Central Valley Regional Water Quality Control Board
20/21 February 2025 Board Meeting
Response to Comments
for the
City of Anderson
Anderson Water Pollution Control Plant
Tentative Waste Discharge Requirements
Shasta County

At a public hearing scheduled for 20-21 February 2025, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of tentative Waste Discharge Requirements (NPDES No. CA0077704) for the City of Anderson's (Discharger) Anderson Water Pollution Control Plant (Facility). This document contains responses to written comments received from interested persons and parties in response to the tentative Order. Written comments from interested persons and parties were required to be received by the Central Valley Water Board by 18 December 2024 in order to receive full consideration. Comments were received prior to the deadline from:

1. Jo Anne Kipps (received 18 December 2024)

2. Debbie Mackey, Executive Officer, Central Valley Clean Water Association (received 18 December 2024)

Written comments from the above interested parties are summarized below, followed by the response of Central Valley Water Board staff.

JO ANNE KIPPS COMMENTS

JO ANNE KIPPS COMMENT #1 – Does the Emergency Storm Water/Overflow Basin have a permanent pumping station to divert impounded wastewater to the headworks? Does the Discharger typically route wastewater impounded in this basin to the headworks?

RESPONSE: The Emergency Storm Water/Overflow basin (i.e., emergency storage pond) does not have a permanent pumping station; however, the Discharger is able to route impounded wastewater from the emergency storage pond back to the treatment process, as follows:

The northeast corner of the emergency storage pond has two, 3-inch PVC risers, equipped with cam lock connections. One line runs to the emergency storage pond's bottom elevation, and the other line runs to Aeration Basin No. 1. In the event the emergency storage pond is needed and used, a portable three-inch pump is hooked up to the risers which facilitates returning all flows from the emergency storage pond back through the treatment process.

Staff note that the tentative Order does state that the Discharger can pump stormwater from the emergency storage pond to the headworks (Fact Sheet section II.A). Therefore, no changes to the tentative Order have been made in response to Comment No. 1.

JO ANNE KIPPS COMMENT #2 – If the three ponds near the Emergency Storm Water/Overflow Basin are the Sludge Stabilization Ponds referenced in the tentative order, what are the designations of the two ponds adjacent to the treatment works? What waste streams do they receive and are they equipped with flow return to the headworks? Please revise the tentative order to clarify the function(s) of these two ponds.

RESPONSE: The two ponds adjacent to the treatment works (northwest of the sludge drying beds) are historic sludge stabilization ponds that are no longer in use. These ponds do not receive or return any flows from/to the treatment process and only receive precipitation. The Discharger considers this area as a potential area for a future plant expansion or additional treatment processes.

The proposed Order has been updated to clarify that the subject two ponds are historic and not in operation (Fact Sheet, section II.A, Sludge Stabilization Ponds and Drying Beds).

JO ANNE KIPPS COMMENT #3 – Please revise the Tentative Order to**:**

a. Use consistent terminology for the surface impoundments.

b. Include a scaled facility site map that shows all high-risk unit operations that may threaten to violate groundwater limitations due to potentially inadequate or inadequately-maintained containment.

c. Include a flow schematic for waste solids treatment, or otherwise consolidate in one place a description of these flows and how ponds receiving these flows are operated.

d. For the sludge drying bed, provide area, for each surface impoundment, area, overall depth, design liquid depth, and invert elevation.

e. For all unit operations equipped with liners or containment, identify installation year and summarize construction (liner material, coverage, presence of compacted subbase, etc.), disclose frequency and method of liner inspection, and summarize liner repair history.

RESPONSE:

3.a. The proposed Order has been revised to provide more consistent terminology for the following ponds:

Emergency Storage Pond: Staff has revised the proposed Order to provide consistent terminology for the emergency storage pond. As such, "Emergency Storm Water/Overflow Basin" in Fact Sheet section II.A (F-6, Storm Drainage), has been changed to "emergency storage pond."

Sludge Stabilization Ponds: The facility has three sludge stabilization ponds. The sludge stabilization ponds are notated as "sludge storage ponds" in the flow schematic contained in Attachment C. The proposed Order has been revised to reflect more consistent terminology for the sludge stabilization ponds, as follows:

Fact Sheet section II.A (F-5, Pressure Filtration), reference to "stabilization ponds" has been changed to "sludge stabilization ponds". Fact Sheet section II.A (F-6, Digester), reference to "equalization ponds" has been changed to "sludge stabilization ponds."

Sludge Drying Beds: Staff has revised the proposed Order to correct erroneous references to sludge drying "ponds," as the units should be consistently referred to as sludge drying beds (not ponds) throughout the proposed Order. Revisions to address this error have been made in section IV.C.4.a. (Construction, Operation and Maintenance Specifications) and Fact Sheet section VI.B.4 (F-67, Construction, Operation and Maintenance Specification).

3.b. The proposed Order has been revised to include a scaled facility site map. The site map identifies the Facility's ponds and drying beds. The facility site map is included in Attachment B.

3.c. Staff note the tentative Order provides an adequate description of flows associated with waste solids and how the ponds receiving these flows are operated in Fact Sheet section II.A (F-6, Digester, Sludge Stabilization Ponds and Drying Beds, and Side streams). As noted in Response to Comment 3.b., a facility site map that includes the Facility ponds and drying beds has been added to the proposed Order.

In addition, Staff has revised the proposed Order (Fact Sheet section II.A (F-6, Emergency Storage Pond)) to include additional operational information on the emergency storage pond, as follows:

> The Facility's emergency storage pond is only used in the event of catastrophic mechanical failures where sufficient treatment cannot be achieved prior to discharge or if there is a 100-year flood and the treatment plant is pushed beyond operational capacity and needs additional storage. In the event the emergency storage pond is filled, there is an overflow from the emergency overflow pond piped to sludge stabilization ponds No. 3, No. 4, and No. 5. The sludge

stabilization ponds can be used in emergency situations to increase storage capacity. The emergency storage pond stays empty year-round, not accounting for any rainfall accumulation..

3.d. The proposed Order has been revised to include the following surface area information on the sludge stabilizations basins, sludge drying beds, and the emergency storage pond (Fact Sheet section II.A):

Sludge stabilization ponds No. 3 and No. 4 are identical in specifications: total surface area is 1-acre, overall depth is 8.4 feet, design liquid depth is 6.4 feet and the total volume is 2 million gallons (each). The invert elevation is 395.85 feet. Sludge stabilization pond No. 5 has a total surface area of 1.75 acres, the overall depth is 8.33 feet, the design liquid depth is 6.33 feet and the total volume is 3.6 million gallons. The invert elevation for sludge stabilization pond No. 5 is 396.57 feet. The sludge stabilization ponds are typically operated in an annual rotation; sludge stabilization ponds No. 3 and No. 4 are operated concurrently when sludge stabilization pond No. 5 is offline, and vice versa. As a result, approximately every 18 months one or two of the ponds will be emptied of solids in the fall.

Sludge drying beds: The sludge drying beds have a total surface area of 30,000 square feet. Individual surface areas of the drying beds are as follows: Drying bed No. 1, No. 2, No. 3, and No. 4 are 7,000, 8,000, 8,000, and 7,000 square feet, respectively.

…

The emergency storage pond has a total surface area of 1.5 acres, the overflow elevation is 403.8 feet, the pond bottom elevation is 396.0 feet, and the total volume is 3.8 million gallons.

3.e. The proposed Order (Fact Sheet section II.A) has been revised to include the unit operation year and construction summary, and frequency and method of liner construction, and liner repair history, if any, as follows:

Unit Construction: The ballast pond was constructed in 1972 with concrete and rebar walls with an asphalt bottom. The ballast pond is inspected during cleaning, which typically occurs at least once per year. The Discharger has reported that no defects have been observed. Sludge stabilization ponds No. 3 and No. 4 were constructed in 1989. Both have concrete with rebar sides and asphalt bottoms. Sludge stabilization pond No. 5 was constructed in 2010 with concrete, rebar sides, and asphalt bottom. The sludge stabilization ponds are inspected when they are emptied, approximately every 18 months, in the fall. The Discharger has reported that no defects have been noted. The Discharger reports that they have not had to make any repairs to the original construction of these basins.

JO ANNE KIPPS COMMENT #4 – Revise the tentative order to include evidence confirming that the containment for the ballast pond, sludge stabilization ponds, and sludge drying bed is effective in meeting Groundwater Limitation V.B and Sludge/Biosolids Treatment Specification VI.C.5.b.i. If resources are limited, consider requiring the Discharger to submit a technical report with this evidence within 120 days of order adoption.

RESPONSE: Staff has revised the proposed Order to include pond construction details and frequency and method of inspection (see Response to Comment 3.e.). In addition, Staff has revised the proposed Order, Construction, Operation and Maintenance Specifications, section VI.C.4. to include a specification that requires the Discharger to regularly inspect the condition of the pond systems and the sludge drying beds. The new language is as follows:

> The Discharger shall regularly inspect the condition of the constructed pond surfaces (e.g., sludge stabilization ponds, ballast pond) and sludge drying beds to ensure the integrity of the concrete and asphalt lined structure and prevent infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order. The Discharger shall maintain and repair the ponds and storage facilities as necessary to ensure the integrity of the ponds and drying beds are maintained and leakage from the units is minimized. Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.

JO ANNE KIPPS COMMENT #5 – To ensure compliance with groundwater limitations and by extension, the effectiveness of containment provided for surface impoundments and the sludge drying bed for limiting leakage, consider revising the tentative order to require groundwater monitoring both upgradient and downgradient from the Facility.

RESPONSE: Information has been added to the Fact Sheet, Section II.A on the emergency storage pond, the sludge stabilization ponds, and the sludge drying beds; however, Staff do not concur with the recommendation for the tentative Order to be revised to require the installation of groundwater monitoring wells. The proposed Order has been revised to include pond construction details and frequency and method of inspection (see Response to Comment 3.e).

The Discharger conducts routine inspections on their pond systems, inspecting for evidence of percolation or exfiltration. The Discharger also monitors influent and effluent flows to determine if flows are concurrent and that there is no to little water loss through any of the processes. The sludge drying beds are equipped with an underdrain system that routes liquid waste back to the headworks for treatment at the Facility. The emergency storage pond is operated in a manner that precludes waste infiltration; wastewater is not stored for extended periods in the emergency storage

pond. As discussed in Response to Comment No. 1, the Discharger collects impounded waste and pumps the waste back to its treatment works.

In addition, the proposed Order has been revised to include new pond monitoring requirements (see Response to Comment #10).

Given the existing design, operation, and maintenance of the Facility's basins, it is reasonable to conclude the basins do not have the potential to cause an exceedance of applicable water quality objectives in groundwater. Based on this information, staff do not believe the installation of groundwater monitoring wells is necessary at this time.

JO ANNE KIPPS COMMENT #6 – Groundwater limitations in WDRs adopted under the WDR Program often have the phrase, "shall not cause or contribute to groundwater." Revise Groundwater Limitations preface to insert the phrase, "or contribute to," as in, "Release of waste constituents from any portion of the Facility shall not cause or contribute to groundwater…" Or, explain why this phrase does not apply to the Facility.

RESPONSE: Staff concur. Section V.B. Groundwater Limitations has been revised as follows. The revision is consistent with the Groundwater Limitations in Fact Sheet section V.B.

> Release of waste constituents from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of background groundwater quality, whichever is greater:
>
> 1. The Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding salinity.
>
> 2. Taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect any beneficial use.
>
> 3. A total coliform organism level of 2.2 MPN/100 mL over any seven-day period.
>
> Release of waste constituents from any portion of the Facility shall not cause or contribute to groundwater to….

JO ANNE KIPPS COMMENT #7 – Include, as a best practicable control measure, two new specifications following section VI.5.b.i that read:

I. As a means of ensuring compliance with section VI.5.b.i of this Order, the sludge stabilization ponds and sludge drying bed shall be equipped with a liner

that precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order.

II. The Discharger shall regularly inspect the liner condition of all lined surface impoundments as required in the monitoring and reporting program. The Discharger shall maintain and repair the liner as necessary to ensure the integrity of the pond liner is maintained and leakage from the liner is minimized. Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.

RESPONSE: Staff has revised the proposed Order to include a new specification in Construction, Operation and Maintenance Specifications, section VI.C.4.b., as follows:

The Discharger shall regularly inspect the condition of the constructed pond surfaces (e.g., sludge stabilization ponds, ballast pond) and sludge drying beds to ensure the integrity of the concrete and asphalt lined structure and prevent infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order. The Discharger shall maintain and repair the ponds and storage facilities as necessary to ensure the integrity of the ponds and drying beds are maintained and leakage from the units is minimized. Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.

JO ANNE KIPPS COMMENT #8 - The tentative order carries over current groundwater limitations for total coliform organisms, Title 22 MCLs, and taste- or odor-producing constituents, and toxic substances. The current order provides reasons for their inclusion in a three-bullet list; the tentative order's rationale reiterates its Groundwater Limitations (except it omits V.B.1 for total coliform organism). Revise the tentative order to carry over the current order's rationale for its inclusion of groundwater limitations.

RESPONSE: In response to Ms. Kipps' comment, Staff has revised the proposed Order to include the rationale for Groundwater Limitations associated with total coliform organisms. The following language has been added to the rationale for Groundwater Limitations in Fact Sheet section V.B:

3. A total coliform organism level of 2.2 MPN/100 mL over any seven-day period.

JO ANNE KIPPS COMMENT #9 – The tentative order carries over the current order's Construction, Operation and Maintenance Specifications for Emergency Storage, Sludge Stabilization, and Drying Ponds Operating Requirements (section VI.C.4.a). Consider revising the header of section IV.C.4.a to read: Emergency Storm

Water/Overflow Basin and Sludge Stabilization Ponds Operating Requirements.

RESPONSE: In response to Ms. Kipps' comment, Staff has revised the proposed Order in Section VI.C.4.a., as follows:

a. Emergency Storage Pond, Sludge Stabilization Ponds, and Sludge Drying Beds Operating Requirements

JO ANNE KIPPS COMMENT #10 –The tentative order indicates it requires the Discharger to monitor and report on the "use of the emergency storage and sludge drying ponds" and their "potential impact on groundwater" (F-67, Construction, Operation, and Maintenance Specifications). However, its monitoring and reporting program (MRP) does not include monitoring locations for these surface impoundments. Revise the tentative order's MRP to include monitoring locations for each surface impoundment and require for each pond (as appropriate): weekly observations of presence/absence of water and freeboard; weekly monitoring of dissolved oxygen concentration; monthly observations of berm condition; and annual observations of liner condition, and, include weekly monitoring of pond pH in the Emergency Storm Water/Overflow Basin when in use for more than 72 hours.

RESPONSE: In response to Ms. Kipps' comment, Staff has revised the proposed Order to include pond monitoring requirements in Attachment E, section IX.D, as follows:

The Discharger shall monitor the sludge stabilization ponds (PND-003, PND-004, and PND-005) and the emergency storage pond (PND-006) as described below:

1. The Discharger shall conduct weekly inspections of the ponds and document their findings in a bound logbook. The records should detail the level of freeboard (feet), the presence or absence of liquid, any odors or nuisance conditions, and the accumulation of substances such as grease, dead algae, scum, or debris in the ponds; berm condition observations shall be conducted once per month. Additionally, any instances of partially or untreated wastewater discharges to PND-006 should be noted. A summary of these observations shall be included in the monthly monitoring report.

2. If there is a discharge of partially or untreated wastewater to PND-006, the Discharger must provide comprehensive notes in the logbook, detailing the timing and cause of the discharge, how the wastewater was managed while in the pond, when it was returned to the Facility's treatment system, and the measures taken to prevent a recurrence of the issue.

3. The Discharger shall conduct regular observations and inspections of the asphalt and concrete-lined units at the Facility; frequency of the inspection of the asphalt and concrete-lined units shall be no less than once per 24 months. Central Valley Water Board staff shall be notified 30 days prior to a planned asphalt and concrete inspection. A summary of the inspections, including the dates, findings, and photo documentation of the inspection, shall be included with the Annual Operation Report, as specified below in section X.D.2.f.

   Pursuant to Construction, Operation and Maintenance Specifications, section VI.C.4., the Discharger shall regularly inspect the condition of the constructed pond surfaces and sludge drying beds to ensure the integrity of the concrete and asphalt lined structure and prevent infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order. The Discharger shall maintain and repair the ponds and storage facilities as necessary to ensure the integrity of the ponds and drying beds are maintained and leakage from the units is minimized. Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.

4. The Discharger shall monitor pH in PND-006 weekly when unit is in use for more than 72 hours.

Rationale for the new pond monitoring requirements has also been added to the proposed Order in Fact Sheet section VII.E.3., as follows:

> Storage stabilization ponds and emergency storage pond monitoring is required to ensure proper operation and maintenance of ponds at the Facility. Weekly freeboard, presence/absence of liquid, odors, or nuisance conditions, and monthly monitoring and evaluation of berm condition, and reporting on discharges of any partially or untreated waste to the emergency storage pond are included in this Order. The Discharger is also required to conduct pH monitoring when the emergency storage basin is in use longer than 72 hours. Additionally, annual reporting on the inspection of the asphalt/concrete liner systems for the Facility's pond units is included in this Order to ensure that the structural integrity of the liner system is not compromised and leakage from the units is minimized prevent infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order.

In addition, the new monitoring location names and descriptions for the sludge stabilization ponds (PND-003, PND-004, and PND-005) and the emergency storage pond (PND-006) have been added to Table E-1, Monitoring Station Locations in Attachment E of the proposed Order.

Attachment E, section X.D.2. has also been revised to include the following with the Annual Report:

> f. The asphalt and concrete-lined units inspection dates, a description of surface conditions at the time of inspection (e.g., surface preparation), inspection protocol, summary of findings, and photo documentation, as specified in section IX.D.A.3. An assessment of the containment's effectiveness for ensuring compliance with groundwater limitations and sludge specifications regarding containment shall be included with the Annual Report.

Lastly, an erroneous reference to sludge "drying" ponds in Fact Sheet section VI.B.4.a., Construction, Operation, and Maintenance Specifications, has been changed to sludge "stabilization" ponds. The revised language is as follows:

> In addition, reporting requirements related to use of the emergency storage and sludge stabilization ponds are required to monitor their use and the potential impact on groundwater.

JO ANNE KIPPS COMMENT #11 – Section V.4.a.vii prohibits discharges of hazardous or designated waste and contains an inaccurate description of Facility unit operations. Ms. Kipps requested replacement of the referenced, "emergency storage or treatment ponds" to Facility's surface impoundments and sludge drying bed."

RESPONSE: In response to Ms. Kipps' comment, Staff has revised the proposed Order in Section V.4.a.vii, as follows:

> The discharge of waste classified as "hazardous" as defined in section 2521(a) of Title 23, California Code of Regulations (CCR), or "designated", as defined in section 13173 of the Water Code, to the Facility's treatment and storage facilities, including the sludge drying beds, is prohibited.

CENTRAL VALLEY CLEAN WATER ASSOCIATION (CVCWA) COMMENTS

CVCWA COMMENT #1 – The Acute and Chronic Whole Effluent Toxicity (WET) effluent limitations included in the Tentative Order are inconsistent with the State Policy for Water Quality Control: Toxicity Provisions (Statewide Toxicity Provisions). CVCWA requests that the most sensitive species for both the acute and chronic toxicity maximum daily effluent limitation (MDEL) and the monthly median effluent limitation (MMEL), respectively, be identified in the limitation.

RESPONSE: Staff concur with CVCWA's request, and the proposed Order has been revised to identify the most sensitive species within the acute and chronic WET limitations; specifically, the chronic and acute WET limitations have been revised, as follows:

> **Acute Whole Effluent Toxicity MDEL.** No *Onocorhynchus mykiss* (rainbow trout) acute aquatic toxicity test shall result in a "Fail" at the acute Instream Waste Concentration (IWC) for the survival endpoint AND a percent effect for the survival endpoint greater than or equal to 50 percent. (section IV.A.1.d and Fact Sheet section IV.5.a.iii).
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> **Acute Whole Effluent Toxicity MMEL.** No more than one *Onocorhynchus mykiss* (rainbow trout) acute aquatic toxicity test initiated in a toxicity calendar month shall result in a "Fail" at the acute IWC for the survival endpoint. (section IV.A.1.e and Fact Sheet section IV.5.a.iii).
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> **Chronic Whole Effluent Toxicity MDEL.** No *Ceriodaphnia dubia* (water flea) chronic aquatic toxicity test shall result in a "Fail" at the chronic Instream Waste Concentration (IWC) for the sub-lethal endpoint measured in the test AND a percent effect for the survival endpoint greater than or equal to 50 percent. (section IV.A.1.f and Fact Sheet section IV.5.b.iii).
>
> **Chronic Whole Effluent Toxicity MMEL.** No more than one *Ceriodaphnia dubia* (water flea) chronic aquatic toxicity test initiated in a toxicity calendar month shall result in a "Fail" at the chronic IWC for any endpoint. (section IV.A.1.g and Fact Sheet section IV.5.b.iii).

CVCWA COMMENT #2 - The acute WET reasonable potential analysis should be based on consideration of dilution at the IWC (See Statewide Toxicity Provisions at 13.). CVCWA states there is no reasonable potential for acute toxicity and inclusion of acute WET MDEL and MMEL effluent limitations are not justified. Further, CVCWA states that the tentative Order developed acute WET limitations based on the State Implementation Policy (SIP), when "guidance in the SIP was superseded by the Statewide Toxicity Provisions."

RESPONSE: Staff do not concur. Reasonable potential for acute WET was conducted in accordance with section III.C.3. of the Statewide Toxicity Provisions. Section III.C.3.c.ii., of the Statewide Toxicity Provisions states, in part, "other information or data, including, but not limited to, fish die off observation, data using a different concentration than the IWC, lack of available dilution, water quality and beneficial uses of the receiving water, the presence of endangered or threatened species or critical habitat, or existing data on toxic pollutants, may be used by the permitting authority to determine if there is reasonable potential."

As stated in the tentative Order, "the Facility is a POTW that treats domestic wastewater containing ammonia and other toxic pollutants, and a mixing zone for acute and chronic aquatic life criteria was granted in the development of effluent limitations for ammonia, copper, zinc, cyanide, and chronic whole effluent toxicity. In addition, as discussed in Section IV.C.2.a., the receiving water supports aquatic life (fish) species that are recognized as threatened under both state and federal endangered species acts." These site-specific factors were considered in the Facility's acute WET reasonable potential analysis and support the determination of reasonable potential and the need for acute WET effluent limitations.

Further, the Discharger did not request an acute WET IWC of less than 100 percent effluent or supply information to support Staff consideration of analyzing an IWC of less than 100 percent effluent for reasonable potential determination. The Discharger has an existing acute WET effluent limitation and no mixing zone for acute whole effluent toxicity has been previously granted to the discharge; all available acute whole effluent toxicity test results are limited to analysis of 100 percent effluent. Should the permittee provide the appropriate information and request a different IWC, this permit may be reopened to adjust the IWC and/or limitations.

Lastly, Staff do not agree with CVCWA's statement that the tentative Order developed acute WET limitations based on the State Implementation Policy (SIP). Reference to the SIP is made in Fact Sheet section IV.5.a.ii; the reference is limited to acknowledging that the SIP dictates procedures for conducting a reasonable potential analysis for priority pollutants; however, the Fact Sheet goes on to note that acute toxicity is not a priority pollutant. Staff developed the acute WET limitations in accordance with section III.C.6. of the Statewide Toxicity Provisions; the tentative Order specifies the type of testing (e.g., the most sensitive species and the concentration of the IWC) that will be used to determine compliance with the acute toxicity effluent limitation.

CVCWA COMMENT #3 - The Tentative Order appropriately provides the Executive Officer with discretion to allow the temporary use of the next appropriate species as the most sensitive species. Unless and until laboratory performances using C. dubia chronic test results and recommendations improve, CVCWA recommends that the Tentative Order identify an alternative test species or that the Executive Officer exercise discretion to allow Dischargers to use the next appropriate test species.

RESPONSE: Staff do not concur. Per Section III.C.2.d of the Statewide Toxicity Provisions, the Executive Officer can allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation, and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. This option is included in Attachment E, Section V.C.6 of the proposed Order. Additional clarifying language has been added to Attachment E, section V.C.6 and section V.G.2 of the proposed Order, as shown below. To date, the Discharger has not submitted any documentation requesting a change to its most sensitive species. This option is available to them in the future. The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

Attachment E, section V.C.6 has been changed to add the following language:

> The Executive Officer has the authority to allow the temporary use of the next appropriate species as the most sensitive species when the discharger submits documentation, and the Executive Officer determines that the discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms. The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species. When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the “next appropriate species” is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species.

Attachment E, section V.G.2 has been changed to add the following language:

> The “next appropriate species” is a species in Table 1 of the Statewide Toxicity Provisions in the same test method classification (e.g., chronic aquatic toxicity test methods, acute aquatic toxicity test method), in the same salinity classification (e.g., freshwater or marine), and in the same taxon as the most sensitive species.

> When there are no other species in Table 1 in the same taxon as the most sensitive species (e.g., freshwater chronic toxicity tests), the "next appropriate species" is the species exhibiting the highest percent effect at the IWC tested in the species sensitivity screening other than the most sensitive species. The Executive Officer shall have discretion to allow the temporary use of the next appropriate species as the most sensitive species when the Discharger submits documentation and the Executive Officer determines that the Discharger has encountered unresolvable test interference or cannot secure a reliable supply of test organisms.

CVCWA COMMENT #4 – The Fact Sheet indicates that the minimum observed hardness was used in the calculation of trace metal criteria. This is an apparent departure from the approach used in other Central Valley permits, and significantly less discussion regarding hardness is provided in this permit than in the City's prior permit (R5-2019-0068). CVCWA respectfully requests a meeting with Regional Board staff to discuss the consideration of hardness in the RP analysis and effluent limit derivation for trace metals in the Tentative Order.

RESPONSE: Staff met with CVCWA to discuss Comment #4 on 10 January 2025. As explained in the Fact Sheet, Staff applied the appropriate ambient hardness for use in the calculation of trace metal criteria, consistent with the California Toxics Rule, State Implementation Policy, and Basin Plan. For a non-effluent dominated waterway, the design ambient hardness shall be an actual measured value from the receiving water. As stated in the tentative Order, receiving water hardness ranged from 30.5 mg/L as ($CaCO_3$) to 138 mg/L.

Staff technical review of effluent/receiving water data, metals criteria, and reasonable resultant downstream conditions using mass balance calculations indicate that using a receiving water hardness less than or equal to a reasonable measure of the minimum effluent hardness when deriving effluent limitations for these metals (copper, zinc) will meet CTR criteria in foreseeable dynamically changing circumstances. The CTR allows for one exceedance of criteria in a three-year period. Establishing limitations using the proposed ambient hardness meets this criteria.

The Discharger's effluent hardness ranged from 32.5 mg/L to 103 mg/L. The observed receiving water hardness of 30.5 mg/L was closest to (and lower than) the lowest observed effluent hardness concentration. Furthermore, when developing water quality-based effluent limitations when there is a mixing zone, typically the minimum upstream hardness is used to calculate the criteria. This is because the SIP requires that appropriate assimilative capacity be estimated when granting a mixing zone and dilution credits. For acute and chronic metals criteria, lower hardness essentially reduces the level of dissolved metal concentration that the receiving stream may carry and continue to meet CTR criteria. When assigning appropriate mixing zone parameters and dilution credits, minimum upstream hardness provides a reasonable measure of the criteria to ensure throughout changing conditions that final effluent

limits and assigned dilution credits are protective of the CTR criteria at the edge of the mixing zone. In this case, the Discharger's minimum receiving water hardness is the appropriate hardness to use as the "design ambient hardness" for both situations (with or without a mixing zone) since the Discharger's minimum effluent hardness was similar in concentration to the receiving water's minimum hardness.

CVCWA COMMENT #5 – 4,4-DDE
The Tentative Order states that the proposed effluent limits for 4,4-DDE are attainable (see Tentative Order at p. F-49). The effluent concentration of 4,4-DDE that was observed in one of four samples would not comply with the proposed effluent limits (see Tentative Order at pp. 5 and F-49). Additionally, no dilution credit was awarded in deriving the effluent limit for 4,4-DDE. Since the objective in question is a human health– based CTR objective, a human health–based dilution factor should be used in the derivation of effluent limits for 4,4-DDE, which would result in an achievable effluent limit based on available effluent data. CVCWA respectfully requests a meeting with Regional Board staff to further discuss this issue.

RESPONSE: Staff met with CVCWA to discuss Comment #5 on 10 January 2025. Effluent limitations for 4,4-DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene) are included in the tentative Order and are based on the CTR criterion for protection of human health for waters from which both water and organisms are consumed. The proposed effluent limitations were calculated with no dilution credits (i.e., end-of-pipe limits). The Discharger did not request dilution credits or supply information to support Staff consideration of granting a mixing zone for the 4,4,-DDE effluent limitations.

4,4-DDE, an organochlorine compound, is a breakdown product of the pesticide DDT (dichloro-diphenyl-trichloroethane). DDT is a banned substance in the United States and is noted for its potential to disrupt endocrine function in wildlife and toxicity to aquatic life. The Basin Plan's pesticide water quality objective states that pesticide concentrations in receiving waters shall not exceed the lowest levels technically and economically achievable. In addition, no individual pesticides shall be present in concentrations that adversely affect beneficial uses; discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses; and pesticide concentrations shall not exceed those allowable by applicable antidegradation policies.

The Discharger's existing human health mixing zones are for chlorodibromomethane, dichlorobromomethane, and nitrate plus nitrite. These mixing zones have been granted, in part, because the zones are as small as practicable and comply with the eleven mixing zone prohibitions under section 1.4.2.2.A of the SIP. A mixing zone credit for 4,4 DDE can be considered should the Discharger request it as a means of compliance with the effluent limitations. Since a human health mixing zone is already established for other constituents, much of the information needed to satisfy the conditions of the SIP has already been collected. However, information specific to this constituent must be considered in light of effluent and upstream conditions in order to

ensure compliance with water quality objectives outside of the mixing zone. Should the permittee provide the appropriate information and request a dilution credit, this permit may be reopened to allow a mixing zone and dilution credit for these constituents.

Analysis of the effluent data shows that the maximum effluent 4,4-DDE concentration of 0.027 µg/L (4,4-DDE) is greater than the proposed water quality-based effluent limitations. However, three out of the four samples collected between 2020 and 2021 for 4,4-DDE were reported as non-detect. Therefore, compliance with the final effluent limitations for 4,4-DDE is potentially achievable; especially given that the parent material should no longer be in circulation. However, given the risk of potential non-compliance, the permittee should consider requesting a time schedule order and interim limitations while information is collected to ensure full compliance.

Staff Revisions

1. **Grammatical and Typographical Corrections.**

   Staff has made grammatical and typographical corrections to the proposed Order for clarity.

2. **Rational for Receiving Water Limitations - Groundwater**

   Fact Sheet section V.B.1 was revised from “Constituent concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding salinity,” to “The Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding salinity.”

3. **Construction, Operation, and Maintenance Specifications**

   Fact Sheet section VI.B.4.a. Construction, Operation, and Maintenance Specifications (F-67). The rationale was updated to include reference to “sludge stabilization ponds.”

4. **Other Special Provisions**

   The volume of the emergency storage pond was revised from 3 million gallons to 3.8 million gallons in Section VI.C.6.a., Other Special Provisions.