (such as a hearing, and the opportunity to present contrary evidence or defenses). Reliance on the permit template prepared by the State Water Board is not acceptable, as the permit template is not a regulation, but merely

a guidance document able to be readily changed. Therefore, the City requests that all references to “violation(s)” be removed and the wording be changed in the compliance determination language to reflect that exceedances are *alleged* violations, since they may also NOT be deemed violations if a defense exists.

Proposed Revisions to Draft Order:

Remove the word “violation” from Provision VII.D. and V.II.E., from the last column and footnotes in Tables F-2,¹⁴ F-2b, and F-2c, and from Section II.D.1. of the Fact Sheet on page F-11. Replace the word “violation” with the more generic term “exceedance” throughout the Draft Order.

The Fact Sheet, at Section II.D.1. would then read:

1. Violations Summary

Five ~~violations~~ exceedances of numeric effluent limitations were recorded during the term of the previous permit, ~~including three violations~~ including three exceedances of the total coliform bacteria 7-day median limit of 2.2 MPN/100 mL, ~~and two violations were recorded for exceedances~~ and two exceedances of the maximum daily limitation of 240 MPN/mL for total coliform bacteria. In response to the exceedances, the Permittee cleaned the UV channels and the discharge returned to consistent compliance.

Further, the Draft Order should state when compliance will be considered attained, or provide what data will be reviewed and what standards the data will be compared to in order to determine compliance, as is done in Provision VII.A. (first sentence), VII.B, VII.C., VII.I., VII.J. and VII.M.. As an illustration, the following alternative modifications could be acceptable:

VII.A.... “For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall ~~compare~~ compare ~~be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in monitoring sample to determine if the sample is greater than to the effluent limitation and greater than or equal to the reporting level (RL).”~~

or

VII.A.... “For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Permittee shall be deemed ~~in~~ in ~~out of compliance with effluent limitations if the concentration of the priority pollutant in monitoring sample is greater less than or equal to the effluent limitation and greater less than or equal to the reporting level (RL).”~~

In addition, a similar change should be made to the MRP in Section X.B.6.b.iv., as follows:

¹⁴ Table F-2 on pages F-9 and F-10 should also have the title to the second to the last column now called “Reported Value of Highest Violation” renamed “Reported Highest Value” to be consistent with Tables F-2b and F-2c, and to address the City’s comments about the use of the term “violation.”

- iv. ~~Violations of Compliance with the WDRs (or lack thereof) [identified violations must include a description of the any requirement that was violated not complied with and a description of the events and reasons violation];~~

This language is consistent with other language in the permit discussing compliance, such as MRP Section X.D.2.b., on page E-28, that requires a “comprehensive discussion of the Facility’s compliance (or lack thereof)...,” or other sections that discuss noncompliance (*see* MRP Section X.D.3.a.i.(d) and MRP Section X.D.4. (is not in compliance with) instead of violations.

Comment 32. Dilution Credits.

Failure to Consider Dilution in Setting Effluent Limitations. The SIP specifically authorizes the consideration of dilution credits when “establishing and determining compliance with effluent limitations for applicable human health ... or the toxicity objective for aquatic life protection in a RWQCB Basin Plan.” (SIP at Section 1.4.2 at page 15.) The Draft Order recognizes and uses a Zone of Initial Dilution for compliance with receiving water limitations but, without justification, states that this “concept was not used for determining reasonable potential or establishing water quality-based effluent limitations (WQBELs) for priority pollutants or water quality objectives other than dissolved oxygen, pH, turbidity, and temperature.” This inconsistent treatment of dilution is not only unjustified, but contrary to state and federal law that clearly allow the consideration of dilution in reasonable potential calculations (40 C.F.R. §122.44(d)(1)(ii)(allowing consideration of “the dilution of the effluent in the receiving water”); *see also* SIP, Section 1.4 at page 8 (including D in effluent limit calculation where D equals the dilution credit).)

No dilution was considered or granted for human health-based effluent limitations or for chronic toxicity. (*See e.g.*, Draft Order at page 20, footnote 7 (“This Order does not allow any credit for dilution for the chronic condition.”) This failure to consider dilution when the City may only discharge during periods of high flow, and when the City’s discharge is less than 5% of the flow, is an abuse of discretion. Harmonic mean dilution or long-term arithmetic mean flow during period of discharge should have been used for the City’s highly treated, intermittent discharges.

Specifically, the City requests that dilution be considered in both the reasonable potential analyses and, if reasonable potential still exists, in the calculation of effluent limitations for chlorodibromomethane and/or dichlorobromomethane.

Comment 33. WDR Page 34, Section VII.N.5.

Date for Documenting Compliance. This section states that the Permittee shall document compliance with the total phosphorus effluent limitations in an annual report, submitted to the Regional Water Board by July 31st of each year. One method for meeting this effluent limitation is with the Nutrient Offset Program. Resolution No. R1-2008-0061 approving the Santa Rosa Nutrient Offset Program requires that a report be submitted on July 1st of each year. This date should be consistent with Resolution No. R1-2008-0061.

Proposed Revisions to Draft Order:

5. The Permittee shall document compliance with the effluent limitations in an annual report, submitted to the Regional Water Board by July 31st of each year.

OTHER COMMENTS – ATTACHMENT E – MONITORING AND REPORTING PROGRAM (“MRP”)

Comment 34. Attachment E, Table E-1.

MLs for Priority Pollutants. This table previously included gas chromatography/mass spectroscopy (GCMS) for dibromochloromethane and dichlorobromomethane, but these values were removed. Both values should be maintained as both are set forth in the SIP at page 4-1. Under the SIP at page 23, Section 2.4.2, “[t]he discharger may select any one of those cited analytical methods for compliance determination.” Removal of the GCMS ML unreasonably and arbitrarily limits the City’s options for available MLs. In addition, the GC methodology is outdated and some the equipment required to run the analyses with this method for halogenated volatiles is no longer being manufactured. Since the Laguna Environmental Laboratory ML for GCMS is as low as that for GC (0.5 µg/L), there is no reason to exclude GCMS. For these reasons, both GC and GCMS should be included with MLs as specified in the SIP.

Proposed Revisions to the Draft Order:

CTR#	Constituent Types of Analytical Methods Minimum Levels (µg/L)	Gas Chromatography (GC)	Gas Chromatography/Mass Spectroscopy (GCMS)	Colorimetric	Inductively Coupled Plasma/Mass Spectroscopy (ICPMS)	Stabilized Platform Graphite Furnace Atomic Absorption
23	Dibromochloromethane	0.5	--2	--	--	--
26	Dichlorobromomethane	0.5	--2	--	--	--

Comment 35. Attachment E Table E-2.

Monitoring Location Names. The monitoring locations names in Table E-2 have changed from what they were in the current Permit. The monitoring location names in the current Permit were changed from what they were in the permit before that. These changes require changes to the quarterly and discharge reports. For consistency, the City requests that the monitoring location names not be changed.

Comment 36. Attachment E Page E-8, Table E-4, Footnote 4.

Typographical Error. Footnote 4 concerns types of radionuclides, but radionuclides are not required monitoring in Table E-4. Therefore, footnote 4 should be deleted.

Proposed Revisions to Draft Order:

Table Notes

4. Radionuclides measured shall include: Combined Radium-226 and Radium-228, Gross Alpha, Gross Beta, Tritium, Strontium 90, and Uranium.

Comment 37. Attachment E Page E-8 and E-18, Tables E-5 and E-7.

Sample Type for pH Monitoring. Tables E-5 and E-7 require continuous monitoring of pH in treatment plant effluent. Previous permits have required grab samples. This will require installation of new equipment and potentially more time consuming procedures for instrument calibration. No justification was provided for the change. Therefore, the City requests that monitoring for pH in treatment plant effluent be changed back to grab samples. Note: the City is requesting the removal of the reclamation requirement and corresponding monitoring for pH (see **Error! Reference source not found.** above). This comment includes pH in Table E-7 in the event that the Regional Water Board does not comply with this request.

Proposed Revisions to Draft Order:

Table E-5. Effluent Monitoring for Discharges to 012A(1) and 015

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	s.u.	<u>Continuous Grab</u>	Daily	Standard Methods

Table E-7. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	s.u.	<u>Continuous Grab</u>	Daily	Standard Methods

Comment 38. Attachment E Pages E-9 and E-10, Table E-6.

Sample Type for Priority Pollutants. Table E-6 requires samples for priority pollutants to be collected as 24-hour composite samples from Delta and Meadowland D Ponds (monitoring locations EFF-006A, EFF-006B, EFF-012A(2), and EFF-012B). This is a change from the previous permit that required grab samples. 24-hour composite samples are difficult and costly to perform in the field. In addition, grab samples are appropriate because the City is discharging from a static body of water (as opposed to most POTWs that are discharging from the outfall pipe of the plant). Delta and D ponds are homogenous mixes of water and, therefore, there is no valid reason for collecting composite samples. The City therefore requests that the sampling for priority pollutants in Table E-6 be changed to grab samples. In addition, the City requests removal of footnote 8 which refers to 24-hour composite samples.

Proposed Revisions to Draft Order:

Table E-6. Effluent Monitoring for Discharges to 006A, 006B, EFF-012A(2), and EFF-012B

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Remaining CTR Priority Pollutants ⁷	µg/L	24-hr composite ⁸ grab	Quarterly	40CFR136
8. 24-hour composite samples shall be collected, except for those constituents that are volatile and/or require grab sampling for other reasons (e.g., ultraclean sample collection methods required). The priority pollutant monitoring report shall document the sampling method used for each constituent and justify the use of grab sampling for specific constituents (e.g., volatile, ultraclean method required, etc.)				

Comment 39. Attachment E Page E-11, Section V.A.3.

Two Species for Toxicity Tests. This section requires all acute toxicity tests to be run with both the water flea (*Ceriodaphnia dubia*) and the rainbow trout (*Oncorhynchus mykiss*). This change is contrary to both the current permit and the previous draft permit, which required that both species be used for the first two suites of testing after which only the most sensitive species need be used.

This change is contrary to federal guidelines. The Draft Order states (Page F-47):

“This Order also implements federal guidelines (Regions 9 and 10 Guidelines for Implementing Whole Effluent Toxicity Testing Programs) by requiring permittees to conduct acute toxicity tests on a fish species and on an invertebrate to determine the most sensitive species. According to the USEPA manual, Methods for Estimating the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/600/4-90/-27F), the acceptable vertebrate species for the acute toxicity test are the fathead minnow, *Pimephales promelas* and the rainbow trout, *Oncorhynchus mykiss*. The acceptable invertebrate species for the acute toxicity test are the water flea, *Ceriodaphnia dubia*, *Daphnia magna*, and *D. pulex*.”

Therefore, the City requests that this section be revised to indicate that only the most sensitive species be used for acute toxicity testing.

Proposed Revisions to Draft Order:

3. Test Species. Test species for acute WET testing shall be with an invertebrate, the water flea (*Ceriodaphnia dubia*) and a vertebrate, the rainbow trout (*Oncorhynchus mykiss*) for the first two suites of testing. After this screening period, monitoring shall be conducted annually using the most sensitive species. The next two species acute WET test shall be conducted during the first surface water discharge following the Permit’s effective date.

Comment 40. Attachment E Pages E-12 and E-15, Sections V.A.7 and V.B.9.a.

Missing Spaces. In paragraph V.A.7, there is a space missing in “VI.C.2.a.i.of” that needs to be inserted. In paragraph V.B.9.a., there is a space missing in “VI.C.2.a.ii.of” that needs to be inserted.

Proposed Revisions to Draft Order:

Section V.A.7

If any one of the additional samples do not comply with the three sample median minimum limitation (90 percent survival), the Permittee shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with section VI.C.2.a.ii of this Order.

Section V.B.9.a

If the result of any accelerated toxicity test exceeds 1.0 TUc, the Permittee shall cease accelerated monitoring, and within 30 days of the date of completion of the accelerated monitoring, initiate the TRE Workplan developed in accordance with section VI.C.2.a.ii of this Order to investigate the cause(s) and identify actions to reduce or eliminate the chronic toxicity.

Comment 41. Attachment E Pages E-12 and E-17, Section V.A.9 and V.C.2.

Clarification. In paragraph V.A.9, the parenthetical contained in paragraph V.A.4. should be inserted here again for clarity. Similarly, in paragraph V.C.2., there should be a reference to subsequent editions

Proposed Revisions to Draft Order:

Section V.A.9

Methods for Measuring the Acute Toxicity in Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions).

Section V.C.2

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R-02-013, 2002, or subsequent editions)...

Comment 42. Attachment E Page E-13, Section V.B.2.

Sample Type for Toxicity Tests. This section states that chronic toxicity samples are to be 24-hour composite samples. However, Tables E-5 and E-6 require chronic toxicity samples to be grab samples. As stated in Comment 38, grab samples are appropriate because the City is discharging from a static body of water that is a homogenous mix of water and, therefore, there is no valid reason for collecting composite samples. The City therefore requests that the sampling in Section V.B.2 be changed to grab samples.

Proposed Revisions to Draft Order:

2. Sample Type. Effluent samples for chronic toxicity shall be ~~24-hour composite~~ grab samples for direct discharges to surface waters at Discharge Points 012A(1) and 015, and shall be representative of the volume and quantity of the discharge. ...

Comment 43. Attachment E Page E-15, Section V.B.9.a., and Page E-14, Section V.B.9.b

Toxicity Levels. These sections relate to the toxicity level that will trigger performance of a TRE. Currently, any indication of toxicity ($TUc > 1.0$) in the accelerated monitoring bioassays requires that the "Permittee shall cease accelerated monitoring, and within 30 days of the date of completion of the accelerated monitoring, initiate the TRE Workplan...." However, the City's experience is that chronic toxicity is variable and transient. For example, in a letter to the Regional Board Executive Officer (Laguna Subregional Water Reclamation System Chronic Bioassay Results and Toxicity Reduction Action Plan dated June 23, 2010), the City stated:

"The February 2008 chronic bioassay for *Selenastrum* and *Ceriodaphnia* for the Delta Pond discharge showed toxicity values that exceeded NPDES permit requirements. Duplicate bioassays were conducted in April 2008 post discharge. These subsequent bioassays showed no toxicity. Therefore, the three chronic toxicity analyses that were collected from the same body of water showed inconsistent results. This also occurred in 2010 with two samples collected from the same body of water showing different toxicity results – one indicating toxicity and the other with no toxicity."

The Draft Order seems to acknowledge this problem with variable and transient toxicity in the selection of a TUc of 1.6 to trigger accelerated testing. However, the City requests that the variability and transience of toxicity also be acknowledged in the TUc value that triggers a TRE so that a TRE is not required unless clear evidence exists of persistent toxicity.

Proposed Revisions to Draft Order:

Attachment E Section V.B.9.a. Page E-14

a. If the result median of any the results of accelerated toxicity test exceeds ~~1.06~~ 1.0 TUc , the Permittee shall cease accelerated monitoring, and within 30 days of the date of completion of the accelerated monitoring, initiate the TRE Workplan developed in accordance with section VI.C.2.a.ii_ of the Order to investigate the cause(s) and identify actions to reduce or eliminate the chronic toxicity....

Attachment E Section V.B.9.b Page E-15

b. If the median of the results of four consecutive accelerated monitoring tests do not exceed 1.0 TUc , the Permittee may cease accelerated monitoring and resume regular chronic toxicity monitoring.

Comment 44. Attachment E Page E-17, Section V.C.1.b and Attachment F Page F-27, Section IV.C.1.

Punctuation. In paragraph V.C.1.b., third line, it states: "... during the permit term. , and organized by...." The period after the word "term" and the extra space before the comma need to be removed. On page F-27, end of the third full paragraph, there is an extra period at the end.

Proposed Revisions to Draft Order:

Attachment E Section V.C.1.v

b. **Compliance Summary.** In addition to the WET report, the Permittee shall submit a compliance summary of chronic toxicity tests results, expressed in NOEC and TUC, for tests conducted during the permit term-, and ...

Attachment F Section IV.C.1

... 2) no data was available for Discharge Points 006A or 006B because the Permittee did not discharge from these locations during the last permit term.-

Comment 45. Attachment E Page E-18, Table E-7.

Requirement for Title 22 Constituent Monitoring. The Draft Order at Table E-7 requires annual testing of recycled water for "Title 22 Drinking Water Constituents". This requirement has not been adequately justified. (See Draft Order at pages F-65 to F-67.) Further, this requirement is not justified because the recycled water is being used at the Geysers or for irrigation purposes, not for drinking water-related recycled water uses. Thus, the water need not meet Title 22 drinking water standards, only bacteriological and other requirements for the uses for which the water is being provided. For these reasons, the City requests that the requirement to monitor recycled water for all "Title 22 Drinking Water Constituents" be removed.

Proposed Revisions to Draft Order:

Table E-7. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Title 22 Drinking Water Constituents	µg/L (or other as appropriate)	24-hour Composite	1X/ Permit Term	40 CFR 136

Comment 46. Attachment E Page E-19, Table E-7.

Daily Flow Reporting. Footnote 1 of Table E-7 requires that the City report each month, the number of days that treated wastewater was used for reclamation at all authorized reclamation sites, as well as the average and maximum daily flow rate. However, the City does not have the metering capability to comply with this request. Meters at each reclamation site record only total flow and would need to be read daily to obtain daily use rates. City staff are not available to

undertake this effort and if recycled water users were required to report every day, it would be extremely burdensome and discourage recycled water use. Therefore, the City requests that this footnote be deleted.

Proposed Revisions to Draft Order:

Table E-7. Reclamation Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow [†]	mgd	Meter	Continuous	Meter

Table Notes:
~~1. Each month, the Permittee shall report the number of days that treated wastewater was used for reclamation at all authorized reclamation sites, as well as the average and maximum daily flow rate.~~

Comment 47. Attachment E Page E-19, Table E-8.

Typographical Error. Footnote 4 regarding the reporting of the required monitoring does not have a corresponding reference in the table.

Proposed Revisions to Draft Order:

Table E-8. Recycled Water Production and Use⁴

Parameter Sample Type	Units	Minimum	Monitoring	Frequency
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Comment 48. Attachment E Page E-20, Table E-9.

Receiving Water Nutrient Monitoring. The City objects to a requirement for receiving water nutrient monitoring. Despite repeated offers to collaborate with the Regional Water Board staff to identify and collect nutrient data to support an adequate nutrient TMDL, Board staff have not yet engaged in a substantive discussion on the matter. At such time that a comprehensive nutrient data collection strategy is developed, the City would be pleased to discuss how it can support implementation. Without such a comprehensive plan, the utility of the nutrient data is unknown and therefore this requirement should be deleted from the permit.

Proposed Revisions to Draft Order:

Table E-9. Receiving Water Monitoring Requirements –RSW-006AU, RSW-006BU-C, RSW-006BU-L, RSW-012AU, RSW-012BU, and RSW-015U

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen	mg/L	grab	Monthly	Standard Methods [†]

Un-ionized Ammonia	mg/L	grab	Monthly	Standard Methods
Nitrate Nitrogen	mg/L	grab	Monthly	Standard Methods
Organic Nitrogen	mg/L	grab	Monthly	Standard Methods
Total Phosphorus	mg/L	grab	Monthly	Standard Methods

Comment 49. Attachment E Page E-21, Section VIII.A.2.a.

First Discharge Event Definition. This section currently states that “The Model verification shall occur during the first discharge event after the adoption of this Order or as soon thereafter as is physically feasible.” This definition ignores the fact that the requirements of the Draft Order do not apply until after the effective date (50 days after permit adoption). Thus, this sentence must be modified.

Proposed Revisions to Draft Order:

The Model verification shall occur during the first discharge event after the adoption effective date of this Order, or as soon thereafter as is physically feasible thereafter.

Comment 50. Attachment E Page E-22, Section IX.A.1; Page E-31, Section X.D.4.a; and Page E-34, Section X.D.5.a.-d.

Biosolids Monitoring. The Regional Water Board has failed to justify the need for biosolids monitoring and other requirements particularly when, at pages 27-28 of the Draft Order, regulation of biosolids is specifically stated to be regulated under the statewide biosolids WDR, Order No. 2004-2012-DWQ. Thus, all biosolids monitoring and compliance reporting requirements should be removed from this permit that does not regulate biosolids disposal.

Further, although this section relates to “biosolids,” the Draft Order continues to use the word “sludge.” In this section, and elsewhere where appropriate, the word “sludge” should be replaced with “biosolids.” The same comment would apply to MRP Section X.D.4.a. and b., and MRP Section X.D.5.a.-d.

Proposed Revisions to Draft Order:

Section IX.A.1

a. A composite sample of sludge shall be collected quarterly at Monitoring Location BIO-001 in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and tested for priority pollutants listed in 40 CFR Part 122, Appendix D, Tables II and III (excluding total phenols).

b. Sampling records shall be retained for a minimum of 5 years. A log shall be maintained of sludge/biosolids quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log must be complete enough to serve as a basis for

developing the Biosolids Handling and Disposal Activity report that is required as part of the Annual Report.

Section X.D.4.a

~~Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as influent and effluent sampling and analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period.~~

~~Wastewater and sludge sampling and analysis shall be performed at least annually. The Permittee shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass-Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.~~

Section X.D.5.a.-d.

5. Biosolids Handling and Disposal Activity Reporting. The Permittee shall submit, as part of its annual report to the Regional Water Board, a description of the Permittee's solids handling, disposal and reuse activities over the previous twelve months. At a minimum, the report shall contain:

- a. Annual ~~sludge~~ biosolids production, in dry tons and percent solids;
- b. ~~Sludge monitoring results;~~
- eb. A schematic diagram showing sludge handling facilities (e.g., digesters, thickeners, drying beds, etc.), if any and a solids flow diagram;
- dc. Methods of final disposal of ~~sludge~~ biosolids:
 - i. For any portion of sludge discharged to a sanitary landfill, the Permittee shall provide the volume of ~~sludge~~ biosolids transported to the land fill, the names and locations of the facilities receiving ~~sludge~~ biosolids, the Regional Water Board's WDRs order number for the regulated landfill, and the landfill classification.
 - ii. For any portion of ~~sludge~~ biosolids discharged through land application, the Permittee shall provide the volume of biosolids applied, the date and locations where biosolids were applied, and the Regional Water Board's WDRs order number for the regulated discharge, a demonstration that the discharge was conducted in compliance with applicable permits and regulations, and, if applicable, corrective actions taken or planned to bring the discharge into compliance with WDRs.
 - iii. For any portion of ~~sludge~~ biosolids further treated through composting, the Permittee shall provide a summary of the composting process, the volume of

sludge biosolids composted, and a demonstration and signed certification statement that the composting process and final product met all requirements for Class A biosolids.

e. ~~Results of internal or external third party audits of the Biosolids Management System, including reported program deficiencies and recommendations, required corrective actions, and a schedule to complete corrective actions.~~

Comment 51. Attachment E Page E-28 and E-29, Section X.D.2.a.-f.

New Annual Summary Report. This appears to be a new requirement for an annual report beyond what is currently required without any justification or burden/benefit analysis required under Water Code section 13267(b).¹⁵ Thus, the entire section should be removed. If this section adequately justified through additional edits to the Draft Order and maintained, then the City requests that the requirements in sections c and e be modified. These sections are particularly irrelevant and intrusive. The City is willing to include a statement in the annual report that monitoring instruments, including flow meters, were calibrated as per the manufacturers' recommendations. The annual report is certified by the responsible City person as being true and correct under penalty of law, so this should be sufficient.

Proposed Revisions to Draft Order:

e. ~~The names, certificate grades, and general responsibilities of all persons employed at the Facility;~~

e. A statement certifying ~~when that~~ the flow meter(s) and other monitoring instruments and devices were last calibrated, ~~including identification of who performed the calibration~~ calibrated according to the manufacturers' recommendations;

Comment 52. Attachment E Page E-29, Section X.D.3.i.d.

Quarterly Recycled Water Report. This section requires the number and dates of inspections conducted for each use site during the reporting cycle. This is a new requirement that would be extremely burdensome for City staff with no corresponding increased benefit. Therefore, the City requests that requirement for reporting number and dates of all inspections, whether or not noncompliance was observed, be omitted.

¹⁵ The same comment could be made for most all of the MRP requirements, which are not justified and the Draft Order contains no Water Code section 13267(b) burden/benefit analysis or findings. Under Water Code section 13267(b), the Regional Water Board must determine the "burden, including costs, of these reports ... bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring these reports, the Regional Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports." See accord Water Code §13225(c). Since the Regional Water Board has stated these permit requirements are pursuant to California Water Code section 13267 (Draft Order at page E-3), the Regional Water Board must comply with the statutory mandates contained therein.

Proposed Revisions to Draft Order:

(d) A summary of recycled water use site inspections conducted by the Permittee or recycled water users. Required reporting includes ~~the number and dates of inspections conducted for each use site during the reporting period;~~ all observations of recycled water over-application and/or runoff; and the number of violations for each use site including description of the noncompliance and its cause, the period of noncompliance, and if the noncompliance has not been corrected, the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Comment 53. Attachment E page E-30, Section X.D.3.ii.b.

Reporting of Repairs for Non-City Owned Property. This section requires the annual recycled water report to include a summary of major repairs scheduled or completed that affected the reclamation system appurtenances and irrigation areas. For non-City owned property, this would require an added burden for the City and recycled water customers that could discourage recycled water use. Therefore, the City requests that this section be limited to major repairs the City makes to the system.

Proposed Revisions to Draft Order:

(b) A summary of major repairs to the system scheduled or completed by the City that affected the reclamation system appurtenances and irrigation areas;

Comment 54. Attachment E Page E32 through E-33 , Section X.D.4.e.

Formatting and Typographical Errors. This section needs some corrections, including having subsections e.iv. through e.xi. become subsections of e.iii, which ends with “affected by the following actions:”

Then, subsection xii. should become iv. Finally, the last sentence is missing the words “following addresses” before the colon. Currently, that sentence ends with the word “the.”

Comment 55. Attachment E Page E-35, Section X.E.1.

Notification Procedures. This section discusses procedures for notification of spills and unauthorized discharges. Although clarified in footnote 4, the text is unclear as to who is the primary contact for spill reporting. The City requests that this be clarified.

Proposed Revisions to Draft Order:

1. Spills and Unauthorized Discharges. Information regarding all spills and unauthorized discharges (except SSOs and recycled water) that may endanger health or the environment shall be provided orally to the Regional Water Board⁴ (during normal business hours) or to CalEMA⁴ (after normal business hours) within 24 hours ...

OTHER COMMENTS – ATTACHMENT F

FACT SHEET

Comment 56. Attachment F Page F-3, Table F-1.

Facility Information Update. The facility contact information should be updated.

Proposed Revisions to Draft Order:

Table F-1. Facility Information

Facility Contact, Title and Phone	Miles Ferris David Guhin, Director of Utilities, (707) 543-4299
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Comment 57. Attachment F Page F-5, Section F.II.A.1.

Collection System Information. This section contains information on the City's collection system that is incorrect and should be modified.

Proposed Revisions to Draft Order:

The Permittee's collection system consists of 582 miles of gravity sewers ranging in size from 4 to 66 inches, ~~5.3~~6.3 miles of pressure sewers, and ~~18~~17 **pumping lift** stations.

Comment 58. Attachment F Page F-13 and F-14, Table F-3.

Beneficial Uses. The Fact Sheet incorrectly added up to four new beneficial uses to the Laguna de Santa Rosa (Hydrologic Subarea 114.21) and Santa Rosa Creek (Hydrologic Subarea 114.21¹⁶), including Wetland Habitat (WET), Flood Attenuation (FLOOD), Native American Culture (CUL), and Subsistence Fishing (FISH). This information is inaccurate and contrary to the Basin Plan. The beneficial uses designated in the Basin Plan for the Laguna de Santa Rosa (Hydrologic Subarea 114.21) and for Santa Rosa Creek (Hydrologic Subarea 114.22) do not include CUL, FLD, WET, or FISH uses. (See NCRWQCB Basin Plan at 2-11.00.) These are not designated as potential uses. Although the Basin Plan at page 2-12.00, Table 2-1, designates Freshwater Wetlands with WET as an Existing Use ("E") and CUL and FLD as Potential Uses ("P"), there is no designation of FISH. Further, since Table 2-1 does not designate WET for Hydrologic Subareas 114.21 or 114.22, the Freshwater Wetlands designations should not apply in those subareas. In addition, the Fact Sheet fails to provide any evidence that any of these uses are existing uses that would justify the addition of these uses in the Draft Order absent designation in the Basin Plan. (See accord 40 C.F.R. §131.3(e).) For these reasons, these four uses should be removed from Table F-3.

¹⁶ The Basin Plan at page 2-11.00 states that the Santa Rosa Hydrologic Subarea is numbered 114.22, not 114.21 as set forth in Table F-3.

Proposed Revisions to Draft Order:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
006A, 006B, 015	Laguna de Santa Rosa (Laguna Hydrologic Subarea – 114.21)	Existing: <ul style="list-style-type: none"> • Agricultural Supply (AGR) • Industrial Service Supply (IND) • Ground Water Recharge (GWR) • Freshwater Replenishment (FRSH) • Navigation (NAV) • Hydropower Generation (POW) • Water Contact Recreation (REC-1) • Non-Contact Water Recreation (REC-2) • Commercial and Sport Fishing (COMM) • Warm Freshwater Habitat (WARM) • Cold Freshwater Habitat (COLD) • Wildlife Habitat (WILD) • Preservation of Rare, Threatened, or Endangered Species (RARE) • Migration of Aquatic Organisms (MIGR) • Spawning, Reproduction, and/or Early Development (SPWN) • Wetland Habitat (WET) • Flood Attenuation (FLOOD) • Native American Culture (CUL) • Subsistence Fishing (FISH) • Potential: <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Industrial Process Supply (PRO) • Shellfish Harvesting (SHELL) • Aquaculture (AQUA)
012A(1), 012A(2), 012B	Santa Rosa Creek (Santa Rosa Hydrologic Subarea – 114.21)	Existing: <ul style="list-style-type: none"> • Municipal and Domestic Supply (MUN) • Agricultural Supply (AGR) • Industrial Service Supply (IND) • Ground Water Recharge (GWR) • Navigation (NAV) • Water Contact Recreation (REC-1) • Non-Contact Water Recreation (REC-2) • Commercial and Sport Fishing (COMM)

		<ul style="list-style-type: none"> • Warm Freshwater Habitat (WARM) • Cold Freshwater Habitat (COLD) • Wildlife Habitat (WILD) • Preservation of Rare, Threatened, or Endangered Species (RARE) • Migration of Aquatic Organisms (MIGR) • Spawning, Reproduction, and/or Early Development (SPWN) • Flood Attenuation (FLOOD) • Native American Culture (CUL) <p>Potential:</p> <ul style="list-style-type: none"> • Industrial Process Supply (PRO) • Hydropower Generation (POW) • Shellfish Harvesting (SHELL) • Aquaculture (AQUA)
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Comment 59, Attachment F Pages F24 through F-26, Section IV.B.

Inadequate Justification for BOD and TSS Mass Loadings. The Draft Order inadequately justifies the necessity for including both mass limits and 85% removal requirements as both are not required by either federal or state law. Under federal law, mass limits are specifically *not required* for Technology-Based Limits, such as BOD and TSS. The federal regulations only require concentration-based effluent limits and 85% removal requirements. (See 40 C.F.R. §133.102(a)(1)-(3) and (b)(1)-(3); see e.g., Order No. R2-2012-0051, Table 6 (monthly and weekly conventional pollutant limits only with no mass limits required).)

The Fact Sheet at page F-24 states that 40 C.F.R. “section 122.45(f) requires the establishment of mass-based effluent limitations for all pollutants limited in Orders, except for 1) pH, temperature, radiation, or other pollutants which cannot be appropriately expressed by mass, and 2) when applicable standards and limitations are expressed in terms of other units of measure.” (Emphasis added.) Further, that same page recognizes that the BOD and TSS limitations are all expressed in concentration, not mass. Because the technology-based limitations are expressed in concentration (i.e., “other units of measure” besides mass), the exception to the requirement for mass limits has been met and mass limits are not required under federal law.¹⁷

If being imposed under state law or the discretionary ability to include mass limits in addition to concentration based limit under section 122.45(f)(2), then these requirements are more stringent than *required* by federal law and have not been adequately justified and nor have all of the considerations under Water Code section 13263 and 13241 been satisfied. (See *City of Burbank v. State Water Resources Control Board*, 35 Cal. 4th 613, 629 (2005).)

¹⁷ The only other way that mass limits are authorized by the federal regulations is where *substituting* the percent removal requirements with a mass loading limit for less concentrated influent wastewater for separate sewers. (40 C.F.R. §133.103(d).) Since the Regional Water Board is *not* substituting mass limits for percent removal requirements that are contained in Provision IV.A.1.c., the mass limits in Table 4 are not justified under federal law.

There is no evidence that the City could or would “artificially dilut[e] its effluent to meet concentration-based limits” as suggested on page F-26 and, in fact, the City meets concentration-based limits much more stringent than those proposed under federal secondary treatment requirements. There is also no evidence to transform these technology-based limits into water quality-based effluent limitations, which the Fact Sheet states at page F-26 “are necessary and appropriated to protect water quality because the effluent is at times discharged to effluent dominated water bodies, primarily Santa Rosa Creek but also Laguna de Santa Rosa, and mass loading of these pollutants may degrade water quality,” when they are specifically stated in that same paragraph to be “technology-based... on the Subregional System’s existing design dry-weather capacity...” Without evidence to support the findings of necessity for these limits and without the Water Code section 13241 analysis required for these limits that are more stringent than required by federal law, the mass limits for BOD and TSS must be removed.

See also Comment 10 in the City’s December 3, 2012 Comment Letter.

Proposed Revisions to Draft Order:

Table 4. Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD (5-day @ 20°C)	mg/L	10	15	--	--	--
	lbs/day	1,780	2,670	--	--	--
	lbs./day (wet weather)	3945	3945	--	--	--
Total Suspended Solids	mg/L	10	15	--	--	--
	lbs/day	1,780	2,670	--	--	--
	lbs./day (wet weather)	3945	3945	--	--	--

Table Notes:

1. See Definitions in Attachment A and Compliance Determination discussion in section VII of this Order.
2. Mass-based effluent limitations apply during periods of discharge to surface waters. See section VII.H of this Order regarding compliance with mass-based effluent limitations.
3. Mass-based effluent limitations for dry weather are based on the existing dry weather design flow of the Subregional System of 21.34 MGD. Dry weather limitations apply when the average influent flow is less than 21.34 MGD over the monitoring period of the effluent limitation.
3. During wet weather periods, when the influent flow rate exceeds the existing dry weather design flow, mass emission limitations are based on the monthly and weekly wet weather design flows of 47.3 MGD and 64 MGD, respectively

Comment 60. Fact Sheet Page F-55, Section IV.D.3.

The Permit Contains Provisions More Stringent than Federal Law and, therefore, the Existing Conclusion that It Does Not Must be Removed from the Draft Order. Section IV.D.3. of the Fact Sheet improperly and inaccurately states that “Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.” This statement must be removed for several reasons. First, the inquiry is not whether the Order collectively is more stringent; instead, each individual requirement must be viewed separately. (*See City of Burbank v. State Water Resources Control Board, et al*, 35 Cal. 4th 613, 618 (2005)(“When, . . . a regional board is considering whether to make the pollutant restrictions in a wastewater discharge permit more stringent than federal law requires, California law allows the board to take into account economic factors, including the wastewater discharger’s cost of compliance.”)) In that case, the California Supreme Court remanded the matter for further proceedings at the Superior Court level to determine whether the individual pollutant limitations in the permits challenged met or exceeded federal standards. (*Id.*) The Superior Court overturned many of the effluent limitations as being more stringent than required by federal law. (*See Statement of Decision, City of Burbank v. State Water Resources Control Board, et al*, Case No. BS060960 (June 28, 2006).)

This paragraph should recognize that the individual effluent limitations being required are, in many cases, more stringent than required by federal law and a Water Code section 13263/13241 analysis should be conducted in *each* of those cases. For example, federal law does not require numeric limits (40 C.F.R. §122.44(d) and (k)(3); *Communities for a Better Environment v. State Water Resources Control Board* (2003) 109 Cal. App. 4th 1089, 1104-5; *In the Matter of the Petition of Citizens for a Better Environment, Save San Francisco Bay Association, and Santa Clara Valley Audubon Society*, Order No. WQ 91-03, May 16, 1991), mass limits where objectives and other limits in the permit are concentration-based (40 C.F.R. §122.45(f)(ii)), daily maximum or other short term limits where longer term limits (monthly and weekly averages) have not been demonstrated with evidence to be impracticable (40 C.F.R. §122.45(d)(2)), or tertiary treatment requirements (40 C.F.R. Part 133). Each of these requirements is more stringent than required by federal law. Since this finding in the Fact Sheet is legally and factually flawed, it should be removed or corrected prior to adoption of the City’s final permit.

Proposed Revisions to Draft Order:

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to section 131.21(c)(1). The remaining water quality objectives and beneficial

uses implemented by this Order (specifically the addition of the beneficial uses Water Quality Enhancement (WQE), Flood Peak Attenuation/Flood Water Storage (FLD), Wetland Habitat (WET), Native American Culture (CUL), and Subsistence Fishing (FISH)) and the General Objective regarding antidegradation) were approved by USEPA on, March 4, 2005, and are applicable water quality standards pursuant to section 131.21(c)(2). ~~Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.~~

Comment 61. Attachment F Page F-64, Section VI.B.1.

Effluent Monitoring. This section states in the parenthetical that routine monitoring for chlorodibromomethane and dichlorobromomethane is "(weekly)" when it should be monthly to be consistent with the MRP requirements at page E- 9, Table E-5.

Proposed Revisions to Draft Order:

1. Routine (~~weekly~~monthly) effluent monitoring for chlorodibromomethane and dichlorobromomethane has been established at EFF-006A and EFF-006B

Comment 62. Attachment F Page F-66, Section VI.F.1.

Typographical Error. The second paragraph of this section contains a typographical error (requirement needs to be plural).

Proposed Revisions to Draft Order:

Monitoring frequency requirements for hardness have been reduced....

Comment 63. Attachment F Page F-70, Section VII.B.2.b.

Storage Pond Technical Report. - This states one of the reasons for the report is to determine if the ponds are hydrologically connected to surface waters. However, this reason for the Storage Pond Technical Report was not in original requirement for the study. The requirements for the report are stipulated in Order No. R1-2006-0045 (current Permit) under Section VI – Provisions, C. Special Provisions, 2. Special Studies, Technical Reports and Additional Monitoring Requirements, d. Storage Pond Leak Monitoring Program include:

“Storage Pond Leak Monitoring Program. The Discharger shall prepare and submit for approval by Regional Water Board Executive Officer a Groundwater Monitoring Program for its Water Reclamation System within 180 days of the effective date of this Order. The Program shall be of sufficient scope to demonstrate that storage of treated wastewater within the Subregional System is not degrading groundwater quality or causing or contributing to excursions of applicable water quality objectives in groundwater or surface water.”

The City requests that the Draft Permit reflect the original requirement for the Storage Pond Technical Report. Also see Comment 26 above.

Proposed Revisions to Draft Order:

Storage Pond Technical Report (Special Provision VI.C.2.b) requires the Permittee to ~~commence implementation of~~ review and revise as appropriate the proposed Storage Pond Leak Monitoring Program to assist in determining whether the storage ponds are adequately designed to minimize the potential for recycled water to cause adverse impacts to areal groundwater and beneficial uses thereof ~~or are hydrologically connected to surface waters...~~

Comment 64. Attachment F Page F-71, Section 5.b.

Typographical Error. The last line of this paragraph contains a typographical error and needs a space between “section403.8(a).”

Proposed Revisions to Draft Order:

The Subregional System is subject to pretreatment standards as described in section 307(b) of the CWA and section 403.8(a).

OTHER COMMENTS – ATTACHMENT G

Comment 65. Attachment G Page G-3, Section A.9.

Terminology for Reclamation Specifications. The term “effluent limitations” is improperly used in this sentence related to recycling, and should reference “reclamation specifications” instead.

Proposed Revisions to Draft Order:

9. This Order authorizes the Permittee to reuse treated municipal wastewater that complies with ~~effluent limitations~~ reclamation specifications contained in section IV of this Order

Comment 66. Attachment G Page G-4, Section B.5.

Water Reclamation Requirements. This section requires immediate cessation of delivery of recycled water if the requirements for use as specified in the Permit or the requirements of CDPH or USEPA are not being met. However, in some cases, the problem can be corrected in a timely manner. The City believes the reference to the USEPA is incorrect because the USEPA does not have regulatory authority over the City’s reclaimed water projects.

Proposed Revisions to Draft Order:

6. The Permittee shall discontinue delivery of recycled water during any period in which there is reason to believe that the requirements for use as specified in this Order or the requirements of CDPH ~~or USEPA~~ are not being met and cannot be corrected in a timely manner. The delivery of recycled water shall not resume until all conditions have been corrected.

Comment 67. Attachment G Page G-5, Section B-28.

Recycled Water User's Guide. This section refers to a recycled water system manual. The City has a Recycled Water User's Guide rather than a recycled water system operations manual for recycled water users.

Proposed Revisions to Draft Order:

28. A copy of the recycled water rules and regulations, irrigation system layout map, and a ~~recycled water system operations manual~~ Recycled Water User's Guide shall be maintained at each use area. These documents shall be available to operating personnel at all times.

Comment 68. Attachment G Page G-7, Section B.18

Hose Bibs for Recycled Water Piping. Pending legislation would allow hose bibbs under certain circumstances and a change to this section to accommodate enactment of such legislation and to correct spelling consistent with Title 22 is requested.

Proposed Revisions to Draft Order:

The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibbs, except as explicitly allowed by CDPH or statute. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access. -[CCR title 22, section 60310(i)] [Urban]

Comment 69 Attachment G Page G-7, Paragraph B.21.

Beneficial Uses. The proposed language in this section seems to imply that no degradation is allowed through the use of recycled water, which is not the case. The State's Antidegradation Policy is not a "no degradation" policy, it specifically allows degradation when certain findings about the importance of the use and the levels of degradation. The Recycled Water Policy has also cleared the use of recycled water under the Antidegradation Policy. Thus, this sentence should be modified.

Proposed Revisions to Draft Order:

21. The use of recycled water shall not cause statistically significant degradation of any water supply above applicable water quality objectives.

Comment 70. Attachment G-1 page G-12, Table G-1

Additional Uses for Recycled Water. In addition to landscape irrigation, the City of Rohnert Park uses recycled water for toilet flushing in two of their parks. The City requests that this type of use be added to Table G-1 for Rohnert Park.

Proposed Revisions to Draft Order:

Table G-1. Approved Recycled Water Use Sites

Owner/operator	APN	Type of Use/Irrigation Types	Total Irrigated Acreage	Volume of Recycled Water (Acre-feet/year)
City of Rohnert Park	143-160-008 143-061-016 143-340-031 047-400-084 047-500-008 047-500-003 143-330-070 143-330-016 143-330-036 143-311-021 143-410-013 159-440-034 143-051-080 143-051-078 143-051-077 143-051-076 143-051-065 143-040-124	Landscape Irrigation, <u>Toilet Flushing</u>	64	95

Comment 71. Attachment G-1 page G-16, Table G-1

Additional Uses for Recycled Water In addition to landscape irrigation, Sonoma State University uses recycled water for toilet flushing and fire suppression. The City requests that these types of use be added to Table G-1 for Sonoma State University.

Proposed Revisions to Draft Order:

Table G-1. Approved Recycled Water Use Sites

Owner/operator	APN	Type of Use/Irrigation Types	Total Irrigated Acreage	Volume of Recycled Water (Acre-feet/year)
Sonoma State University	047-131-011	Landscape Irrigation, <u>toilet flushing, fire suppression</u>	90	160

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December 3, 2012

Matthias St. John
Executive Officer
North Coast Regional Water Quality Control Board
5550 Skylane Blvd. Suite A
Santa Rosa, CA 95403

Comments regarding Tentative *Waste Discharge Requirements and Master Reclamation Permit for the Santa Rosa Subregional Water Reclamation System*

Dear Mr. St. John:

The City of Santa Rosa ("City") appreciates the opportunity to comment on the Tentative *Waste Discharge Requirements and Master Reclamation Permit for the Santa Rosa Subregional Water Reclamation System* ("Tentative Order") and its accompanying documents. As you know, the City has made every effort over the past several years to anticipate the issues raised by this permit renewal and to engage your staff in discussing approaches to addressing these issues. The City also appreciates the efforts your staff have made in the last month to work with us on the initial items we brought to their attention. Our detailed comments are provided in the attachment to this letter. The purpose of this cover letter is to highlight the four primary requested revisions to the Tentative Order that are essential to the City.

1. **"No Net Loading" Effluent Limitations for Total Nitrogen and Total Phosphorus.** The Tentative Order contains final effluent limitations for total nitrogen and total phosphorus that require "no net loading" to the Laguna de Santa Rosa and Mark West Creek watershed. Compliance with these limitations is via the Regional Water Board's Nutrient Offset Program adopted in 2008. The City does not believe either the initial 303(d) Listings for nitrogen and phosphorus in the Laguna de Santa Rosa, or the "no net loading" requirements based thereon, are supported or reasonable. Further, the City has serious concerns whether the Nutrient Offset Program is a viable means for compliance with the proposed "no net loading" requirements. Despite extremely good faith efforts to identify and implement nutrient offset projects, the City has been unable, to date, to secure enough project credits from the Regional Water Board to offset its anticipated nutrient discharges from 2012 - 2015. For these reasons, the City requests that the proposed "no net loading" effluent limitations be replaced with final effluent limitations based on the wasteload allocations in the upcoming nutrient TMDLs and that interim mass load limitations be imposed for total nitrogen and total phosphorus until the TMDLs are adopted by the Regional Water Board and subsequently approved.
2. **Clarifying that "Discharge" Requirements and Provisions Are Not Applicable Reclamation Activities.** Throughout the Tentative Order, the terms "discharge" and "receiving waters," among others, are used when discussing recycled water and

reclamation activities, notwithstanding the fact that the City's recycled water/reclamation activities do not involve direct discharges to waters of the State or the United States, and recycled water applied to land is not for the purpose of disposal. See *accord* Tentative Order Provision IV.B. For example, the Geysers Recharge Project and the City's Irrigation Distribution System are improperly referred to as "receiving waters" (see Tentative Order at Table 2), and effluent limitations applicable to discharges to surface waters of the United States are inappropriately applied to reclamation projects that do not involve such discharges (see, e.g., Tentative Order at Section IV.C.2.) The Tentative Order requires global changes to remove the concept of "discharges" to "receiving waters" when referencing recycled water/reclamation activities, and associated provisions. A variety of comments in the enclosed attachment address this issue.

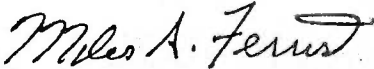
3. **New Reclamation Monitoring and Reporting Requirements.** The Tentative Order contains numerous new recycled water requirements that seem to be taken directly from the State's General Permit for Landscape Irrigation (hereafter "General Permit"). The General Permit was written for situations with no knowledge or recognition of the conditions surrounding the use of recycled water and are, therefore, very restrictive. This is not the case for the City's Recycled Water Program, which has an excellent track record and no identified ground water or surface water issues resulting from the use of recycled water. In addition, the City is already developing a Salt and Nutrient Management Plan that addresses most of the new requirements contained in the Tentative Order. From the City's perspective, the proposed requirements in the Tentative Order for both existing and future sites are of great concern and seem overly burdensome for little benefit. Our detailed comments on this matter are attached.
4. **Eliminating Duplicative SSO Requirements.** The Tentative Order contains internally duplicative and unnecessary discharge prohibitions applicable to sanitary sewer overflows ("SSOs") (compare Tentative Order at Sections III.B., III.D., and III.E.). Further, specific discharge prohibitions related to SSOs (e.g., Tentative Order at Section III.E.) as well as monitoring and reporting provisions (e.g., Tentative Order at Section VI.A.2.b.) are unnecessary and overly duplicative since the City is already separately regulated by the State Water Resources Control Board's SSO WDR (Order No. 2006-0003-DWQ), under which the Regional Water Board already receives notification. Creating differing standards for monitoring and reporting, and exposing the City to duplicative liability under different permits for the same occurrence is unreasonable and unsupported. Further, to the extent the Regional Water Board seeks in this Tentative Order to address potential discharges to groundwater that may create a nuisance condition (see Tentative Order at Section III.E.), the SSO WDR already addresses this circumstance. See Order No. 2006-0003-DWQ at Prohibition C.2.

Matthias St. John
December 3, 2012
Page 3

A number of other key revisions and technical corrections are detailed in the attachment. . . The City remains committed to stewardship of local ground water, the Russian River, and the Laguna, and City representatives have expressed and will continue to express their willingness to assist the Regional Board with studies and investigations that will lead to water quality improvement based on valid scientific data and improvement strategies. Thank you for your consideration of the City's comments. We would appreciate a follow up meeting with you in the near future to discuss these issues.

Please contact David Guhin, Deputy Director Subregional Operations, at 707-543-4299 to discuss this further.

Sincerely,

A handwritten signature in cursive script that reads "Miles A. Ferris".

Miles A. Ferris
Director of Utilities

ATTACHMENT
CITY OF SANTA ROSA COMMENTS REGARDING
WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION
PERMIT FOR THE SANTA ROSA SUBREGIONAL WATER
RECLAMATION SYSTEM

**COMMENT ON THE NO NET LOADING EFFLUENT LIMITATIONS FOR TOTAL NITROGEN AND
TOTAL PHOSPHORUS**

Comment 1.

For the reasons set forth below, and as specifically requested in Section F of this comment, the City requests that the proposed “no net loading” effluent limitations for total nitrogen and total phosphorus set forth in Section IV.2.b.i. of the Tentative Order be replaced with final effluent limitations based on the wasteload allocations in the upcoming nutrient TMDLs and that interim mass load limitations be imposed for total nitrogen and total phosphorus until the TMDLs are adopted by the Regional Water Board and subsequently approved.

A. The 303(d) Listings for Nitrogen and Phosphorus and Proposed Final Effluent Limitations for Total Nitrogen and Total Phosphorus Based Thereon.

By way of background, in the early 1990s, the Laguna de Santa Rosa was placed on the State Water Resources Control Board’s (“State Water Board”) Clean Water Act 303(d) List of Impaired Waterbodies (“303(d) List”) for failing to comply with the Regional Water Board’s water quality standards for dissolved oxygen and ammonia set forth in the Basin Plan. In response, the City undertook and completed substantial upgrades to its treatment facility to further reduce the concentration of nutrients, including ammonia, in the Laguna. In addition, the City funded an innovative dairy loan program that provided funding for dairy farmers in the Laguna watershed to build barns to house cows during the winter months, significantly reducing the amount of manure and nutrients washed off into the waterways.

At that time, the Regional Water Board also adopted a Waste Reduction Strategy for the Laguna de Santa Rosa to address potential sources of nutrients to the Laguna de Santa Rosa. *See, accord*, Tentative Order Fact Sheet at F-17. The City worked closely with the Regional Water Board to ensure compliance with the Waste Reduction Strategy. Because of the development of the Waste Reduction Strategy, the Laguna de Santa Rosa watershed was removed from the 303(d) List of Impaired Waterbodies in 1998.

Subsequently, in 2002, because dissolved oxygen levels were not being consistently attained in every part of the Laguna, the Regional Water Board considered re-listing the Laguna de Santa Rosa for dissolved oxygen, nitrogen and phosphorus. After much public comment, the Regional Water Board decided *against* re-listing the Laguna de Santa Rosa on the 303(d) List for nitrogen and phosphorus, and instead, included the Laguna on the Monitoring List. Given the capabilities of the City, as compared to other entities in the region and watershed, the City volunteered to

work with the Regional Water Board to further study the dissolved oxygen and nutrient issues in the Laguna de Santa Rosa.

Unfortunately, the United States Environmental Protection Agency (“USEPA”) ignored the very detailed information and rationale presented by the State and Regional Water Boards for not listing the Laguna de Santa Rosa as impaired for nitrogen and phosphorus, and unilaterally listed the Laguna de Santa Rosa as impaired for nitrogen and phosphorus. *See, accord*, USEPA’s 2010 California 303(d) List of Water Quality Limited Segments. It is this listing by USEPA that has simply been carried forward to subsequent 303(d) Lists, and that the Regional Water Board relies upon, in combination with the Basin Plan’s narrative water quality objective for “biostimulatory substances,” for the following proposed final effluent limitations:

“IV. Effluent Limitations and Discharge Specifications

A. 2. Final Effluent Limitations – Water Quality-Based Effluent Limitations

- b.i. Effluent Limitations for Biostimulatory Substances for Compliance with Narrative Objective.** There shall be no net loading of total nitrogen and total phosphorus to the Laguna de Santa Rosa and Mark West Creek watershed.

Compliance with these effluent limitations shall be determined in accordance with section VII (Compliance Determination) of the Order.”

See Tentative Order at page 8, Section IV.A.2.b.i. Section VII.M. of the Tentative Order (the Compliance Determination section) prescribes compliance with the “no net loading” limitations through the Nutrient Offset Program (Attachment H) discussed in detail below.

B. The City’s Discharges to Receiving Waters Are Disassociated from Any Upstream Impairment.

While the City’s existing NPDES Permit, and the proposed Tentative Order, authorize the discharge of recycled water from the City’s recycled water storage ponds to the Laguna de Santa Rosa and/or Santa Rosa Creek, from October 1st through May 14th of each year, the City rarely invokes this authority, instead directing almost the entirety of its recycled water to beneficial reuse projects. The City beneficially reuses most of its produced and stored recycled water throughout the year, providing agricultural operators with recycled water for beneficial water reclamation and reuse (*i.e.*, agricultural irrigation of crops, including vineyards, orchards, animal fodder, pasture, and specialty vegetable crops), participating in urban reuse (*i.e.*, golf courses, playing fields, and landscaped areas), or providing the water to the Geysers Recharge Project.¹

The City invested enormous resources into construction and operation of the Geysers Recharge Project, a sophisticated energy project that took over ten years to complete. The Project consists of a 41-mile pipeline to convey recycled water to the Geysers steamfield operators’ distribution network for steamfield injection and generation of electricity. Beginning in 2003, the City was

¹ Approximately 6,388 acres of urban and agricultural land are irrigated with recycled water.

contractually obligated to provide 4015 million gallons each year to the steamfield operators (translating into an average daily delivery of 11 million gallons per day (“MGD”). In 2007 (after the adoption of the City’s current NPDES Permit), the Geysers Recharge Project was expanded and the City is now contractually obligated to supply 4,607 million gallons each year to the steamfield operators translating to an average daily delivery of 12.62 MGD.

Operation of the Geysers Recharge Project, in combination with the City’s comprehensive agricultural and urban reuse program, has allowed the City to beneficially reuse, rather than discharge, most of the recycled water produced by its Reclamation Plant, between 95% and 100% during at least the last five years of operation.² For this reason, the City seriously questions its role, if any, in any ongoing impairment identified in the Laguna de Santa Rosa. To place the City’s discharge history into perspective, for the past five discharge seasons, the City has discharged to receiving waters as follows:

Discharge Season	Total Days of Discharge	Volume (million gallons)	Timing (months)
2007/2008	13	190	February
2008/2009	0	0	N/A
2009/2010	9	84	April
2010/2011	61	744	January - April
2011/2012	1	5	April

Further, the discharges noted above all originate from Discharge Points 012A and 012B, the City’s Delta Pond that discharges to Santa Rosa Creek, which in turn discharges to the Laguna de Santa Rosa near its conclusion, just two miles before the Laguna de Santa Rosa’s confluence with Mark West Creek. The fact that the City’s discharges are exceptionally limited in duration and volume, that these limited discharges occur during the winter months at a time when dilution is present and nutrient concerns are lessened,³ and that all discharges occur near the conclusion of the Laguna de Santa Rosa, support the City’s position that onerous discharge requirements for total nitrogen and total phosphorus are unnecessary to impose on the City’s surface water

² Nonetheless, authority to discharge to the Laguna de Santa Rosa and Santa Rosa Creek between October 1st and May 14th of each year is necessary to maintain the water balance in an especially wet year.

³ “Management of dry weather loading may be more important than wet weather loading since the critical conditions for eutrophication impacts are during dry weather periods.” S. Butkus, NCRWQCB, memo December 8, 2011.

discharges based on the 303(d) Listings. The Regional Water Board must consider these factors before simply imposing onerous and unsupported “no net loading” effluent limitations as proposed.

C. The City’s Prior NPDES Permit, Appeals, and Informal Resolution Via the Nutrient Offset Program.

At the time the City’s existing NPDES Permit was renewed in 2006 (Order No. R1-2006-0045, as amended by Order No. R1-2008-0091), the City found itself in the same position as the City finds itself now; that is, with 303(d) List impairments for nitrogen and phosphorus in the Laguna de Santa Rosa, but no corresponding Total Maximum Daily Load (“TMDL”) to address those listings. Notwithstanding significant protest by the City, and for the stated purpose of implementing the Basin Plan’s narrative water quality objective for “biostimulatory substances” in light of the 303(d) Listings, at that time, the Regional Water Board imposed alternative final effluent limitations for nitrogen and phosphorus of “zero, or no net loading,” effective November 9, 2011 if TMDLs were not yet adopted at that time, and wasteload allocations (“WLAs”) not substituted. *See* Order No. R1-2006-0045 at Provision IV.A.1.g. Footnote 5 to those effluent limitations explained that the “no net loading” effluent limitations “may be met by: 1) reducing the effluent concentration below detectable levels through source control and/or treatment; 2) reducing loads through recycling/reclamation; and/or 3) reducing loads elsewhere in the watershed by an amount at least equal to the amount discharged (and of equivalent bioavailability) through an approved offset program.” *Id.* at fn. 5.

Despite the City’s extraordinary efforts to beneficially reuse of its recycled water at the time the 2006 NPDES Permit was adopted, there was no expectation by the City that it could comply with the new, unprecedented alternative final effluent limitations for nutrients. The City’s expectation that a TMDL (or TMDLs), which might ease the discharge requirements via calculation of proper WLAs, would be adopted on or before the compliance deadline of Nov. 9, 2011 was equally bleak. Consistent with earlier objections, the City filed a Petition for Review with the State Water Board on October 19, 2006 (SWRCB/OCC File No.A-1779), and a subsequent Petition for Writ of Mandate was filed in Sonoma County Superior Court in July 2007, Case No. SCV 241194, challenging the alternative final limitations on the basis that they directly contradicted State Water Board precedent (*e.g.*, State Water Board Order No. WQ 2001-06), were not legally required, constituted an improper interpretation of the narrative objectives for biostimulatory substances and chemical constituents, and were not supported by findings or evidence in the administrative record.

In July 2008, the City and the Regional Water Board resolved the City’s legal action through the Regional Water Board’s adoption of the Santa Rosa Nutrient Offset Program, Resolution No. R1-2008-0061, (“Nutrient Offset Program”). The Nutrient Offset Program satisfied the existing NPDES Permit’s requirement that the alternative final effluent limitations could be complied with by “reducing the loads elsewhere in the watershed by an amount at least equal to the amount discharged (and of equivalent bioavailability) through an approved offset program.” *See* Order No. R1-2006-0045 at Provision IV.A.1.g., fn. 5.

The Nutrient Offset Program sets forth the following detailed program elements:

- Identification by the City of the annual nutrient load to be offset
- Criteria for nutrient reduction credits
 - Detailed method for direct measurement of nutrient reduction
 - Detailed method for estimated nutrient reductions
 - Margin of safety
 - No nutrient reduction credits for projects/activities already required by the City's NPDES permit for municipal storm water discharges.
- Accounting for nutrient credits – Regional Water Board and City staff both understood that due to the vagaries of variable and unpredictable annual discharge of water and nutrients, project implementation timelines and varying nutrient reduction values from short and long-term projects, an averaging period for compliance was warranted. Thus, compliance with the no net loading requirement is calculated using a three-year averaging period. The City is deemed compliant if the three-year average difference between actual discharge and offset reduction credits is less than or equal to zero mass units.
- Effective date and banked credits – the alternative final effluent limitations were effective November 9, 2011, and the first three-year average compliance determination would occur in 2014 upon conclusion of the 2013-2014 discharge season.⁴ Credit for any nutrient removal/reduction actions implemented after 2007 and prior to the 2011-2012 discharge season are available to “bank,” and apply to the City's first three-year average compliance period.
- Process for submission, review, and approval/disapproval – as specifically stated in the Program, the process for obtaining approval for nutrient reduction projects is as follows:
 - City identifies nutrient reduction project(s)
 - City submits description of nutrient reduction project(s) to RWQCB documenting consistency with adopted Nutrient Offset Program
 - RWQCB accepts proposed nutrient reduction project(s)
 - City implements project(s)
 - City submits annual report documenting nutrient discharged and controlled.

See Resolution No. R1-2008-0061.

The City always viewed compliance with the Nutrient Offset Program as requiring a varied mix of short and long-term projects, as neither Regional Water Board staff nor the City has

⁴ Due to the issuance of Time Schedule Order No. R1-2011-0103, the first three-year compliance determination pursuant to the Nutrient Offset Program was extended by one year, to 2015, using a three-year average from the 2012-2013 discharge season through the 2014-2015 discharge season.

previously identified one singular project that would entirely offset the limited, seasonal discharge of nutrients into Santa Rosa Creek and the Laguna de Santa Rosa. The Nutrient Offset Program itself acknowledges this fact by the constant reference to "project(s)" and inclusion of the three-year averaging period necessary to allow implementation of a variety of projects. The Nutrient Offset Program could be successful only if both the City and the Regional Water Board are invested and engaged in successfully identifying and approving multiple projects that will undoubtedly vary in scope and duration.

D. Significant Challenges Encountered with Nutrient Offset Program Project Implementation

Soon after the Nutrient Offset Program was adopted in July 2008, City staff began the good faith process of obtaining approval for early implementation of nutrient reduction projects. In February 2009, and following several consultations with Regional Water Board staff, the City provided Regional Water Board staff with a draft Laguna Sediment and Ludwigia Removal Project for informal consideration and discussion. A meeting between City and Regional Water Board staffs occurred in April 2009, during which Regional Water Board staff indicated general concerns with the draft project and requested to meet at a later date to discuss further. That meeting did not occur until June 2010, notwithstanding repeated requests for the meeting from City staff. Further information was provided by the City regarding the project; however, in September 2010, Regional Water Board staff indicated they would deny the project if formally proposed by the City.

Refocusing efforts to develop acceptable nutrient reduction projects, City staff again met with Regional Water Board staff, including the Executive Officer, in October 2010. The purpose of the meeting was to develop a list of potentially mutually agreeable nutrient offset project options, including near and long-term projects, as both were necessary for compliance with the alternative effluent limitations set forth in the City's existing NPDES Permit. Based on discussions at that meeting, in January 2011, City staff presented to Regional Water Board staff various options for a near-term nutrient offset project that could be implemented in 2011. At that meeting, verbal support was given by the Executive Officer for the near-term Laguna Ludwigia Nutrient Offset Project. The project involved the City, in conjunction with the Laguna de Santa Rosa Foundation and the Sonoma County Water Agency, removing Ludwigia from specified locations of the Laguna de Santa Rosa. Ludwigia contains nutrients that are mineralized upon plant decay; therefore, removing Ludwigia removes nutrients that could otherwise pose water quality problems in the Laguna. Based on Regional Water Board staff support, the City undertook the resource-intensive process of preparing a formal submission, and on March 14, 2011, the Laguna Ludwigia Nutrient Offset Project was submitted to the Executive Officer for formal approval.

On April 15, 2011, City staff received correspondence from Regional Water Board staff, asking to resubmit the Laguna Ludwigia Nutrient Offset Project. Regional Water Board staff was aware the City had submitted a project, but could not locate the document. The City provided an electronic copy. During a call on May 16, 2011, Regional Water Board staff suddenly reversed their previous support for the project, and indicated the project was unacceptable. On May 20, 2011, the City received a letter from the Regional Water Board's Executive Officer rejecting the Laguna Ludwigia Nutrient Offset Project and listing technical concerns in an attachment to the letter. In that letter, the Executive Officer expressed that acceptable nutrient offset projects

would be those involving agricultural discharges, specifically, dairies. While the City was investigating nutrient offset options involving agricultural discharges at that time, the City did not believe those projects to be the exclusive projects by which the City would achieve compliance with the alternative effluent limitations for nitrogen and phosphorus.

To salvage the project initially agreed upon, City staff spoke with the Regional Water Board's Executive Officer on May 26, 2011, and the parties agreed the City would resubmit the Laguna Ludwigia Nutrient Offset Project, revised to address the technical concerns of Regional Water Board staff as set forth in the May 20, 2011 letter. A meeting between City and Regional Water Board staffs, as well as a representative from the Laguna Foundation, occurred that same day, during which Regional Water Board staff's technical concerns and the City's proposed resolutions were discussed. With the technical impediments seemingly resolved, a schedule for obtaining approval of the project was also discussed, so as to ensure the project could move forward during Summer/Fall 2011. Regional Water Board staff concurred with a July 15, 2011 date for approval of the resubmitted project.

On June 6, 2011, the City submitted the revised Laguna Nutrient Offset Project to the Regional Water Board, which responded to and resolved the technical questions and concerns of Regional Water Board staff expressed in the May 20, 2011 letter, and as discussed at the May 26, 2011 meeting. Throughout June 2011, City staff continued contact with the Regional Water Board staff, offering assistance or clarification, if necessary, to ensure the project would be approved. On June 30, 2011, Regional Water Board staff indicated they were on track to meet the City's requested approval date of July 15, 2011 provided the parties could work through some "relatively minor last-minute concerns." City and Regional Water Board staffs spoke further that day, and for the next week, regarding Regional Water Board staff's further concerns, which, if resolved, would render the project almost useless to the City in terms of nutrient removal credit, especially as compared to the effort expended. The concerns raised went beyond any criteria set forth in the Nutrient Offset Program, and imparted a clear signal that Regional Water Board staff simply did not now want to approve any project involving Ludwigia removal. Instead, Regional Water Board staff preferred the City to focus its nutrient reduction efforts on agricultural dischargers, to supplement and expedite the Regional Water Board's agricultural discharge program.

On July 22, 2011, the City received a letter from the Regional Water Board's Executive Officer, dated July 14, 2011, stating that the Laguna Nutrient Offset Project (Revised Proposal) was unsuitable for compliance with the Nutrient Offset Program, on the basis that the project did not provide a clear long-term environmental benefit with respect to the overall management of Ludwigia in the Laguna de Santa Rosa. The Executive Officer acknowledged the hard work and good faith effort of the City to identify and implement a nutrient offset project, but again, diverted discussion of nutrient offset options to those involving agriculture, including dairies. At that point in time, the City had expended approximately \$310,000 in fees and costs to develop the Laguna Ludwigia Nutrient Offset Project. In August 2011, the City filed a Petition for Review with the State Water Board, challenging the Executive Officer's decision, and that Petition for Review remains in abeyance.

To reflect the City's good faith efforts to date, and to resolve the City's concerns regarding the lack of available nutrient offset projects to implement prior to the initial three-year compliance

determination prescribed in the Nutrient Offset Program, scheduled for 2014, the Regional Water Board issued Time Schedule Order No. R1-2011-0103, which extended by one year, to 2015, the first three-year compliance determination. The three-year average for the compliance determination in 2015 will commence with the 2012-2013 discharge season.

In 2012, the City substantially refocused its efforts to identify nutrient reduction projects involving agricultural activities; specifically, dairies. To that end, between January and June 2012, the City expended significant staff and consultant resources to identify and discuss with stakeholders and Regional Water Board staff alike, potential nutrient reduction projects. Given the City's historical efforts, such as the dairy loan program discussed above, and the Regional Water Board's recent actions to adopt General WDRs/NPDES Permit for CAFOs (R1-2012-0001) and the Conditional Waiver of WDRs for Existing Cow Dairies (R1-2012-0003), the list of projects that can qualify for nutrient offset credits under the Nutrient Offset Program is limited. However, the City did identify three projects that, if approved and implemented, might offset the City's nutrient discharges from discharge seasons ranging from 2012-2013 through 2014-2015. These projects are called the Beretta Project, the Pepperwood Project, and the Nunes Project, and they would provide 6, 25, and 94 percent of the nutrient credits, respectively, necessary for compliance in 2015. However, early on, Regional Water Board staff indicated that the Nunes Project would not likely be eligible for nutrient offset credits because of the General WDRs and/or Conditional Waiver noted above.

On June 6, 2012, the City submitted the Beretta Project to the Regional Water Board to secure agreement that the project qualifies under the Nutrient Offset Program. Though deemed approved on August 6, 2012 based on the terms of the Nutrient Offset Program, the Regional Water Board did formally provide its agreement regarding the project's qualifications on September 20, 2012. As noted above, the Beretta Project provides for only 6 percent of City's nutrient offset needs. On June 28, 2012, the City submitted the Pepperwood Project to the Regional Water Board. The City agreed to extend the formal time period for Regional Water Board action prescribed by the Nutrient Offset Program to October 17, 2012, and the Regional Water Board formally provided its agreement regarding the project's qualifications on October 18, 2012. As noted above, the Pepperwood Project provides for only 25 percent of the City's nutrient offset needs. Thus, at this time, the City expects only 31 percent of its expected nutrient discharges to be offset through the Nutrient Offset Program.

On August 27, 2012, City staff and representatives met with Regional Water Board staff to discuss the City's serious concerns regarding the viability of the Nutrient Offset Program, and the City's expected inability to comply with the "no net loading" requirement contained in the existing NPDES Permit given the lack of available projects technically and economically feasible to implement prior to 2015. The City suggested modifying the NPDES permit's requirements in the upcoming renewal process, to reflect the City's good faith efforts to date, and to avoid the City being unduly punished for compliance with creative discharge limits that cannot be attained. The City confirmed it would remain committed to the Beretta and Pepperwood projects. On September 5, 2012, the City submitted a proposal to Regional Water Board staff, requesting that the final effluent limitations for nitrogen and phosphorus be modified in the NPDES permit renewal consistent with Section F. below. No response was provided by Regional Water Board staff prior to issuance of the Tentative Order.

On September 13, 2012, however, Regional Water Board staff asked City staff for additional information regarding the Nunes Project, to reconsider the project's eligibility under the Nutrient Offset Program. Based on discussions between City and Regional Water Board staffs, the City submitted the Nunes Project to the Regional Water Board on October 30, 2012. It is unknown at this time whether the Regional Water Board will provide its agreement regarding the project's qualifications under the Nutrient Offset Program, and further, whether the City can even reach agreement with the landowner and/or Wildlands to implement the project.⁵ Thus, the City remains gravely concerned about its ability to comply with a "no net loading" discharge requirement, notwithstanding all efforts to date, and requests modifications to the Tentative Order in Section F to reflect this reality.

On November 1, 2012, the City's Board of Public Utilities approved the Beretta and Pepperwood Projects, and completed CEQA compliance. The Board also approved contract amendments to the City's agreement with the Sotoyome Resource Conservation District so that the District can implement both projects, at a cost of approximately \$700,000.00.

E. The Proposed "No Net Loading" Effluent Limitations for Total Nitrogen and Total Phosphorus Are Contrary to State Water Board and Judicial Precedent, Unsupported, Unnecessary, and Unreasonable.

For the stated purpose of implementing the Basin Plan's narrative water quality objective for "biostimulatory substances," designed to protect aquatic life, the Tentative Order contains the following final effluent limitations for total nitrogen and total phosphorus: "There shall be no net loading of total nitrogen and total phosphorus to the Laguna de Santa Rosa and Mark West Creek watershed." See Tentative Order at page 8, Section IV.A.2.b.i. The Tentative Order states that "Compliance with these effluent limitations shall be determined in accordance with section VII (Compliance Determination) of the Order." *Id.* Section VII.M. of the Tentative Order (the Compliance Determination section) prescribes compliance with the "no net loading" limitations through the Nutrient Offset Program (Attachment H). As discussed below, the "no net loading" final effluent limitations for total nitrogen and total phosphorus directly contradict State Water Board precedent, are not legally required, constitute an improper interpretation of the narrative objective for biostimulatory substances, and are not supported by findings or evidence in the administrative record. Any final effluent limitation for a 303(d) listed pollutant should be based on the WLA in the TMDL, so that resources are not focused on complying with moving target compliance requirements.

The CWA established the TMDL program as the mechanism for quantifying wasteload and load allocations to allow pollutant reductions to be equitably apportioned among sources. See 40 C.F.R., §130.2(g). When a TMDL is developed, discharge limits in NPDES permits must be made consistent with the WLAs in the TMDL. See 40 C.F.R., § 122.44(d)(1)(vii)(B). In 2001, the State Water Board confronted a very similar case involving the Tosco (now Tesoro) refinery and the discharges of dioxin, a pollutant listed as impairing a portion of the San Francisco Bay. In that case, the San Francisco regional water board issued an NPDES permit to the refinery with

⁵ To date, the City has been unable to reach agreement with the landowner and/or Wildlands to implement the proposed Nunes Project.

alternative final limits of “zero” or “no net loading.” As a result of that case, the State Water Board issued a precedential decision, State Water Board Order No. WQ 2001-06 (“Tosco” or “Tosco Order”), disposing of the instant issues, in favor of the City. *See* Cal. Gov’t Code §11425.60 (setting forth rules for relying on agency precedent).

The State Water Board recognized that permit reissuance before TMDL completion can be “problematic” because:

“if a water body is impaired, the water may not be able to assimilate more of the impairing pollutant. If this is the case, effluent limitations for the pollutant may be based solely on the applicable criterion or objective with no allowance for dilution. Hence, they may be extremely stringent. Ultimately, when the TMDL is done, the stringent limitations may become unnecessary because nonpoint source controls may provide assimilative capacity for the point source discharges.”

See Tosco Order at pgs. 21-22.

The Tosco Order establishes that where a TMDL is not yet complete, and a discharger cannot comply with a final effluent limit calculated by the Regional Water Board, the permit limit or final water-quality based effluent limit (“WQBEL”) should be enunciated as the WLA in the anticipated TMDL. *See* Tosco Order at p. 36. In this situation, “[t]he permit findings should state that final water quality-based effluent limitations will be based on the wasteload allocations in the TMDL.” *Id.* In 2003, the California Court of Appeal, First Appellate District, affirmed the State Water Board’s decision. *See Communities for a Better Environment v. State Water Board/Tesoro* 109 Cal.App.4th 1089 (2003). The court specifically upheld the inclusion of a future WLA derived from a TMDL as the final WQBEL, noting that the San Francisco regional water board, State Water Board, and USEPA all concurred with this approach. *Id.* at 1107.

In 2005, the State Water Board also adopted the “Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options” (“2005 Water Quality Control Policy”). *See* State Water Board Resolution 2005-0050. This policy contains an “Impaired Waters Regulatory Decision Tree” that directs the regional water boards to calculate loading capacity for waters that do not attain water quality standards due to anthropogenic causes before redressing the impairment by issuing or revising an individual permit. *See* State Water Board Res. 2005-0050, Attachment A. The Decision Tree also indicates that if, after the receiving water’s loading capacity has been calculated, it is determined that the impairment’s cause must be redressed through multiple actions of a regional water board or other entities, individual permits should be issued or revised only as tools to implement a TMDL. *Id.* This further evinces the State Water Board policy that loading capacities, WLAs, and TMDLs be used to establish permit limits.

Thus, under court-affirmed State Water Board precedent, the final effluent limitations for total nitrogen and total phosphorus assigned to the City should be based on the WLAs in the upcoming TMDLs, scheduled for completion in 2015. To the extent that nitrogen and phosphorus discharged by the City at all contribute to impairment in the Laguna de Santa Rosa, these pollutants must be comprehensively addressed at the watershed level. As the State Water

Board has consistently held, pollution problems involving multiple sources “are best addressed through the TMDL program.” *See* Tosco Order at p. 38.

Furthermore, the final effluent limitations of “no net loading” for total nitrogen and total phosphorus contradict the express holdings and direction of the State Water Board in the Tosco Order. As the State Water Board stated unequivocally in *Tosco*:

“The Board does not construe the Clean Water Act as mandating the alternative final limits [of “zero” or “no net loading”]. The Clean Water Act authorizes compliance schedules for water quality standards that are adopted or revised after July 1, 1977. A TMDL, as explained previously, is a quantitative plan to attain and maintain water quality standards for an impairing pollutant. A TMDL, thus, is ‘derived from, and complies with’ the applicable water quality standard. A water quality-based effluent limitation that is consistent with the waste load allocations in a TMDL likewise is derived from and complies with the standard. *The Board concludes, therefore, that a compliance schedule that leads to compliance with a water quality standard through TMDL development satisfies applicable legal requirements, and that an alternative default limitation is unnecessary.*”

See Tosco Order at pgs. 41-42 (emphasis added; footnotes omitted.)

The State Water Board in the *Tosco* case determined that the findings regarding the alternative final limits of “zero” or “no net loading” presumed that the receiving waters lack assimilative capacity for the constituent on the 303(d) list. *Id.* at p. 37. The State Water Board held that the mere fact that a water body is listed as impaired for a pollutant is not a sufficient basis to conclude that a water body lacks assimilative capacity for the pollutant. *Id.* at pgs. 33, 37 (“The listing itself is only suggestive; it is not determinative.”). Similarly, the Regional Water Board here has failed to provide any support for the “no net loading” final effluent limitations imposed on the City. Monitoring information submitted by the City, and described above, does not in any way support a conclusion that the Laguna cannot assimilate the City’s existing, limited, seasonal discharge, and that additional, onerous requirements must apply in the absence of TMDLs.

The State Water Board also determined that the alternative final limits of “no net loading” may be technically infeasible to achieve and ultimately unnecessary. *See* Tosco Order at p. 37. Tosco submitted evidence to the regional water board that some limits could not be met with waste minimization, pollution prevention, or current technology. *Id.* at 38. Here, the Tentative Order specifies that “no net loading” limits may be met by implementing the Nutrient Offset Program. As detailed above, implementation of projects pursuant to the Nutrient Offset Program is not a viable compliance solution for the City, particularly in light of the fact that subsequent TMDLs could--indeed, likely would-- result in different final effluent limitations for total nitrogen and total phosphorus. In addition, here, as in *Tosco*, even if the City were to achieve compliance with the “no net loading” requirements via the Nutrient Offset Program, there is no evidence in the record to support the conclusion that a demonstrable water quality effect would result, especially given the questionable listing of the Laguna de Santa Rosa by USEPA. Thus,

the alleged impairments “are best addressed through the TMDL program” rather than by unreasonable “no net loading limits.” *See* Tosco Order at p. 38.

Additionally, no federal or state statutory or regulatory provisions authorize or require the imposition of the “no net loading” final effluent limitations proposed in the Tentative Order, which explains why none are cited by the Regional Water Board. Thus, the Regional Water Board’s action in imposing such requirements is unsupported and unreasonable, in violation of Cal. Water Code section 13000 and 13263(a) (requiring “reasonable” water quality regulation and requirements that are “reasonably required” to protect the receiving waters). Indeed, the Basin Plan’s narrative water quality objective for biostimulatory substances does not mandate the inclusion of the “no net loading” requirements, and the Regional Water Board has failed to explain how the limits were derived from this or any other water quality objective.

The narrative objective for biostimulatory substances states that “[w]aters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.” *See* Basin Plan at 3.300. In imposing the “no net loading” final effluent limitations, the Regional Water Board did not articulate how it concluded that “no net loading” is necessary to prevent nuisance or adversely affect beneficial uses in the Laguna de Santa Rosa. When interpreting narrative objectives, a Regional Water Board must demonstrate “why any effluent limitations . . . are necessary in light of site-specific conditions” in accordance with Water Code sections 13000 and 13377. *See City of Woodland v. California Regional Water Quality Control Board, Central Valley Region*, Alameda County Superior Court Case No. RG04-188200 (May 16, 2005) at p. 15; State Water Board Order 2004-13, *In the Matter of Petition of Yuba City* at pp. 17-18. Further, administrative orders not supported by the findings or findings not supported by the evidence constitute an abuse of discretion. *See* 40 C.F.R. §124.8(b)(4); *Topanga Association for a Scenic Community v. County of Los Angeles*, 11 Cal.3d 506, 515 (1974); *California Edison v. SWRCB*, 116 Cal. App.3d 751, 761 (4th Dt. 1981); *see also In the Matter of the Petition of City and County of San Francisco, et al.*, State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995). Finally, there is no evidence in the administrative record that the factors set forth in Water Code section 13241 were considered for this interpretation of the narrative objective when the narrative objective for biostimulatory substances was adopted, and there is no evidence that the Regional Water Board considered those factors when preparing the Tentative Order in accordance with Water Code section 13263(a).

For these reasons, the City requests that the “no net loading” final effluent limitations for total nitrogen and total phosphorus be removed from the Tentative Order and replaced with the language set forth in Section F below.

F. Request to Modify Proposed Effluent Limitations for Total Nitrogen and Total Phosphorus

The Regional Water Board plans to complete TMDLs for nitrogen and phosphorus in 2015. *See* Tentative Order Fact Sheet at F-18. Given the upcoming TMDLs, the comments set forth above, and consistent with the City’s earlier September 5, 2012 request, the City again requests that the proposed “no net loading” effluent limitations for total nitrogen and total phosphorus set forth in Section IV.2.b.i. be replaced with the following effluent limitations:

1. **Final Effluent Limitations**: the WLAs in the upcoming TMDLs.
2. **Interim Effluent Limitations**: interim mass load limitations of 42,028 lbs. (total nitrogen) and 10,050 lbs. (total phosphorus) apply until the TMDLs are adopted by the Regional Water Board and subsequently approved. The interim mass load limits are based on the following:
 - 547 million gallon (MG) median annual discharge. This is derived using the City's operations simulation model described in Water Balance Technical Memorandum D-7 of Discharge Compliance Project EIR http://www.recycledwaterprogram.com/doclib/Documents/ut_irwp_DCP_DEIR_TM_D-7.pdf. The water balance model (WBM) estimates daily recycled water production over 95 water years (1910 to 2004) based on a specified average dry weather flow (ADWF), and allocates it to recycled water demands (*i.e.*, Geysers and irrigation), storage and discharge. Using ADWF of 15.4 MGD from 2011, the WBM provides a median annual discharge volume of 547 MG.
 - 2.2 mg/L total phosphorus concentration, as described in Table 11 in the City's *NPDES Permit Renewal and Report of Waste Discharge for the Santa Rosa Subregional Water Reclamation System* (May 13, 2010).
 - 9.2 mg/L total nitrogen concentration, based on the sum of nitrate and TKN values from Tables 10 and 11, respectively, in the City's *NPDES Permit Renewal and Report of Waste Discharge for the Santa Rosa Subregional Water Reclamation System* (May 13, 2010).

Imposition of interim mass-based nutrient load limitations, with the final limitation being the WLAs in the upcoming TMDLs, is consistent with permitting guidance provided in the September 2005 Court of Appeal case involving Tesoro Refinery, noted above. Anti-backsliding principles do not prohibit this approach, because the final effluent limitations in the newly adopted NPDES Permit would carry over from the existing NPDES Permit (which prescribed similar final effluent limitations of the WLAs based on TMDLs, though with an alternative approach that would be abandoned) and would be derived from the mandated TMDL program. However, even if anti-backsliding did apply, the City should qualify for the exception at section 402(o)(2)(A) based on the following changes to the City's facility and efforts since permit issuance as follows:

- Reduced discharge quantity resulting from the Geysers Project (beginning in late 2003) and the Geysers Expansion Project (beginning in 2007);
- Improved discharge management through implementation of the Discharge Compliance Project, which includes discharge only at Delta Pond (beginning with the 2006-07 discharge season), installation of a diffuser (in 2011) and real-time water quality monitoring and modulation of discharge flows at the Delta Pond discharge location (beginning in 2011); and
- Ongoing good faith effort to find and implement nutrient offset projects since 2009.

GENERAL COMMENTS

COMMENT 2.

Regulation of the City's activities should be accomplished in two separate permits, with the City's limited discharges to waters of the United States regulated by a federal NPDES permit, and the remainder of the City's reclamation or other activities regulated by a Master Reclamation Permit, Waste Discharge Requirements ("WDRs"), or Water Reclamation Requirements issued pursuant to state law, namely the Porter-Cologne Water Quality Control Act. While the City greatly appreciates Finding II.C. in the Tentative Order, the City is concerned that there are other state law-only requirements contained in the Tentative Order not identified in this Finding. Further, and more importantly, by including state law-only requirements in an NPDES permit, those provisions may be inappropriately subject to third party enforcement under the Clean Water Act notwithstanding Finding II.C. The City has been a past target of third party citizen suit enforcement, and would like to ensure that only provisions required to be implemented under the federal Clean Water Act are included in the City's NPDES permit. Other permittees in the State have also made this request, and had their NPDES/WDR permits separated into two separate permits. (*See e.g.*, Order Nos. R5-2007-0038 (WDR) and R5-2007-0036 (NPDES).)

COMMENT 3.

The Tentative Order contains numerous new recycled water regulations that seem to be taken directly from the State's General Permit for Landscape Irrigation (hereafter General Permit). The General Permit was written to be a general template, and did not incorporate site-specific considerations or acknowledge ongoing recycling programs. Many of the General Permit's requirements may not be appropriate for the City's Recycled Water Program, which has an excellent track record and data demonstrating that no identifiable ground water or surface water impairment has resulted from the use of the City's recycled water. Further, the City already has many of the requirements already in place – for example, a guide specifying Best Management Practices ("BMPs"), training of site supervisors, weekly e-mailing of recycled water tips including a weekly water use recommendation based on real time evapotranspiration data, and inspections to identify issues before they become problems. All of these actions achieve the goal of recycled water being applied efficiently at agronomic rates. In addition, the City is currently developing a Salt and Nutrient Management Plan that will address most of the new requirements contained in the Tentative Order. The City believes that many of the new requirements in the Tentative Order for both existing and future sites seem overly burdensome for little benefit to water quality. In fact, some of the requirements are legally and practically difficult or impossible to meet. For example, the Irrigation Management Plan seems to be aimed toward having the City control the amount of nutrients that are applied by each recycled water user. However, the City does not have the legal authority to do this. In another example, the permit would require the City to take into account the depth to ground water, but this information is not known for most current and potential irrigation sites. Compliance with the proposed requirement to meet quarterly with 101 site supervisors is also infeasible for the current system, and the requirement would likely be considered a compelling reason by the City to not implement the planned expansion of the system to more than 1,000 users. In addition, the requirements for recycled water users are potentially so burdensome as to discourage recycled water use, which is contrary to Legislative mandates to increase recycling in California. (*See* Water Code §§13510-13512,

13550 *et seq.*) The City could lose current recycled water users and new users could be discouraged from entering the program since they would have little incentive to comply with burdensome regulations and so, instead, might continue to use potable water for irrigation.

Therefore, the City requests removal of the following sections of the Tentative Order:

- a. WDR section VI.C.2.b. Page 21. Technical Report(s) Regarding Existing Recycled Water Use Sites. Entire section
- b. MRP section X.D.2.b.h. Page E-28. Entire section.
- c. MRP section X.D.2.c.ii. Page E-28. Entire section
- d. MRP section X.D.2.d.i. Page E-29. Entire section
- e. Attachment F section II.A.4. Page F-7. Last paragraph
- f. Attachment F section IV.D.2.d. Pages F-49 and F-50. Last paragraph of section 2.d, portion beginning with "A key component..."
- g. Attachment F section IV.G.3.g. Page F-55 and F-56. Water Reclamation Requirements and Provisions. Entire first paragraph.
- h. Attachment F section VIII.C.2.b Page F-64-F-65. Technical Report(s) Regarding Existing Recycled Water Use Sites. (Special Provision VI.C.2.b) Entire Section
- i. Attachment G section III.5. Page G-10. Entire section.
- j. Attachment G section IV.1.a. Pages G-11 and G-12. Programmatic and Site-Specific Technical Reports and Public Notice Requirements. Entire section.
- k. Attachment G section IV.1.b. Pages G-12 and G-13. Training Program Programmatic Technical Report. Entire Section.
- l. Attachment G section IV.?3 (due to numbering irregularities, it is hard to determine to what section this subsection applies). Pages G-13 and G-14. Approved Recycled Water Use Sites. Entire section.
- m. Attachment G section IV.?4 (due to numbering irregularities, it is hard to determine to what section this subsection applies). Pages G-14 through G-16. Programmatic and Site-Specific Technical Report Requirements. Entire section.

COMMENT 4.

The references to Attachment G throughout the Permit refer to section numbers that do not exist. For example, the MRP at Section X.D.2.h. refers to Water Reclamation Requirement B.9.b of Attachment G. However, there is no section B.9.b of Attachment G. In addition, the numbering in Attachment G is inconsistent and out of order.

WDR COMMENTS

COMMENT 5. WDR PAGE 1 TABLE 2.

Table 2 on page 1 of the Tentative Order, titled "Discharge Locations," inaccurately refers to the Geysers Recharge Project and the Irrigation Distribution System under the heading "Receiving Water," when these are more appropriately characterized with the heading "Use Locations." A new Table 2.a. should be created, with the title, "Reclamation Sites" to reflect that the Geysers

Recharge Project and the Irrigation Distribution System do not involve discharges to surface waters, but are sites where disinfected tertiary treated municipal wastewater is being beneficially reused. In addition, this water should not be characterized in this table as “Effluent”; the end product is recycled water. (See *accord* Fact Sheet at F-55, Section V.G.3.d.; and F-60, Section VII.D.)

These changes are consistent with the State’s Recycled Water Policy, which mandates the Regional Water Boards to exercise the authority granted to them by the Legislature to the fullest extent possible to encourage the use of recycled water. (See 2009 SWRCB Recycled Water Policy at sections 4.a. and 5.c.) Based on the above, the City suggests the following modifications to Table 2:

Proposed Revisions to Tentative Order:

Table 2.a. Reclamation Sites

Distribution System	Recycled Water Description	Location (Latitude/Longitude)	Use Location
001	Disinfected tertiary treated municipal wastewater	38° 45’ 46” N 122° 45’ 38” W	Geysers Recharge Project
002	Disinfected tertiary treated municipal wastewater	See Table G-1 in Attachment G	Irrigation Distribution System

The remainder of Table 2 would be created as new Table 2.b.

COMMENT 6. WDR PAGE 2.

On pages 2-3 of the Tentative Order, the Regional Water Board orders that the City’s previous NPDES permit and associated monitoring program be superseded, yet in subsequent sentences states the following:

“This action in no way prevents the Regional Water Board from taking any enforcement action for past violations of the previous permit. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Permittee shall comply with the analogous provisions of Order No. R1-2006-0045, Order No. R1-2008-0091, and MRP No. R1-2006-0045, which shall remain in effect for all purposes during the pendency of the stay.”

The above-quoted language is inconsistent with other similar permit language around the State, which does not decouple the superseding/rescission concept from enforceability of the previous permit. The newly proposed language in the Tentative Order regarding compliance with earlier, superseded provisions upon the issuance of a temporary stay has no legal basis (neither the Water Code nor Chapter 6 of Title 23 of the California Code of Regulations prescribe or sanction this concept, and federal regulations on this point are inapplicable to the State), and is

unsupported by the Fact Sheet. In addition, the proposed language may be problematic since there may not be any "analogous provisions" of the previous orders to the provisions that might be stayed. Further, pursuant to Cal. Water Code section 13167.5, a rescinded or superseded permit cannot be revived without an additional hearing and order of the Regional Water Board. Where contested provisions of a permit are temporarily stayed by the State Water Board in accordance with 23 C.C.R. § 2053 (along with any unseverable uncontested provisions), those provisions are not enforceable until the stay is lifted; however, a permittee must continue to comply with the remaining, non-stayed permit provisions, and rescinded or superseded provisions are not automatically revived. For these reasons, the proposed language in the Tentative Order should be modified.

Proposed Revisions to Tentative Order:

The first and third sentences of this section should be combined to state:

IT IS HEREBY ORDERED, that this Order supersedes and rescinds Regional Water Quality Control Board (Regional Water Board) Order No. R1-2006-0045, Order No. R1-2008-0091, and Monitoring and Reporting Program (MRP) No. R1-2006-0045, upon the effective date specified in Table 3, except for enforcement purposes. In order to meet the provisions contained in division 7 of the California Water Code (Water Code) (commencing with section 13000) and regulations and guidelines adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Permittee shall comply with the requirements of this Order. ~~This action in no way prevents the Regional Water Board from taking any enforcement action for past violations of the previous permit. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Permittee shall comply with the analogous portions of Order No. R1-2006-0045, Order No. R1-2008-0091, and MRP No. R1-2006-0045, which shall remain in effect for all purposes during the pendency of the stay.~~

Alternatively, this entire section should be replaced with language more comparable to language used in other regional permits (*see accord* City of Pacifica permit, Order No. R2-2012-0002; Arcata permit, Order No. R1-2012-0031; Rio Dell permit, Order No. R1-2011-0054; Redway CSD, Order No. R1-2011-0046), which states:

"IT IS HEREBY ORDERED, that Order No. R1-2006-0045, Order No. R1-2008-0091, and Monitoring and Reporting Program (MRP) No. R1-2006-0045 are rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Permittee shall comply with the requirements in this Order."

COMMENT 7. WDR SECTION III.D. PAGE 6.

This section prohibits the reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II.A of the Fact Sheet) from anywhere within

the collection, treatment, or disposal systems. However, in the unlikely event of a Laguna Treatment Plant filtration or UV disinfection failure or upset, the procedure is to capture the water in Reclamation ponds Alpha or Brown (*see* the Laguna Treatment Plant emergency response procedure section 4.b.). The water captured in the City's reclamation ponds Alpha or Brown is then used for City farm irrigation only. The City requests that this section be modified to permit disposal of partially treated waste on City-owned land. The City owns property, in part, so such waste can be managed in situations such as this. The City controls access to and use of the land so public health will be adequately protected.

Proposed Revisions to Tentative Order:

D. The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II.A of the Fact Sheet) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Attachment D, Standard Provisions G (Bypass) or H (Upset), and except for disposal on City owned property in the event of a treatment plant failure.

Comment 8. WDR Section III.E. Page 6

This discharge prohibition regarding sanitary sewer overflows is unnecessary and contains provisions duplicative of other discharge prohibitions. (*Compare* Section III.B with III.E (both prohibiting pollution, contamination or nuisance as defined by Water Code section 13050) and III.D. (Prohibiting untreated or partially treated waste from anywhere within the collection, treatment or disposal system).) Imposing duplicative provisions merely creates additional enforcement jeopardy for a single event that might fall under numerous prohibitions. In addition, there is no regulatory need for this prohibition to be specifically applied to sanitary sewer overflows ("SSOs") since the City is already separately covered by the Sanitary Sewer Overflow WDR (Order No. 2006-0003-DWQ) ("SSO WDR"). If Section III.E. were retained, there is no need to separately list (a) waters of the State and (b) groundwater, since groundwater is already encompassed within the definition of "waters of the State," and regulated by the SSO WDR. (*See* Cal. Wat. Code §13050 (e)(means "any surface water or groundwater"); *see also* SSO WDR at Prohibition C.2.) Finally, this discharge prohibition is broader in scope than provisions in other recently adopted NPDES permits. (*See* Order No. R2-2012-0002 ("Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.") .) Differing regulatory requirements for similarly situated entities (*e.g.*, POTWs) subject to the same laws should be avoided.

Proposed Revisions to Tentative Order:

Remove Section III.E.

Alternatively, remove duplicative references to groundwater, and to pollution, contamination or nuisance since those conditions are already addressed in Section III.B. and the SSO WDR (nuisance). The alternative revisions would be as follows:

Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the State, ~~(b) groundwater,~~ or (c) waters of the United States ~~and~~

that creates pollution, contamination, or nuisance, as defined in Water Code section 13050 (m) is prohibited.]

COMMENT 9. WDR SECTION III.F. PAGE 6.

In addition to recycled water use on land owned by the City and by users under agreement with the City, some recycled water users are governed by City ordinance. In addition, the City allows and issues permits to contractors to use recycled water for dust control. The City would like to make sure these additional uses are covered by the Tentative Order.

Proposed Revisions to Tentative Order:

F. The discharge of waste to land that is not owned by the Permittee, governed by City ordinance, or under agreement to use by the Permittee, or for which the Permittee has explicitly permitted such use, is prohibited, except for use for fire suppression as provided in title 22, sections 60307(a) and 60307(b) of the California Code of Regulations (CCR).

COMMENT 10. WDR SECTION IV.A.1.A EFFLUENT LIMITATIONS – BOD AND TSS MASS LOADING AND PH LIMITS (P. 8)

BOD and TSS Mass Loadings. The Tentative Order failed to explain the necessity for including both mass limits and 85% removal requirements as both are not required by either federal or state law. Under federal law, mass limits are specifically *not required* for Technology-Based Limits, such as BOD and TSS. The federal regulations only require concentration-based effluent limits and 85% removal requirements. (See 40 C.F.R. §133.102(a)(1)-(3) and (b)(1)-(3); see e.g., Order No. R2-2012-0051, Table 6 (monthly and weekly conventional pollutant limits only with no mass limits required).) Mass limits are only authorized where *substituting* the percent removal requirements with a mass loading limit for less concentrated influent wastewater for separate sewers. (40 C.F.R. §133.103(d).) Since the Regional Board is *not* substituting mass limits for percent removal requirements that are contained in Provision IV.A.1.c., the mass limits in Table 4 are not justified under federal law. If being imposed under state law, these requirements more stringent than federal law have not been adequately justified and all considerations under Water Code section 13263 and 13241 have not been satisfied. (See *City of Burbank v. State Water Resources Control Board*, 35 Cal. 4th 613, 629 (2005).)

pH Limits. The Regional Board should include the following footnote to Table 4's pH effluent limits as is utilized in other regions, including the Bay Area (See e.g., Order No. R2-2012-0051 at 9, fn 2.):

If the Permittee monitors pH continuously, pursuant to 40 CFR 401.17, the Permittee shall be in compliance with the pH limitation specified herein provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes.

Proposed Revisions to Tentative Order:

Table 4. Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD (5-day @ 20°C)	mg/L	10	15	--	--	--
	lbs/day	1,780	2,670	--	--	--
	lbs./day (wet-weather)	3945	3945	--	--	--
Total Suspended Solids	mg/L	10	15	--	--	--
	lbs/day	1,780	2,670	--	--	--
	lbs./day (wet-weather)	3945	3945	--	--	--
pH ⁴	s.u.	---	---	---	6.0	9.0

Table Notes:

1. See Definitions in Attachment A and Compliance Determination discussion in section VII of this Order.
2. Mass-based effluent limitations apply during periods of discharge to surface waters. See section VII.H of this Order regarding compliance with mass-based effluent limitations.
3. ~~Mass based effluent limitations for dry weather are based on the existing dry weather design flow of the Subregional System of 21.34 MGD. Dry weather limitations apply when the average influent flow is less than 21.34 MGD over the monitoring period of the effluent limitation.~~
3. During wet weather periods, when the influent flow rate exceeds the existing dry weather design flow, mass emission limitations are based on the monthly and weekly wet weather design flows of 47.3 MGD and 64 MGD, respectively
4. If the Permittee monitors pH continuously, pursuant to 40 CFR 401.17, the Permittee shall be in compliance with the pH limitation specified herein provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes.

COMMENT 11. WDR SECTION IV.A.1.B PAGE 8. DISINFECTION REQUIREMENTS AND FACT SHEET AT PAGES F-27 TO F-28

The effluent limitations section of the Tentative Order contains statements about sampling for coliform bacteria “in each of the discharge channels.” However, “discharge channels” are not defined and are unclear. For clarification, the City proposes changing the term “discharge channels” to “disinfection channels.”

Proposed Revisions to Tentative Order:

WDR Section IV.A.1.b Page 8 and Fact Sheet Section IV.B.6.a Pages F-27 to F-28

Disinfection. The disinfected effluent, sampled in each of the ~~discharge~~ disinfection channels, shall not contain concentrations of total coliform bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-001:

- i. The median concentration of the discharge disinfection channels shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (mL), using the daily bacteriological results 2 of the last 7 days for which analyses have been completed³; and...

COMMENT 12. WDR SECTION IV.A.2.B PAGE 9. ACUTE TOXICITY EFFLUENT LIMITATION.

The Tentative Order contains an effluent limitation for acute toxicity, even though there is no demonstrated reasonable potential, simply because a similar effluent limitation was imposed in the previous permit. (See page F-41 (“Consistent with Order No. R1-2006-0045”); page F-60 (“retained from the previous Order”); *but see* RPA Analysis tables on Fact Sheet page F-37 to F-38; *see also* Fact Sheet at F-42 (“All acute toxicity testing results during the term of the previous permit were 100 percent survival.”).) Effluent limitations are not required where there is no reasonable potential. (40 C.F.R. §122.44(d)(1); *see also* EPA Permit Writers Manual (Sept. 2010) at 6-36, Section 6.5 (“Calculate Reasonable Potential and WQBELs for WET”); and at 6-38 (“If the projected toxicity exceeds the applicable numeric water quality criterion for WET, the discharge would cause, have the reasonable potential to cause, or contribute to an excursion above the applicable water quality standards, and the permit writer must develop a WQBEL for WET [see § 122.44(d)(1)(iv)].”.)

Under CWA section 402(o)(2)(B)(i), removal of this limit contained in the City’s previous permit is authorized since new reasonable potential “information is available which was not available at the time of permit issuance ... which would have justified the application of a less stringent effluent limitation at the time of permit issuance.” (See Fact Sheet at F-45, Section V.F.1. (“The lack of reasonable potential ... constitutes new information, which permits the removal of effluent limitations consistent with CWA section 402(o)(2)(B)”); *see also accord* SWRCB Order No. WQO 2003-0012 at pgs. 15-17.). Further, the permit still maintains acute toxicity testing and a reopener if reasonable potential occurs in the future for acute toxicity. (See Page 17, Provision VI.C.1.b, and pages E-10 to E-11.)

Proposed Revisions to Tentative Order:

~~ii. Acute Toxicity. There shall be no acute toxicity in treated wastewater discharged to the Laguna de Santa Rosa or Santa Rosa Creek. The Permittee will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted effluent complies with the following.~~

- ~~(a) Minimum for any one bioassay: 70 percent survival; and~~
~~(b) Median for any three or more consecutive bioassays: at least 90 percent survival.~~

~~Compliance with this effluent limitation shall be determined in accordance with section V.A of the MRP.~~

COMMENT 13. WDR SECTION IV.C. PAGES 10-11. RECLAMATION REQUIREMENTS.

This section includes references to “discharge” of reclaimed water, which is not accurate. The recycled water is not being discharged for the purposes of disposal. This is recognized expressly

in Provision IV.B., which states “treated wastewater is not discharged to or applied to land for the purpose of disposal.” Thus, the word discharge is inappropriately used in relation to water reclamation and this word should be replaced with “delivery,” “use,” or some other similar word that does not connote discharge of waste.

Proposed Revisions to Tentative Order:

C. Reclamation Specifications

The ~~discharge~~ delivery of reclaimed water to Discharge Points 001 and 002 shall maintain compliance with the following reclamation specifications, when ~~discharges~~ delivery occurs:

... **3. Reclamation Capacity.** The Permittee ~~shall maintain, at a minimum currently possesses,~~ a total reclamation capacity of 4,607 million gallons for Geysers recharge, and maintain the capability to irrigate 2,590 million gallons per year at 21.34 mgd average dry weather flow. Prior to allowing an increase in the permitted discharge flows, the Discharger shall submit to the Regional Water Board and to CDHP for approval, an engineering report as required by Title 22 detailing modifications to the treatment and/or reclamation capacity. The engineering report shall demonstrate the capability of meeting the Subregional System’s capacity requirements of 25.9 mgd ADWF without necessitating an increase in discharge volumes to surface waters above those permitted. The Incremental Recycled Water Program (IRWP) was developed by the City of Santa Rosa as a means of planning for future flows to the Subregional Water Reclamation System. The Master Plan for the IRWP has been designed to meet the Subregional System’s capacity requirements and manages flows with a mixture of conservation and reuse. The design ADWF volume permitted to be ~~discharged~~ delivered may be modified provided the Permittee demonstrates the agreements, modifications, and capacity are adequate to ensure surface water discharge volumes remain unchanged. (see also Comment 14 and Comment 16).

COMMENT 14. WDR SECTION IV.C.1.B PAGE 10. RECLAMATION REQUIREMENTS.

The City has submitted a Title 22 Engineering Report to the Regional Water Board. Nevertheless, this Reclamation Requirement seems to require a new Engineering Report that the City considers to be unnecessary until such a time that new users are added.

Proposed Revisions to Tentative Order:

b. The Permittee shall ~~receive approval of its title 22~~ submit engineering reports as required by title 22 for ~~from~~ CDHP approval and operate its reclamation system in accordance with all CDHP requirements.

COMMENT 15. WDR SECTION IV.C.2. RECLAMATION SPECIFICATIONS

The City’s recycled water/reclamation activities do not involve direct discharges to waters of the State or the United States, and recycled water applied to land is not for the purpose of disposal. However, Section IV.C.2 requires recycled water deliveries to meet effluent limitations that are intended to be applicable to discharges to surface waters of the United States. This is an inappropriate application of effluent limitations to reclamation projects that do not involve such

discharges. Therefore, the City requests removal of Section IV.C.2. Alternatively, the language in Section IV.C.2 should be revised reflect the applicable requirements for reclamation projects.

Proposed Revisions to Tentative Order:

Delete WDR Section IV.C.2

~~2. Reclamation Specifications~~

~~All effluent discharges to the recycled water system are from on-site recycled water storage ponds, therefore, effluent limitations identified in sections IV.A. above must be met for discharges to the Geysers Recharge Project and to the recycled water system.~~

OR

Revise WDR Section IV.C.2 as follows:

All ~~effluent discharges~~ reclaimed water deliveries to the recycled water system are from on-site recycled water storage ponds, therefore, ~~effluent limitations~~ reclamation specifications identified in sections ~~IV.A. above~~ section IV.C. must be met for ~~discharges~~ delivery to the Geysers Recharge Project and to the recycled water system.

COMMENT 16. WDR SECTIONS IV.C.3 AND 4. PAGES 10-11. RECLAMATION CAPACITY AND RECLAMATION ALTERNATIVES AND FACT SHEET SECTIONS V.I.3.E. PAGE F-55

The Tentative Order contains requirements that the City maintain a minimum reclamation capacity and utilize all reasonable alternatives for reclamation. The Fact Sheet contains no legal justification or authority for these requirements, and the City believes that these are inappropriate requirements. It is in the City's best interest to maintain its reclamation capacity which, with the Geysers Expansion Project in 2007, is 4,607 million gallons. Consequently, this requirement need not be included in a federally enforceable NPDES permit. Therefore, the City requests that the phrase "The Permittee shall maintain, at a minimum," be changed to "The Permittee currently possesses..." and make corresponding changes to the Fact Sheet at F-55, Provision V.D.1.e. In addition, the City requests that Provision IV.C.4. be removed as unnecessary and not justified for inclusion in the permit.

Proposed Revisions to Tentative Order:

WDR Sections IV.C.3 and 4. Pages 10-11

3. Reclamation Capacity. The Permittee shall ~~maintain, at a minimum~~ currently possesses; a total reclamation capacity of 4,607 million gallons for Geysers recharge, and maintain the capability to irrigate 2,590 million gallons per year at 21.34 mgd average dry weather flow. ...

~~4. Reclamation Alternatives. The Permittee shall utilize all reasonable alternatives for reclamation. "Reasonable alternatives" for reclamation include, but are not limited to: full use of existing irrigation capacity; seeking additional irrigation capacity to the extent that storage~~

~~capacity increases; and sending additional discharges to the Geysers steamfields during extreme weather conditions.~~

Fact Sheet Sections V.I.3.e. Page F-55

e. Reclamation Capacity. This Order ~~requires~~ recognizes that the Discharger ~~maintain, at a minimum,~~ currently possesses a total reclamation capacity of 4,607 million gallons for Geysers recharge, and maintain the capability to irrigate 2,590 million gallons per year. ...

COMMENT 17. WDR SECTION IV.D.1.A PAGE 11

This section specifies the filtration rate to be measured at INT-001A (immediately preceding the advanced wastewater filtration process) and INT-001B (immediately following the advanced wastewater process and prior to UV disinfection). Hydraulic conditions prevent accurate flow measurement at these locations. Therefore, flow is measured at the plant's effluent flow meter (EFF-001), which is a 48" magnetic meter that measures flow directly downstream of the UV system and is equal to the flow at INT-001A and INT-001B, with the exception of any flow that spills over into the UV diversion structure. Flow would go to the diversion structure under two conditions: 1) when the UV system is off line (such as immediately following a power failure), and 2) when hydraulic loading exceeds the UV system's hydraulic capacity (by experience, around 70 MGD). Flow that goes to the diversion structures is recycled back to the treatment cycle and not released.

Proposed Revisions to Tentative Order:

WDR section IV.D.1.a Page 11

- a. Filtration Rate. The rate of filtration through the tertiary filters, as measured at ~~INT-001A and INT-001B~~ EFF-001, shall not exceed 5 gallons per minute per square foot of surface area or other filtration rates authorized in writing by the Executive Officer and under conditions recommended by CDPH.

COMMENT 18. WDR SECTION IV.D.1. PAGE 11. FILTRATION PROCESS REQUIREMENTS

Some of the requirements in this section read like effluent limitations, even though they are operational requirements. Therefore, the language should include language clarifying that these filtration process requirements are not effluent limitations, and subject to mandatory minimum penalties. The City requests that the Tentative Order specify that Filtration Process Requirements are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d)

Proposed Revisions to Tentative Order:

1. Filtration Process Requirements. The following Filtration Process Requirements are Operation and Maintenance specifications, and not effluent limitations as defined in Water Code section 13385.1(d).

COMMENT 19. WDR SECTION IV.D.1.B.I AND II. PAGE 11.

The Tentative Order requires the filtration process to meet the following requirements

- i. An average of 2 Nephelometric Turbidity Units (NTU) during *any* 24-hour period (emphasis added); and
- ii. 5 NTU more than 5 percent of the time during *any* 24-hour period (emphasis added).

However, Health and Safety Code Section 60301.320 Filtered Wastewater requires “[a]n average of 2 NTU within *a* 24 hour period” and “5 NTU more than 5 percent of the time within *a* 24-hour period.” This difference is relevant to reporting since “any” 24-hour period implies a rolling average, which would substantially increase the number of values reported and would be inconsistent with Health and Safety Code requirements.

Proposed Revisions to Tentative Order:

- i. An average of 2 Nephelometric Turbidity Units (NTU) during *any a* 24-hour period;
- ii. 5 NTU more than 5 percent of the time during *any a* 24-hour period;

COMMENT 20. WDR SECTION IV.D.1.B.IV. PAGE 12

This section states that the Permittee shall provide notification to the Regional Board if chemical addition or wastewater diversion is activated. Notification is unwarranted (and not required by Health and Safety Code Sections 60304 and 60307) if effluent turbidity 24-hr average does not exceed 2 NTU.

Proposed Revisions to Tentative Order:

Pursuant to title 22 sections 60304 and 60307, since coagulation is not used as part of the regular treatment process, the Permittee shall have the capability to automatically activate chemical addition or divert the wastewater should the filter influent exceed 10 NTU at any time or 5 NTU for more than 15 minutes, or if the filter effluent turbidity exceeds 2 NTU. ~~The Permittee shall provide notification if chemical addition or wastewater diversion is activated.~~

COMMENT 21. WDR SECTION IV.D.2. PAGES 12 THROUGH 14. DISINFECTION PROCESS REQUIREMENTS FOR ULTRAVIOLET (UV) DISINFECTION SYSTEM

The proposed permit language in this section on pages 12-14 of the Tentative Order violates Water Code §13360(a)'s prohibition on mandating the manner of compliance and is inconsistent with other permits adopted in this region. For these reasons, the language of this section should be modified to conform to the language adopted in other region permits (e.g., Order No. R1-2012-0031 at pg. 10), modified to reflect Santa Rosa's existing system:

Proposed Revisions to Tentative Order:

Delete WDR Section IV.D.2 and replace with the following text:

The Permittee shall operate the UV disinfection to maintain compliance with bacteria Effluent Limitations.

- a. Prior to the permit's effective date, the Permittee shall submit to the Executive Officer and CDPH, an operations and maintenance plan detailing how compliance with the National Water Research Institute's guidelines will be assured at all times.
- b. The UV disinfection system shall be operated in accordance with an appropriate operations and maintenance plan.

COMMENT 22. WDR SECTION IV.D.2. PAGES 12 THROUGH 14. DISINFECTION PROCESS REQUIREMENTS FOR ULTRAVIOLET (UV) DISINFECTION SYSTEM

In the event that the Regional Board fails to make the City's requested revision to the Disinfection Process Requirements section (WDR Section IV.D.2.) of the Tentative Order as described in Comment 21, the City has the following comments on this section.

Comment 22a. WDR Section IV.D.2.b. Page 12.

This section requires monitoring of flow in each channel. However, channel flow meters are not reliable due to weir configuration. Flow is measured at a combined channel. A bioassay was conducted by Carollo engineers (and accepted by CDPH this year) using MS2 coliphage that has demonstrated even flow to all channels. ("Laguna Water Reclamation Facility UV Checkpoint Bioassay Results, Final, June 2012").

Proposed Revisions to Tentative Order:

- b. The Permittee shall provide continuous, reliable monitoring of flow ~~per channel~~, UV transmittance, UV dose, UV power, and turbidity. The Permittee must demonstrate compliance with the UV dose requirement.

Comment 22b. WDR Section IV.D.2.d. Page 12

This section requires that the UV Transmittance (UVT at 254 nanometers) in the wastewater shall not fall below 55 percent of maximum at any time, unless otherwise approved by CDPH. However, the City's UV system controls dose using a calculation (accepted by CDPH) in which UVT as one of the factors in determining the ballast power level needed to provide the required dose. Thus, the dose would account for low UVT, and a minimum UVT is unnecessary.

Proposed Revisions to Tentative Order:

- d. ~~The UV transmittance (at least 254 nanometers) in the wastewater shall not fall below 55 percent of maximum at any time, unless otherwise approved by CDPH~~

Comment 22c. WDR Section IV.D.2.h.iii. Page 13.

This section states that a quick reference plant operations data sheet should be posted at the treatment plant and include operational limits and responses required for critical alarms, including the values of high daily and weekly median total coliform when flow must be diverted to waste. However, diverting flow to waste as a response to high daily and weekly median total coliform values is operationally impossible. Flow is beyond recall by the time the 2-4 day test is complete.

Proposed Revisions to Tentative Order:

~~iii. The values of high daily and weekly median total coliform when flow must be diverted to waste.~~

COMMENT 23. WDR SECTION VI.A.9. PAGE 15 BIOSTIMULATORY SUBSTANCES AND SECTION V.B.1. PAGE 16. GROUNDWATER LIMITATIONS

The Tentative Order contains a requirement that the “discharge shall not cause or contribute to concentrations of biostimulatory substances to receiving waters that promote objectionable aquatic growth....” This is the only provision contained in Provision V.A. that contains the qualifier “or contribute” and this phrase should be removed since the concept of contribution is only required in relation to a reasonable potential analysis done to determine if effluent limitations are required (40 C.F.R. §122.44(d)(1)(i)), not when imposing receiving water limitations. Because no authority has been provided for this expansion, the language regarding contribution should be removed. This language is also inconsistent with the recently adopted McKinleyville permit, which required: “The discharge shall not contain concentrations of biostimulants that promote objectionable aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.” (Order No. 2011-0008-DWQ at 15, para. 10.)

Further, this additional contribution language is inconsistent with the initial requirement in Provision V.A.9. that mandates that “Discharges from the Subregional System shall not cause the following in the receiving waters.”

Similarly, Provision V.B.1. contains the same “or contribute to” language in relation to groundwater. No legal justification has been provided for applying this contribution concept from the federal reasonable potential analysis process to groundwater limitations.

Therefore, the City requests the removal of the words “or contribute to” from Provisions V.A.9. and V.B.1.

Proposed Revisions to Tentative Order:

Revise WDR Section VI.A.9 as follows:

9. The discharge shall not cause ~~or contribute~~ concentrations of biostimulatory substances ~~to~~ in receiving waters that promote objectionable aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

OR

9. The discharge shall not contain ~~cause or contribute~~ concentrations of biostimulatory substances ~~to receiving waters~~ that promote objectionable aquatic growth to the extent that such growth causes nuisance in or adversely affects beneficial uses of the receiving waters.

Revise WDR Section V.B.1:

1. The collection, storage, and use of wastewater or recycled water shall not cause or ~~contribute to~~ a statistically significant degradation of groundwater quality ...

COMMENT 24. WDR SECTION VI.A.2.B. PAGE 17 REGIONAL WATER BOARD STANDARD PROVISIONS FOR SPILL NOTIFICATION AND REPORTING

Included within Provision VI.A.2.b. are requirements for notification and reporting for “sanitary sewer overflows” that should be removed to avoid imposing requirements in the City’s NPDES permit that conflict and/or duplicate requirements contained in the SSO WDR that separately applies to the City and under which the Regional Water Board already receives appropriate notifications and reporting (discussed further in Comment 25). Further, the City seeks to avoid federalizing SSO notification and reporting requirements as not all SSOs involve discharges to waters of the United States to which NPDES permit requirements should apply. Creating differing standards for monitoring and reporting of SSOs from the State Water Board’s already established program, and exposing the City to duplicative liability under different permits and laws for the same occurrence is unreasonable and unsupported.

The City also requests that the phrase “irrigation runoff” be modified to “recycled water main break or equivalent release.” This is consistent with recent discussions with Regional Board staff and the City’s Non-Storm water Discharge Plan (requirement of City NPDES Storm Water Permit). Further, since recycled water main breaks or equivalent releases are addressed in this Section, reference generally to “waste” when describing unauthorized spills should be removed, as recycled water is not a “waste” under the Water Code (*see* Water Code §13050(n)).

Further, as Regional Water Board staff members are not available on weekends or holidays, the City requests that Regional Water Board notification be changed from “twenty-four (24) hours” to “the next business day.”

Proposed Revisions to Tentative Order:

b. In the event the Permittee does not comply or will be unable to comply for any reason, with any prohibition, interim or final effluent limitation, land discharge specification, reclamation specification, receiving water limitation, or provision of this Order (except for sanitary sewer overflows) that may result in a significant threat to human health or the environment, such as inundation of treatment components, breach of pond containment, ~~sanitary sewer overflow, irrigation runoff~~ recycled water main break or equivalent release, etc., that results in a discharge to a drainage channel or a surface water, the Permittee shall notify Regional Water Board staff ~~within~~ by 24 hours the next business day and report orally and in writing to the Regional Water Board staff ~~all unauthorized spills of waste~~. Spill notification and

reporting shall be conducted in accordance with section X.E. of the Monitoring and Reporting Program.

COMMENT 25. WDR SECTION VI.C.6.A.I AND II. PAGE 24, MRP SECTION X.E. PAGES E-33 AND E-34. SANITARY SEWER OVERFLOWS

Sections VI.C.6.a.i. and ii. introduce new requirements related to SSOs that are unnecessary, duplicative, and/or conflict with the State Water Board's SSO WDR, and these should be removed. Further, it appears the Regional Water Board is requiring compliance with the SSO WDR via the NPDES permit, when the SSO WDR is already independently applicable to the City, and the City secured coverage under that WDR many years ago. To that end, the last sentence of the first paragraph on page 24 of the Tentative Order should be revised in accordance with the language in Order No. R1-2012-0031 at pg. 20, as set forth below.

More importantly, though, the Tentative Order requires compliance with monitoring and reporting requirements in Section X.E. of the Monitoring and Reporting Program that are either in conflict with the State Water Board's SSO WDR, or that unduly burden City staff with additional, unnecessary reporting obligations, some of which may not be possible to comply with (e.g., the requirement to report information within the initial 2-hour window that may not be possible to ascertain within that short timeframe).

Finally, notice requirements for non-compliance are already contained in the Standard Provisions at page D-9, Paragraph V.H. Compliance with this provision for SSOs is accomplished via the reporting required by the State Water Board's SSO through CIWQS, which the Regional Water Board receives. Thus, additional notification and reporting requirements are simply duplicative and unnecessary. (*See accord Light, et al. v. State Water Resources Control Board*, Mendocino Superior Court Case No. SCUJ CVG 11 59127, Order Granting Petition for Writ (Sept. 26, 2012)(striking down regulations deemed not reasonably necessary).)

With respect to specific modifications requested below, Section VI.C.6.a.ii.(1) contains requirements that are entirely duplicative of SSO WDR Provisions D.3. and D.4. (requiring all feasible steps be taken to prevent and eliminate SSOs).

Monitoring and Reporting Program Section X.E. contains monitoring and reporting requirements that are either entirely duplicative of the SSO WDR, or that require additional, overly burdensome, and unreasonable reporting requirements. For example, the SSO WDR requires initial 2-hour notification of an SSO, and that notification is required to be provided to the Regional Water Board. However, the information sought by the Regional Water Board in the 2-hour reporting requirement contained in the Tentative Order is information that may not be readily available at the 2-hour stage of an SSO (i.e., the cause of the SSO, remedial efforts taken, etc.). The SSO WDR requires a 24-hour certification and reports to be entered into the State's CIWQS system at 3-day and 15-day intervals, that the Regional Water Board also receives. The Tentative Order requires the same 24-hour certification; however, the Tentative Order also imposes a new 5-day written report that appears to be unnecessary given the SSO WDR's 3 and 15-day report requirements.

Other duplicative requirements concern the City. For example, once CalEMA is notified under the 2-hour reporting obligations set forth in the SSO WDR (also required by proposed MRP Section X.E. in the Tentative Order), notices are automatically sent to the Regional Water Board and the County Environmental Health Department. For this reason, the City requests that separate notification requirements to the two agencies be modified to avoid duplication of effort.

Section X.E.1.b is also unnecessary as this provision is already addressed within the SSO WDR and CalEMA's automatic notification to the Regional Water Board. The City requests that this duplication of effort be removed as well. If it remains, the City requests that "24 hours" be changed to the "next business day." If Section X.E.1.c. is retained, notwithstanding the City's request to remove below, the City suggests that the CalEMA certification number be added to the Section X.E.1.c list.

Finally, the City requests that the MRP (and any other relevant provisions of the Tentative Order) be clarified to indicate that Water Code section 13529.2 specifies a threshold of 50,000 gallons for reporting unauthorized discharge of recycled water and this threshold is distinct from that established in Section 13271(f)(1) for other substances, such as unauthorized sewage discharges that include SSOs. The City also requests that this section be revised to clarify that incidental runoff is not a "spill", "unauthorized discharge" or "SSO," and that this portion of the Tentative Order, if ultimately retained in some format, does not apply to incidental runoff.

Proposed Revisions to Tentative Order and MRP Section X.E:

WDR Section VI.C.6.a.i

The Permittee ~~shall maintain~~ has coverage under, and ~~shall be~~ is separately subject to the requirements of, Order Nos. 2006-0003-DWQ and WQ-2008-0002-EXEC, and any future revisions thereto for operation of its wastewater collection system, which are not incorporated by reference herein.

WDR Section VI.C.6.a.ii

ii. Spills and (non-Sanitary Sewer Overflows)

1) The Permittee shall take all feasible steps to stop spills ~~and SSOs~~ as soon as possible. All reasonable steps should be taken to collect spilled material and protect the public from contact with wastes or waste-contaminated soil or surfaces.

2) ~~The Permittee shall report orally and in writing to the Regional Water Board staff all SSOs and unauthorized spills of waste. Spill n~~ Notification and reporting of all unauthorized spills of waste (except sanitary sewer overflows) shall be conducted in accordance with section X.E of the Monitoring and Reporting Program.

MRP Section X.E

The City requests that reference to SSOs be omitted in this section entirely, and replaced with the following language:

“Notification and reporting of sanitary sewer overflows (SSOs) is accomplished under the requirements of Order Nos. 2006-0003-DWQ and WQ-2008-0002-EXEC, and any future revisions thereto.”

Alternatively, if the Regional Water Board retains SSOs within MRP Section X.E., the City requests the following modifications in accordance with the comments above, and to ensure consistency with the State Water Board SSO WDR. The City also requests modifications related to unauthorized discharges of recycled water for the reasons noted above.

E. Spills and Overflows Notification

1. All ~~sewer spills, and unauthorized discharges, and sanitary overflows (SSOs)~~ equal to or in excess of 1,000 gallons of any waste not treated as described in section II.A of the Fact Sheet, or any size sewer spill, or unauthorized discharges, or SSO of any waste not treated as described in section II.A of the Fact Sheet that result in a discharge to a drainage channel or a surface water or any unauthorized discharge of recycled water treated as described in section II.A of the Fact Sheet in excess of 50,000 gallons, not including incidental runoff:

a. As soon as possible, but not later than two (2) hours after becoming aware of the discharge, the Permittee shall notify the California Emergency Management Agency (CalEMA), which in turn is required to notify both the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas, and the Regional Water Board.²

Information to be provided verbally to ~~the Regional Water Board~~ CalEMA includes:

- i. Name and contact information of caller;
- ii. Date, time and location of sewer spill occurrence;
- iii. Estimates of sewer spill volume, rate of flow, and sewer spill duration, if available and accurate;
- iv. Surface water bodies impacted, if any;
- v. Cause of spill;
- vi. ~~Cleanup actions taken or repairs made;~~ and
- vii. Responding agencies.

~~b. As soon as possible, but not later than twenty-four (24) hours after becoming aware of a discharge, the Permittee shall submit to the Regional Water Board a certification that CalEMA and the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas have been notified of the discharge. For the purpose of this requirement, “certification” means a CalEMA certification number and, for the local health department, name of local health staff, department name, phone number and date and time contacted.~~