PROPOSED ORDER R3-2023-0001 COMMENTS AND STAFF RESPONSES

During the 30-day public comment period, the Central Coast Water Board received written comments on proposed Order R3-2023-0001 from the city of Santa Cruz, Soquel Creek Water District, the State Water Board Division of Drinking Water, and Becky Steinbruner. Staff responses to these comments are provided below. All comments are direct transcriptions from the comment letters.

Staff has also made various non-substantive corrections and edits to the previous draft of this order, which are not described here.

City of Santa Cruz - Comment 1

Bacteria Monitoring stations requested and potential Sanitary Surveys

Please re-instate the following beach monitoring stations for monitoring bacteria on a weekly basis to maintain continuity of data and our abilities to calculate the geometric means that will be necessary when routine monitoring is impaired by weather or when inexplicable data anomalies and/or excursions might otherwise trigger an expensive sanitary survey.

The requested stations, which were identified in the expiring permit:

Nearshore Sample Site	Latitude	Longitude
Mitchell's Cove	36.952438° North	122.041224° West
Cowell's	36.960704° North	122.024305° West
Wharf-West	36.961894° North	122.022736° West
Main	36.962447° North	122.021114° West
Seabright	36.962790° North	122.008898° West

The analytical data from these samples may be used for evidence of sanitary surveys and will be used as critical elements of sanitary survey if exceedances are recorded at the stations monitored along the 30-foot contour.

The North latitude and West longitude information above are approximate for administrative purposes.

Staff Response to City of Santa Cruz – Comment 1

Staff agrees with the suggested change as language from page 11 of the 2017 order was inadvertently not copied into the proposed 2023 order. The 2017 permit included stations for bacteria monitoring, and the underlying limits and rationale and the entire section were inadvertently omitted in the draft. Staff concurs that fewer sites are needed in the proposed permit and that the sites will still have the same conditions and range. The sites in the proposed order are spaced further apart and will have the same reach for shellfish harvesting considerations, sanitary surveys, and recreational limits. The

sites above are important to monitor for evidence of sanitary surveys if exceedances are recorded at the stations monitored along the 30-foot contour.

Change Made:

Included the section for shellfish monitoring on page 18 of the proposed order. The table includes the sites above and the Natural Bridges site from the 2017 order.

City of Santa Cruz - Comment 2

Please include the most sensitive species identified for Whole Effluent Toxicity Testing The City has concluded the required Species Sensitivity Testing stipulated in the expiring permit and has identified the most responsive test species given our current and projected effluent chemical and biochemical characteristics. The inclusion of these specifications obviates the need for renewed species sensitivity testing, and a full report of these tests, including the underlying data is currently being prepared in association with our consultants. The report, which will be transmitted to the Water Board upon completion, indicate as follows:

- a. **Abalone** (*Haliotis rufescens*) is most responsive to the detected toxicants in the effluent with TUc (Chronic Toxic Units (100/EC50) TAC for abalone: > 80% normal shell development in controls PMSD <20%; and
- b. **Menidia berrylina** is most responsive to the detectable toxicants in the effluent when assessing for acute toxicity measurements. (TAC for *Menidia*: > 80% survival in controls; > 0.50 mg average dry weight of controls; PMSD growth 11%-28%)

Staff Response to City of Santa Cruz – Comment 2

The city provided the species sensitivity testing report referenced above on November 6, 2023. The ongoing WET testing that was done in preparation for the RO concentrate from Pure Water Soquel in the new order confirms that *Haliotis rufescens* is most responsive to the detected toxicants in the effluent with TUc (Chronic Toxic Units (100/EC50) and that *Menidia berrylina* is most responsive to the detectable toxicants in the effluent when assessing for acute toxicity measurements. Therefore, the standard toxicity testing language of the most sensitive species has been addressed and further assessments are not required under the permit term.

Change Made: Added language to footnote 1 in Table E-8 stating that the updated species sensitivity testing completed by the city and submitted November 6, 2023, is acceptable rather than repeating this toxicity sensitivity testing again under the new order.

City of Santa Cruz - Comment 3

<u>Specifying monitoring locations for compliance measurements in TOC and TSS</u> Please indicate by notation; footnote or other regular means that the location for monitoring TOC and TSS for plant permit compliance shall at all times be at the

Page 2 of 16 Item 12 Attachment 2
December 14-15, 2023 Meeting
Santa Cruz WWTP NPDES Permit Response to Comments

approved locations **before** comingling with the return waste and/or ROC reject from Pure Water Soquel. Although it is very clearly stated at 4.1.2 (page E-7 of Attachment E) that these will be monitored at EFF-001A on pages E-7 and E-8; as currently drafted, it is not obvious that these specific compliance measurements will NOT be determinable at the location designated as EFF-001B in Table E-5 of Attachment E on page E-9. A simple notation will be helpful for the casual reader of the permit.

Staff Response to City of Santa Cruz - Comment 3

Central Coast Water Board staff agrees with the change. Although the purpose of TSS and TOC monitoring is important for information regarding the California Ocean Plan, this monitoring is only required for compliance assessment for secondary treated effluent technology standards. The addition of a footnote to Table E-5 of Attachment E on page E-9 clarifies that the TSS and TOC measured after mixing with RO concentrate will not be used for compliance assessment. TOC and TSS data for compliance shall be collected at EFF-001A as described at 4.1.2 on page E-7 of Attachment E.

Change Made:

For clarification, additional language was added to the permit in footnote 1 of Table E-5 that states, "the location for monitoring TOC and TSS for plant permit compliance shall at all times be at the approved locations before comingling with the return waste and/or ROC reject from Pure Water Soquel."

City of Santa Cruz – Comment 4

The Average Weekly Limits (AWL) for TOC.

The City requests that the average weekly TOC limits stipulated in the Waste Discharge requirements and in Table F-7 be changed to 26 mg/L and 3686 lbs/day consistent with the derivations of the referenced site specific studies for TOC-BOD correlations at 4.2.2.2 of Attachment F of the draft permit.

The draft permit currently stipulates the (AWL) values at 23 mg/L and 3261 lbs/day. Both of those levels were not updated within the DMR Change Request submitted to the Water Board and USEPA in June 2020.

Staff Response to City of Santa Cruz - Comment 4

Central Coast Water Board staff concurred with changes for the average monthly TOC limits based on more accurate and updated work done by the city to establish the BOD versus TOC relationship. However, the June 2020 submittal did not request changes to the average weekly TOC limit from 23 mg/L to 26 mg/L nor the related mass limit changes from 3261 to 3686 lbs/day. If the city would like to make changes to the average weekly TOC limit, it will need to provide additional information to the Central Coast Water Board and the United States EPA.

City of Santa Cruz – Comment 5

Monitoring for blended effluent:

The City requests language in the permit relating to measuring the duration of blending as listed in Table E-5. Blending of the City Effluent and ROC reject and PWS waste return is planned as a continuous exercise, and will not be measured in minutes. However, this is separate from the rare blending, measurable in minutes, that occurs when plant flows exceed 40 million gallons. The City requests that this be specifically identified in the permit.

Staff Response to City of Santa Cruz – Comment 5

The unit of measurement of the duration of blending is based on the understanding that the blending under reference is specific to the process of comingling the RO reject from PWS and the effluent of the Santa Cruz WWTF before discharge. It is understood that this is envisioned as a continuous process barring programmed and/or unanticipated interruptions once the PWS project is commissioned. Central Coast Water Board staff concurs that the mixing of the city effluent and ROC reject and PWS waste return is more accurately reported in the units of days rather than minutes.

Change Made: Changed Table E-5 on page E-9 so the reportable units are in days rather than minutes.

City of Santa Cruz – Comment 6

Modifications to text: The City requests the following specific modifications

- a. To the text of Footnote 1 of Table 2 at Section 4.1.1.
- Please modify the term BOD5 within the footnote 1 to cBOD5, because although the terms have been consistently used interchangeably, the tests and data were always derived from cBOD5.
- b. Please modify the term BOD5 within Table F-10 and within the Footnote 1 of the same to cBOD5, because although the terms have been consistently used interchangeably, the tests and data were derived from cBOD5 at all times.
- c. Please delete the superscript (2) attached to Fecal Coliform Bacteria in Table E-5 of Attachment E on page E-9 because the reference in the footnote is applicable specifically to Whole Effluent Toxicity only, and not to Fecal Coliform Bacteria.

Staff Response to City of Santa Cruz – Comment 6

Central Coast Water Board staff agrees with the suggested edits.

Change Made: The term BOD5 in footnote 1 of Table 2 at Section 4.1.1. was modified to cBOD5. The term BOD5 within Table F-10 and within footnote 1 was changed to cBOD5. The superscript (2) attached to Fecal Coliform Bacteria in Table E-5 of Attachment E on page E-9 was deleted because the reference in the footnote is

applicable specifically to Whole Effluent Toxicity only, and not to Fecal Coliform Bacteria.

Soquel Creek Water District and City of Santa Cruz - Comment 1

2.5 and 4.3.1

Request adding a sentence to both sections stating that onsite use of recycled water is allowable per 60303 Title 22.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 1

Staff agrees with the suggested language revision.

Change Made: A sentence to both sections stating that onsite use of recycled water is allowable per title 22 section 60303 was added to 2.5 and 4.3.1.

Soquel Creek Water District and City of Santa Cruz - Comment 2

Table 2

Table 2 on page 8 should only apply to EFF-001A to be consistent with Table F-10 and Section F 4.4.4.1.1, which already reflect compliance with EFF-001A.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 2

Staff agrees with the suggested language revision as the TOC and TSS are technology-based effluent limitations that apply to secondary treated wastewater.

Change Made: Language was added to footnote 1 of Table 2 on page 8 stating, "TOC and TSS technology-based effluent limits apply to EFF-001A."

Soquel Creek Water District and City of Santa Cruz – Comment 3

4.3.3 through 4.3.7

Recycled water should meet the quality required depending on end use, per California Code of Regulations Title 22 Uniform Water Recycling Criteria. So, if there was an issue with the plant and disinfected secondary-23 effluent was being produced instead of tertiary, the plant should still be able to use the water for dust control without having a permit violation.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 3

Staff agrees with the comment that recycled water should meet the quality required depending on end use, and that if disinfected secondary-23 effluent was being produced instead of tertiary, the plant should still be able to use the water for dust control without having a permit violation. The existing language in section 4.3 on page 16 states,

"distribution and offsite reuse of recycled water produced by the Facility is subject to State Water Board Order WQ 2016-0068-DDW, State Water Board General Water Reclamation Requirements for Recycled Water Use, or other applicable permit, dependent on final use." Section 4.3.2 on page 16 of the order states, "recycled water production for distribution and offsite use shall comply with a title 22 engineering report approved by the Division of Drinking Water (DDW) that demonstrates or defines compliance with the Uniform Statewide Recycling Criteria (and amendments)."

Change Made: Section 4.3.3 was changed to remove the term "disinfected tertiary recycled water" and generically refers to section 60301 in order to allow for the city's uses as described in approved title 22 reports.

Soquel Creek Water District and City of Santa Cruz – Comment 4

4.3.10

"Recycled water shall not exceed any maximum contaminant level..."

Please clarify if this MCL would only apply if the T22 tertiary project was converted in the future to a potable recycled water use. Please confirm that if the recycled water is only used for non-potable uses approved under Title 22, then this requirement would not be triggered nor apply to the current tertiary non-potable reuse project. Request adding text: "Recycled water used for subsurface groundwater recharge shall not exceed any MCL"

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 4

Staff agrees with the comment and suggested language revision.

Change Made: Language was added to section 4.3.10 stating that recycled water used for subsurface groundwater recharge shall not exceed any MCL.

Soquel Creek Water District and City of Santa Cruz – Comment 5

Table E-1 and Table E-6

Suggest deleting the requirement for tertiary recycled water at EFF-001C of Ocean Plan constituents. EFF-001C is defined as tertiary recycled water (from DP-002). Table E-6 requires EFF-001C to be monitored for Ocean Plan Pollutants even though the water is not discharged directly to the ocean (it is either used for non-potable uses or returned to the head of the Santa Cruz Wastewater Treatment Facility if off-spec).

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 5

Central Coast Water Board staff does not concur with the suggestion to remove the once per permit term Ocean Plan pollutant monitoring for EFF-001C. This monitoring informs internal processes and the Ocean Plan. The monitoring will help determine the

effects of filtration and disinfection on the treated effluent, and the requirement to monitor once per permit term is not onerous for the discharger to complete.

Change Made: None.

Soquel Creek Water District and City of Santa Cruz - Comment 6

4.1.1 and Table E-3

Table E-3 appears to be copied from the existing permit. Is the intent to replace Table E-3 in this proposed order with Table E-4 (EFF-001A) and Table E-5 (EFF-001B)? Recommend paragraph 4.1.1 on page E-6 be revised to match paragraph 4.1.1 on page 8.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 6

Table E-3 provides value as it describes the routine schedule for monitoring and includes additional parameters for CCLEAN. For example, silica and nitrate monitoring in Table E-3 can provide information regarding nutrient discharges that can cause plankton blooms and shellfish poisoning. Table E-4 provides information regarding Facility performance. Table E-7 lists frequency of the various monitoring schedules.

Change Made: Language was added to paragraph 4.1.1 on page E-6 stating, "the

Discharger shall monitor for additional parameters in accordance with the following schedule in Table E-3 below to ensure adequate data is available for CCLEAN and to provide information useful for Facility performance."

Soquel Creek Water District and City of Santa Cruz – Comment 7

Table E -5

Recommend removing TOC and TSS from monitoring location EFF-001B. TOC and TSS are technology-based limits that tell how well the plant is performing so should only be sampled at EFF-001A. Suggest having separate composite samplers - one to measure the plant effluent only and one to measure the flow-controlled blend of plant effluent and ROC blend.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 7

Although Central Coast Water Board staff is supportive of the city measuring with separate composite samplers, staff does not agree to remove TOC and TSS analysis from monitoring location EFF-001B. Technology-based effluent limits are included in NPDES permits both as a measure of plant performance and also to prevent pollution by establishing the minimum level of effluent quality achievable using current technologies for reducing pollutant discharges into waters of the United States. TOC and TSS monitoring provides information for assessing potential impacts associated with the discharge. Although a standard for plant performance, this monitoring provides needed information to what is happening downstream. See response to city of Santa Cruz

comment number 3 above regarding the TSS and TOC measured at EFF-001B will not be used for compliance assessment. TOC and TSS data for compliance shall be collected at EFF-001A as described at 4.1.2 on page E-7 of Attachment E.

Change Made: Language was added to the permit in footnote 1 of Table E-5 that states, "the location for monitoring TOC and TSS for plant permit compliance shall at all times be at the approved locations before comingling with the return waste and/or ROC reject from Pure Water Soquel."

Soquel Creek Water District and City of Santa Cruz - Comment 8

Table E-5

Recommend deleting footnote 2 notation from fecal coliform in this table. Footnote 2 is about whole effluent toxicity.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 8

Staff agrees with the suggested language revision.

Change Made: Deleted footnote 2 notation from fecal coliform in Table E-5.

Soquel Creek Water District and City of Santa Cruz – Comment 9

Table E-5

Consider changing "Volume of Blended Effluent Discharged" to flow rates as required in Table E-4.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 9

Staff does not agree with the suggested language revision. The existing language and footnote (with clarification) is suitable to describe the monitoring of secondary treated wastewater that has been combined with reverse osmosis concentrate from the Pure Water Soquel project.

Change Made: None.

Soquel Creek Water District and City of Santa Cruz – Comment 10

Table E-9

Table E-9 requires recycled water be monitored for TSS and TDS even though it is not required by Title 22 or the Conditional Acceptance Letter. Consider removing this monitoring requirement or explain its purpose.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 10

Staff does not agree with the suggested language revision, as monitoring for TSS and TDS is not onerous and can help provide information for future changes to help with plant operations, recycling, and compliance.

Change Made: None.

Soquel Creek Water District and City of Santa Cruz - Comment 11

2.2

Suggest adding text to make description accurate: "When the PWS Project is implemented, an average of <u>up to 2.77 MGD</u> will be diverted to the AWPF <u>and the T22 non-potable reuse facility</u>, which will decrease the secondary effluent flow discharged to the ocean by the same amount."

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 11

Central Coast Water Board staff agrees with the suggested language revision.

Change Made: The underlined language in the comment above was added to section 2.2 on page F-6 of the Fact Sheet.

Soquel Creek Water District and City of Santa Cruz – Comment 12

2.2.1

Suggest revising "Product Water Pump Station" to "Purified Water Pump Station" to align with PWS terminology.

Staff Response to Soquel Creek Water District and City of Santa Cruz – Comment 12

Central Coast Water Board staff agrees with the suggested language revision.

Change Made: Product water pump station was changed to purified water pump station in section 2.2.1 on page F-6 of the Fact Sheet.

DDW - Comment 1

4.3.3 and 4.3.4

We recommend admin draft section 4.3.3 to include disinfection for the tertiary recycled water is by a UV system whose conditions will be required based on the completion and review of the spot check bioassay test results. Attached for reference is DDW's conditional acceptance letter (Item 5), dated August 12, 2022 to Regional Water Quality Control Board.

Page 9 of 16 Item 12 Attachment 2
December 14-15, 2023 Meeting
Santa Cruz WWTP NPDES Permit Response to Comments

Staff Response to DDW - Comment 1

Central Coast Water Board staff agrees with the suggested language revision.

Change Made: The following language was added to page 16 under section 4.3.3, "The disinfection for the tertiary recycled water is by a UV system whose conditions will be required based on the completion and review of the spot check bioassay test results."

Becky Steinbruner – Comment 1

Please include a Staff Report for summary analysis of the impacts to the historic wastewater effluent stream that will be caused by the online operation of the Pure Water Soquel Project reverse osmosis concentrate and off-specification water that are new pollutants included in the National Pollutant Discharge Elimination System (NPDES) Permit CA 0048194.

Staff Response to Becky Steinbruner – Comment 1

The order includes the compliance history of the discharger under the existing order description (section 2.4 in the fact sheet). The RO concentrate from Pure Water Soquel does not add new pollutants to the waste stream or increase the mass of pollutants discharged; rather, it is the concentrated secondary effluent from the Santa Cruz WWTP after it is treated by reverse osmosis. Secondary treated effluent will be sent from the Santa Cruz WWTP to the Pure Water Soquel project where it will be further treated with reverse osmosis. The treated water (approximately 80%) will be injected into the groundwater. The RO concentrate left behind (approximately 20%) will be sent back to the Santa Cruz WWTP where it will be blended with additional secondary treated water and then discharged through the ocean outfall. Ultimately, the same mass of pollutants is discharged through the ocean outfall regardless of the Pure Water Soquel project.

Consistent with the Ocean Plan, the proposed order identifies a higher dilution for the smaller volume of the discharge when RO concentrate is generated from the secondary treated wastewater diverted to the Pure Water Soquel project. Tables 4, 5, and 6 of the proposed order include effluent limitations for two dilution scenarios: the scenario where only secondary treated effluent from the Santa Cruz WWTP is discharged (Dm = 139) and the scenario where secondary treated effluent from the Santa Cruz WWTP is blended with RO concentrate from Pure Water Soquel (Dm = 150). The reasonable potential analysis, summarized in section 4.3.3 of the fact sheet, was run for both scenarios and identified the same pollutants requiring effluent limitations in each scenario. Concentration-based effluent limitations were then calculated for each dilution scenario and a single mass-based effluent limitation was calculated based on the permitted discharge volume.

Becky Steinbruner – Comment 2

Please add a discussion as to whether the PureWater Soquel Project waste effluent ("brine") will be mixed with the wastewater effluent within the City's Wastewater Treatment Facility or discharged directly into the Pacific Ocean via the existing effluent outfall pipe. This will provide transparency for compliance with Section 5.1.6.3, referenced on page 20:

5.1.6.3. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

Staff Response to Becky Steinbruner – Comment 2

The RO concentrate from Pure Water Soquel will be combined in a mixing well with the secondary treated wastewater, after the treatment process, at the city of Santa Cruz WWTP, and the combined discharge will travel through the existing effluent outfall pipe to the outfall diffuser through which it enters the Pacific Ocean. As described in section 2.3.1 on page F-7, the smaller volume when discharging the RO concentrate will result in higher mixing dilutions for the discharge through the ocean outfall diffuser system.

Change Made: None.

Becky Steinbruner – Comment 3

Please include a discussion and documentation regarding the potential impacts of the PureWater Soquel Project waste and treatment brine to marine habitat and wildlife, and state what, if any, mitigations have or will be implemented.

Staff Response to Becky Steinbruner - Comment 3

The RO concentrate from the Pure Water Soquel project is far below ocean salinity levels and the combined discharge with the secondary effluent from the Santa Cruz WWTP will be positively buoyant and well mixed upon discharge through the ocean outfall diffuser system. Additionally, the permit is written to comply with California Ocean Plan effluent standards that are protective of marine habitat and wildlife. Table 4 of the proposed order on page 10 lists effluent limitations for the protection of marine aquatic life under two scenarios: when only secondary treated effluent is discharged through the ocean outfall and when secondary treated effluent is blended with RO concentrate from Pure Water Soquel. The order's requirements for the discharges comply with the Ocean Plan and do not require mitigation.

Becky Steinbruner – Comment 4

Please provide a timeline for the Discharger's compliance with preparation and public availability of the Facility's recycled water management plan, as referenced on page 5 of the Proposed Permit:

2.7. Provision of Treated Effluent for Beneficial Reuse. Section 6.3.6 of this Order requires the Discharger to prepare a recycled water management plan to describe in detail how the Discharger will maximize the amount of the Facility's treated effluent used for beneficial reuse, with the goal of achieving maximum beneficial reuse.

and referenced again on page 20 in Section 5.1.6.3:

5.1.6.3. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

Staff Response to Becky Steinbruner – Comment 4

As stated in section 6.3.6.1 on page 27,"within one year of the effective date of this Order, the Discharger shall submit to the Central Coast Water Board Executive Officer a phase I recycled water management plan (Phase I Plan) for review and approval." Regarding the second comment, the discharge will mix with the secondary treated wastewater after the treatment process in a mixing well and will be discharged through the pipeline to the outfall diffuser system. As described in section 2.3.1 on page F-7, the smaller volume when discharging the RO concentrate will result in higher mixing dilutions during the discharge to the ocean outfall diffuser system.

Change Made: None.

Becky Steinbruner – Comment 5

Please provide analysis of any radioactive by-products that are anticipated in the PureWater Soquel Project waste brine to ensure the public the Discharger will be in compliance and the concentrated brine will not adversely impact marine wildlife, as is required by Sections 5.1.5 and 5.1.6 stated on pages 19 and 20:

- 5.1.5. Radioactivity
- 5.1.5.1. Discharge of radioactive waste shall not degrade marine life.
- 5.1.5.2. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- 5.1.6. General Standards
- 5.1.6.1. The discharge shall not cause a violation of any applicable water quality objective or standard for receiving waters adopted by the Central Coast Water Board or State Water Board, as required by the CWA and regulations adopted

Page 12 of 16 Item 12 Attachment 2
December 14-15, 2023 Meeting
Santa Cruz WWTP NPDES Permit Response to Comments

thereunder.

- 5.1.6.2. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- 5.1.6.3. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.

Staff Response to Becky Steinbruner – Comment 5

Receiving water limitations in sections 5.1.5 and 5.1.6 stated on pages 19 and 20 are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. This language from the draft order is standard language and the order is written to comply with this standard language. No radioactive by-products are anticipated in the Pure Water Soquel project ROC or the city's secondary treated wastewater.

Change Made: None.

Becky Steinbruner – Comment 6

Please provide any and all analysis and data regarding the potential impacts the PureWater Soquel Project waste brine will impose on the indigenous marine life and the existing diverse marine community, with special focus on species struggling due to climate change impacts.

Staff Response to Becky Steinbruner – Comment 6

The effluent limitations and monitoring and reporting program are based on requirements from the California Ocean Plan that ensure protection of marine life. The Ocean Plan standards required by the effluent monitoring and reporting program are based on long-established bioassay work to protect marine species. These standards and the well-mixed effluent result in effluent limitations that protect indigenous marine life. The order includes the compliance history of the discharger under the existing order description (section 2.4 in the fact sheet). The RO concentrate from Pure Water Soquel does not add new pollutants to the waste stream or increase the mass of pollutants discharged; rather, it is the concentrated secondary effluent from the Santa Cruz WWTP after it is treated by reverse osmosis. Please see response to comment 3 above.

Change Made: None.

Becky Steinbruner – Comment 7

Please require that any and all Toxicity Notifications by Discharger are posted on the home page of both the City of Santa Cruz and Soquel Creek Water District websites for

public transparency as part of compliance with Section 6.3.2.1 stated on pages 20 and 21:

6.3.2.1. Toxicity Notification Requirements

The Discharger shall notify the Central Coast Water Board in writing within 14 days of exceedance of a chronic toxicity trigger of 140 TUc (Toxicity Units Chronic). This notification shall describe actions the Discharger has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed or reasons that no action has been taken. Written notification should also be sent within 14 days to U.S. EPA Region 9 Wastewater Enforcement Section Manager at R9NPDES@epa.gov.

Staff Response to Becky Steinbruner - Comment 7

Section 8.4.5. on page D-15 states: "All "Dischargers" shall submit reports electronically to the State Water Board's California Integrated Water Quality System (CIWQS) database at http://ciwqs.waterboards.ca.gov/." CIWQS has this public data available for review by interested parties.

Change Made: None.

Becky Steinbruner – Comment 8

Please require that links to any and all Toxicity Reduction Evaluations (TRE), described on page 21, for the Santa Cruz Wastewater Treatment Facility and / or the PureWater Soquel Project Advanced Treatment Facility be posted immediately for on respective agency website home pages for transparency and public inspection.

Staff Response to Becky Steinbruner – Comment 8

Section 8.4.5. on page D-15 states: "All "Dischargers" shall submit reports electronically to the State Water Board's California Integrated Water Quality System (CIWQS) database at: http://ciwqs.waterboards.ca.gov/." CIWQS has this public data available for review by interested parties.

Change Made: None.

Becky Steinbruner – Comment 9

Please provide a timeline for anticipated Saline Waste Disposal Study release and allow a 30-day public comment period. Please require both Discharge agencies to post links to the Draft and Final Saline Waste Disposal Study on the home page of their agency websites for transparent public information. Page 24 description:

6.3.2.6. Saline Waste Disposal Study

Prior to discharging saline waste through the ocean outfall, the Discharger shall submit a saline waste disposal study to the Executive Officer and to the MBNMS for approval. The study shall include, at a minimum, the following

Page 14 of 16 Item 12 Attachment 2
December 14-15, 2023 Meeting
Santa Cruz WWTP NPDES Permit Response to Comments

elements: (1) a projection of the saline waste volume and characteristics, (2) an assessment of the impact of the increased saline waste volume on permit compliance, (3) an assessment of the impact of the increased saline waste volume on the minimum probable initial dilution at the point of discharge, (4) a detailed description of any saline waste disposal facilities that are proposed to accommodate the increased volume of saline waste flow metering and sampling, and (5) a schedule for the design and construction of the new saline waste disposal facilities

Staff Response to Becky Steinbruner - Comment 9

The Saline Waste Disposal Study language is included in the proposed order in section 6.3.2.6. on page 24 and section 6.2.2.3. on page F-40 to provide a pathway for covering minor additions of salts from salt regeneration companies (e.g., Culligan, Rayne, etc.) if the need arises. If pursued, the study is required to be submitted to the Central Coast Water Board and the study must be approved prior to the discharge commencing. If the Discharger does not pursue covering this type of additional minor waste stream, then a Saline Waste Disposal Study is not required to be submitted. Approval of the study is based on agreement between the Central Coast Water Board and the Monterey Bay National Marine Sanctuary.

Section 8.4.5. on page D-15 states: "All "Dischargers" shall submit reports electronically to the State Water Board's California Integrated Water Quality System (CIWQS) database at: http://ciwqs.waterboards.ca.gov/." CIWQS has this public data available for review by interested parties.

Change Made: None.

Becky Steinbruner – Comment 10

Please require quarterly or semi-annual Ocean Outfall and Diffuser inspections and dye dilution studies with visual inspections semi-annually. The City of Santa Cruz has not been reliably compliant with this requirement of Section 6.3.2.7, and the information has been difficult for the public to access. Please require the City of Santa Cruz to provide this information on the homepage of the website, rather than forcing members of the public to file Public Records Act requests, as has been the case historically. To date, the City has not conducted such inspections subsequent to the violent 2023 winter storms.

The requirement for regular inspections of the Ocean Outfall on page 24 need to be enforced:

6.3.2.7. Ocean Outfall and Diffuser Inspection

At least once per year, the Discharger shall conduct a dye dilution study to visually inspect the entire outfall structure to determine whether there are leaks, potential leaks, or malfunctions. This inspection shall be conducted along the outfall pipe/diffuser system from landfall to its ocean terminus. Within a week of the dye dilution study, an outfall inspection by divers and/or remotely operated

Page 15 of 16 Item 12 Attachment 2
December 14-15, 2023 Meeting
Santa Cruz WWTP NPDES Permit Response to Comments

vehicle (ROV) shall be conducted to check the structural integrity at the leak site and diffuser and possible external blockage of diffuser ports by sand and/or silt deposition. These studies shall be conducted when there are high flows of at least 4 MGD. Fluorometer measurements shall be collected during the underwater inspection to provide data that helps record the magnitude of the leak. The two inspections shall be conducted together in order to determine the magnitude and dilution of the leak measured during the inspection. Results of the outfall inspections shall be reported in the applicable annual report.

Staff Response to Becky Steinbruner - Comment 10

Section 6.3.2.7. on page 24, section 9.2. on page E-24, section 6.2.2.4. on page F-41, and section 7.6.2. on page F-47 require the discharger to complete outfall monitoring at least annually. Monitoring since the 1990s has not shown a significant issue with the outfall pipe gasket leak caused by the October 1989 Loma Prieta earthquake. As required by the Central Coast Water Board, the city has provided required technical reports summarizing the history and long-term monitoring of the leak since it was discovered in 1992. Considering the information provided in the city's latest June 1, 2020 technical report, the Central Coast Water Board increased monitoring and reporting requirements to confirm that the leak remains minor in nature and does not pose a risk to water quality. The additional monitoring has been sufficient to confirm the minor nature of the leak. As described in our February 5, 2021 letter to the City, If the Central Coast Water Board determines that the leak poses an unacceptable risk to water quality, the City will be required to take additional steps to mitigate the leak.

Section 8.4.5. on page D-15 states: "All "Dischargers" shall submit reports electronically to the State Water Board's California Integrated Water Quality System (CIWQS) database at: http://ciwqs.waterboards.ca.gov/." The annual reports uploaded to CIWQS include the annual leak studies and this public data is available for review by interested parties.