CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2017-XXXX

AMENDING WASTE DISCHARGE REQUIREMENTS
ORDER R5-2015-0068 (NPDES PERMIT NO. CA0081621)
AND RESCISSION OF CEASE AND DESIST ORDER R5-2014-0044

DONNER SUMMIT PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT PLANT
NEVADA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. The Donner Summit Public Utility District Wastewater Treatment Plant (Facility) is a Publicly-Owned Treatment Works, owned and operated by the Donner Summit Public Utility District (Discharger). The Discharger provides sewerage service for the Donner Summit Public Utility District, the Norden and Soda Springs areas, the Sugar Bowl and Soda Springs Ski Resorts, the Serene Lakes subdivision, Sierra Lakes County Water District, and CalTrans rest areas and serves a population of approximately 2,000. The treatment system consists of influent flow equalization, preliminary treatment, conventional activated sludge process, lime addition equipment to control pH, biological treatment with membrane bioreactors plus filtration, and ultraviolet light (UV) disinfection. Disinfected tertiary treated municipal wastewater is used to spray irrigate a portion of the Soda Springs Ski Area. Tertiary treated effluent can also be discharged to the South Yuba River, a water of the United States, within the Upper Yuba watershed, from 1 October through 31 July. Discharge of wastewater to the South Yuba River is prohibited from 1 August to 30 September.

2. On 28 March 2014, the Central Valley Water Board adopted Cease and Desist Order R5-2014-0044 (CDO), providing a time schedule for the Discharger to comply with final effluent limitations for aluminum, ammonia, copper, cyanide, dichlorobromomethane, manganese, nitrate, silver, and zinc prescribed in Waste Discharge Requirements (WDRs) Order R5-2009-0034, NPDES Permit No. CA0081621. The CDO provided interim effluent limitations for these constituents and required completion of construction of a Facility upgrade project by 31 December 2014. The CDO requires that the Discharger comply with the final effluent limitations for aluminum, copper, and zinc by 31 December 2017.

3. On 4 June 2015, the Central Valley Water Board adopted WDRs Order R5-2015-0068, renewing NPDES Permit No. CA0081621 that prescribes waste discharge requirements for the Discharger. Order R5-2015-0068 contains revised final effluent limitations for aluminum, ammonia, and copper, and new final effluent limitations for nitrate plus nitrite.

4. Order R5-2015-0068 includes final effluent limitations for ammonia and nitrate plus nitrite because the treatment of domestic wastewater has the potential to discharge ammonia and nitrate and the Central Valley Water Board finds that requiring water quality-based effluent limitations for these constituents is necessary to maintain the integrity and beneficial uses of receiving waters. However, the Facility has demonstrated that it can consistently comply

with the final effluent limitations for ammonia and nitrate (regulated as nitrate plus nitrite); therefore, the Discharger is in compliance with the CDO regarding ammonia and nitrate.

5. Order R5-2015-0068 includes final effluent limitations for manganese because manganese in the discharge exceeded the applicable water quality objectives. However, the excursion of the water quality objectives occurred prior to the Facility upgrade project. Since the completion of the Facility upgrade project, the Facility can consistently comply with the final effluent limitations for manganese and therefore, the Discharger is in compliance with the CDO regarding manganese.

6. Order R5-2015-0068 included the removal of final effluent limitations for cyanide, dichlorobromomethane, silver, and zinc because the discharge no longer demonstrated reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for these constituents. Therefore, the Discharger is in compliance with the CDO regarding cyanide, dichlorobromomethane, silver, and zinc.

7. Order R5-2015-0068 includes final effluent limitations for aluminum because aluminum in the discharge exceeded the applicable water quality objectives. However, the excursion of the water quality objectives occurred prior to the Facility upgrade project. Central Valley Water Board staff conducted a reasonable potential analysis for aluminum based on the new data collected since the completion of the Facility upgrade project. The reasonable potential analysis demonstrated that the discharge no longer exhibits reasonable potential for aluminum to cause or contribute to exceedance of the aluminum water quality objective. Therefore, this Order amends Order R5-2015-0068 to remove the final effluent limitations and monthly compliance effluent monitoring requirements for aluminum.

8. The CDO required the Discharger to submit a site-specific water quality study work plan to comply with final effluent limitations for copper by 1 May 2016 and requires full compliance with the final effluent limitations for copper by 31 December 2017. The Discharger submitted a *Copper Water-Effect Ratio Study Work Plan* dated 12 April 2016 and *DSPUD Copper Water-Effect Ratio Study* (Study) dated 17 November 2016. The Study is in accordance with applicable USEPA guidance (i.e., EPA-822-R-01-005 and EPA-821-R-02-012), and the results concluded that a site-specific water-effects ratio (WER) of 2.72 for total recoverable copper and for dissolved copper apply to the discharge.

   The influent hardness to the Facility is relatively low; therefore, the Discharger operates a lime-feed system in order to provide the alkalinity necessary for ammonia removal. The lime-feed system provides the added benefit of increasing the hardness of the effluent thereby reducing the toxicity of copper in the discharge.

   Central Valley Water Board staff conducted a reasonable potential analysis for copper based on the increased hardness, the effluent copper samples from the upgraded Facility, and the site-specific WER of 2.72. The reasonable potential analysis demonstrated that reasonable potential no longer exists for copper to cause or contribute to exceedance of the copper water quality objective. Therefore, this Order amends Order R5-2015-0068 to remove the final effluent limitations and monthly compliance effluent monitoring requirements for copper.

9. For the reasons detailed above, the Discharger is in compliance with the CDO, the CDO is no longer necessary; therefore, the CDO is rescinded by this Order.

10. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to modify a NPDES permit (*Pacific Water Conditioning Ass'n, Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.).

11. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend the NPDES permit and rescind the CDO for this discharge and has provided them with an opportunity to submit written comments.

IT IS HEREBY ORDERED THAT:

1. Cease and Desist Order R5-2014-0044 is rescinded upon the effective date of this Order except for enforcement purposes.

2. Waste Discharge Requirements Order R5-2015-0068 (NPDES No. CA0081621) is amended in order to remove effluent limitations and regular effluent monitoring for copper.

Effective immediately upon adoption, Order R5-2015-0068 is amended as shown in Items a through v below:

a. Change the Order number throughout to R5-2015-0068-01.

b. Cover Page. Modify the paragraph above the signatory line on the Cover Page, as shown in underline format below:

> I, Pamela C. Creedon, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **4 June 2015, and amended by Order R5-2017-XXXX on XX December 2017**.

c. Effluent Limitations and Discharge Specifications. Modify Table 4, in part, in section IV.A.1.a of the Limitations and Discharge Requirements, as shown in strikeout format below:

Table 4. Effluent Limitations – Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
~~Copper, Total Recoverable~~	~~µg/L~~	~~1.8~~	~~--~~	~~3.1~~	~~--~~	~~--~~

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
~~Aluminum, Total Recoverable~~	~~µg/L~~	~~49~~	~~110~~	~~--~~	~~--~~	~~--~~

d. Special Provisions. Modify section VI.C.1.e of the Limitations and Discharge Requirements, as shown in underline/strikeout format below:

e. **Water Effects Ratios (WER) and Metal Translators.** With the exception of copper, a~~A~~ default WER of 1.0 has been used in this Order for calculating criteria for applicable inorganic constituents. The Discharger conducted a site-specific WER for copper (*DSPUD Copper Water-Effect Ratio Study* prepared by Stantec, dated 17 November 2016), in accordance with applicable USEPA guidance (i.e., EPA-822-R-01-005 and EPA-821-R-02-012), and the results concluded that a site-specific WER of 2.72 for total recoverable copper and for dissolved copper apply to the discharge. Based on this new information, the Central Valley Water Board adopted an amendment to Order R5-2017-XXXX on XX December 2017 and effluent limitations and monthly compliance monitoring for copper were removed. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total recoverable when developing effluent limitations for ~~copper and~~ lead. If the Discharger performs additional studies to determine site-specific WER's and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

e. Effluent Monitoring Requirements. Modify Table E-3, in part, in section IV.A.1 of Attachment E - Monitoring and Reporting Program, as shown in strikeout format below:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
~~Copper, Total Recoverable~~	~~µg/L~~	~~Grab~~	~~1/Month~~[5]	~~2,6~~
~~Aluminum, Total Recoverable~~	~~µg/L~~	~~Grab~~	~~1/Month~~[5]	~~2,7~~

~~7 Compliance with the final effluent limitations for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's *Ambient Water Quality Criteria for Aluminum* document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.~~

f. Rational for Effluent Limitations and Discharge Specifications. Modify section IV.C.2.e, in part, including Table F-5 and Table F-13, of Attachment F – Fact Sheet, as shown in underline/strikeout format below:

The upstream receiving water hardness varied from <5 mg/L to 44 mg/L, based on 226 samples from July 2011 to June 2014. Downstream receiving water hardness varied from 8 mg/L to 74 mg/L, based on 65 samples from July 2011 to June 2014. The effluent hardness varied from 48 mg/L to 224 mg/L, based on 60 samples from July 2011 to June 2014. For calculating the CTR criteria the downstream ambient hardness has been used. The SIP, CTR, and State Water Board do not require use of the minimum observed ambient hardness in the CTR equations. The hardness used must be consistent with design conditions and protective of water quality criteria under all flow conditions. The South Yuba River is not effluent dominated during periods when discharges occur. Therefore, the median downstream hardness of 20 mg/L, which represents typical conditions in the receiving water, was used to calculate CTR criteria that are fully protective of aquatic life under all flow conditions for ~~all of~~ the CTR metals: cadmium, chromium III, lead, nickel, silver, and zinc.

The Facility discharges both hardness and metals, which must be considered in the downstream ambient receiving water to ensure the criteria are protective under all flow conditions. The tables below examine how the downstream ambient conditions change with varying mixtures of effluent and upstream receiving water. The calculations determine whether or not toxicity could result from one or more metals using the selected design ambient hardness to calculate the CTR criteria.

A simple mass balance (Equation 2) is used to model the ambient concentrations of hardness and metals in the receiving water downstream of the discharge for all possible mixtures of effluent and upstream receiving water under all flow conditions.

$$C_{downstream} = C_{upstream} \times (1\text{-}MIX) + C_{effluent} \times (MIX) \quad \text{(Equation 2)}^{1}$$

Where:

$C_{downstream}$ = Downstream receiving water concentration

$C_{upstream}$ = Upstream receiving water concentration

$C_{effluent}$ = Effluent concentration

MIX = Fraction of effluent in downstream ambient receiving water

For each of several downstream ambient mixtures of upstream receiving water and effluent, the potential for toxicity is examined. The hardness of the mixture is calculated, and the resultant water quality criterion is calculated from the CTR equation. The metals concentration is also calculated for the mixture of upstream receiving water and effluent. If the metals concentration complies with the CTR criterion for that mixture, the ambient mixture is not toxic, and "Yes" is indicated in the far right column. If the metals concentration exceeds the CTR criterion for that mixture, the ambient concentration is toxic, and "No" is indicated in the far right column. The results of these evaluations are summarized in Table F-13.

For ~~this~~the evaluation of cadmium, chromium III, lead, nickel, silver, and zinc, the following conservative assumptions have been made:

- Upstream receiving water at the median observed upstream receiving water hardness (i.e., 20 mg/L).

- No assimilative capacity for each metal in the upstream receiving water (i.e., metals concentration equal to CTR criteria calculated using a hardness of 20 mg/L).
- Effluent hardness at the lowest observed effluent hardness of 48 mg/L.

The following tables (F-5 through F-12) demonstrate that the selected design ambient hardness used to calculate the CTR criteria result in protective criteria for all flow conditions (i.e., the mixed downstream ambient metals concentrations do not exceed the CTR criteria). Table F-13 summarizes the design ambient hardness for each metal.

For copper, this permit was amended in 2017 using the current dataset available for the upgraded Facility (dataset from 1 January 2015 through 31 July 2017). The upgraded Facility uses a lime-feed system to increase the low hardness of the influent to the Facility. With the lime-feed system operating properly, the effluent hardness ranged from 128 mg/L to 252 mg/L, with an average effluent hardness of 188 mg/L.

Table F-5. Copper Evaluation (Design Ambient Hardness = ~~20~~128 mg/L)[7]

Assumed Upstream Receiving Water Copper Concentration				~~0.72~~1.1 µg/L[48]
Copper Chronic Criterion[2,7]				~~2.4~~12 µg/L
Mix[6,7]		Mixed Downstream Ambient Concentration			Complies with CTR Criteria
		Hardness [3,7] (mg/L)	CTR Criteria [4,7] (µg/L)	Copper [5,7] (µg/L)	
High Flow ↓ Low Flow	1%	~~5.4~~9.2	~~0.77~~1.2	~~0.74~~1.2	Yes
	5%	~~7.2~~14	~~0.98~~1.7	~~0.80~~1.6	Yes
	15%	~~11~~26	~~1.5~~3.0	~~0.97~~2.6	Yes
	25%	~~16~~38	~~1.9~~4.1	~~1.1~~3.7	Yes
	50%	~~27~~68	~~2.9~~6.7	~~1.5~~6.3	Yes
	75%	~~37~~98	~~4.0~~9.2	~~2.0~~8.9	Yes
	100%	~~48~~128	~~5.0~~11.5	~~2.4~~11.5	Yes

Footnotes for CTR Hardness-dependent Metals Tables (F-5 through F-12)

7 New data from 1 January 2015 through 31 July 2017 was used for the Copper Evaluation during the 2017 permit amendment (see also section IV.C.3.a.ii).

8 Highest assumed downstream receiving water metals concentration calculated using CTR equation (Equation 1) for chronic/ acute criterion at a hardness of 8 mg/L.

Table F-13. Summary of Design Ambient Hardness and CTR Criteria for Hardness-dependent Metals

CTR Metals	Design Ambient Hardness (mg/L)	CTR Criteria (µg/L, total recoverable)[1]	
		acute	chronic
Copper	~~20~~128	~~3.1~~48[2]	~~2.~~431[2]
Chromium III	20	470	55
Cadmium	20	0.74	0.70
Lead	20	11	0.41
Nickel	20	120	13
Silver	20	0.25	--
Zinc	20	31	31

[1] Metal criteria rounded to two significant figures in accordance with the CTR.

[2] Acute and chronic criteria for copper adjusted using the approved site-specific WER of 2.72 (see section VI.C.1.e).

g. Rational for Effluent Limitations and Discharge Specifications. Add section IV.C.3.a.ii to Attachment F – Fact Sheet, as shown in underline format below: The subsequent sections were also renumbered accordingly.

ii. **Aluminum**

(a) **WQO.** The State Water Board, Division of Drinking Water (DDW) has established Secondary MCL's to assist public drinking water systems in managing their drinking water for aesthetic conditions such as taste, color, and odor. The Secondary MCL for aluminum is 200 µg/L for protection of the MUN beneficial use. Title 22 requires compliance with Secondary MCL's on an annual average basis.

The Code of Federal Regulations promulgated criteria for priority toxic pollutants for California's surface waters as part of section 131.38 Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (California Toxics Rule or CTR), including metals criteria. However, aluminum criteria were not promulgated as part of the CTR. Absent numeric aquatic life criteria for aluminum, WQBEL's in the Central Valley Region's NPDES permits are based on the Basin Plans' narrative toxicity objective. The Basin Plans' *Policy for Application of Water Quality Objectives* requires the Central Valley Water Board to consider, "*on a case-by-case basis, direct evidence of beneficial use impacts, all material and relevant information submitted by the discharger and other interested parties, and relevant numerical criteria and guidelines developed and/or published by other agencies and organizations. In considering such criteria, the Board evaluates whether the specific numerical criteria which are available through these sources and through other information supplied to the Board, are relevant and appropriate to the situation at hand and, therefore, should be used in determining compliance with the narrative objective*." Relevant information includes, but is not limited to (1) U.S. EPA NAWQC and subsequent Correction, (2) site-specific conditions

of the South Yuba River, the receiving water, and (3) site-specific aluminum studies conducted by dischargers within the Central Valley Region. (Basin Plan, p.IV.17.00; see also, 40 C.F.R. 122.44(d)(vi).)

U.S. EPA NAWQC. U.S. EPA recommended the NAWQC aluminum acute criterion at 750 µg/L based on test waters with a pH of 6.5 to 9.0. U.S. EPA also recommended the NAWQC aluminum chronic criterion at 87 µg/L based upon receiving waters with low hardness.

(b) **RPA Results.** For priority pollutants, the SIP dictates the procedures for conducting the RPA. Aluminum is not a priority pollutant. Therefore, the Central Valley Water Board is not restricted to one particular RPA method. Due to the site-specific conditions of the discharge, the Central Valley Water Board has used its judgment in determining the appropriate method for conducting the RPA for this non-priority pollutant constituent. The most stringent objective is the NAWQC chronic criterion. The RPA was conducted based on the maximum observed effluent aluminum concentration. The maximum background concentration was 85.7 µg/L (based on the dataset from July 2011 to July 2017) and the maximum effluent aluminum concentration was 81 µg/L based on 31 samples collected between 1 January 2015 and 1 August 2017. Therefore, aluminum in the discharge does not have reasonable potential to cause or contribute to an in-stream excursion above the water quality criteria. Removal of aluminum effluent limitations is in accordance with federal anti-backsliding requirements (see section IV.D.3 of the Fact Sheet).

h. Rational for Effluent Limitations and Discharge Specifications. Add section IV.C.3.a.iii to Attachment F – Fact Sheet, as shown in underline format below: The subsequent sections were also renumbered accordingly.

iii. **Copper**

(a) **WQO.** The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for copper. These criteria for copper are presented in dissolved concentrations. USEPA recommends conversion factors to translate dissolved concentrations to total concentrations.

The Discharger conducted a site-specific WER for copper (*DSPUD Copper Water-Effect Ratio Study* prepared by Stantec, dated 17 November 2016) in accordance with applicable USEPA guidance (i.e., EPA-822-R-01-005 and EPA-821-R-02-012), and the results concluded that a site-specific WER of 2.72 for total recoverable copper and for dissolved copper apply to the discharge. This site-specific WER of 2.72 is used in place of the default WER.

(b) **RPA Results.** Section IV.C.2.e of this Fact Sheet includes procedures for conducting the RPA for hardness-dependent CTR metals, such as copper. The CTR includes hardness-dependent criteria for copper for the receiving water. The upstream receiving water hardness and reasonable worst-case downstream hardness, plus the site-specific WER of 2.72, were used to calculate the criteria. The acute criterion and chronic criterion were calculated to be 48 µg/L and 31 µg/L, respectively. The maximum background concentration was 1.2 µg/L (based on the

dataset from 1 July 2011 to 31 July 2017) and the MEC is 23.4 µg/L from 54 effluent samples obtained between 1 January 2015 and 31 July 2017. Therefore, copper in the discharge does not have reasonable potential to cause or contribute to an in-stream excursion above the water quality criteria. Removal of copper effluent limitations is in accordance with federal anti-backsliding requirements (see section IV.D.3 of the Fact Sheet).

i. Rational for Effluent Limitations and Discharge Specifications. Modify section IV.C.3.b of Attachment F – Fact Sheet, as shown in strikeout format below:

b. Constituents with Reasonable Potential. The Central Valley Water Board finds that the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard for ~~aluminum,~~ ammonia, BOD_5, ~~copper,~~ lead, manganese, nitrate plus nitrite, pH, total coliform organisms, and TSS. WQBEL's for these constituents are included in this Order. A summary of the RPA is provided in Attachment G, and a detailed discussion of the RPA for each constituent is provided below.

j. Rational for Effluent Limitations and Discharge Specifications. Modify section IV.C.3.b.i of Attachment F – Fact Sheet, as shown in strikeout format below: The subsequent sections were also renumbered accordingly.

~~i.~~ ~~**Aluminum**~~

~~Aluminum is the third most abundant element in the earth's crust and is ubiquitous in both soils and aquatic sediments. When mobilized in surface waters, aluminum has been shown to be toxic to various fish species. However, the potential for aluminum toxicity in surface waters is directly related to the chemical form of aluminum present, and the chemical form is highly dependent on water quality characteristics that ultimately determine the mechanism of aluminum toxicity. Surface water characteristics, including pH, temperature, colloidal material, fluoride and sulfate concentrations, and total organic carbon, all influence aluminum speciation and its subsequent bioavailability to aquatic life. Calcium [hardness] concentrations in surface water may also reduce aluminum toxicity by competing with monomeric aluminum (Al^{3+}) binding to negatively charged fish gills.~~

~~(a) **WQO.** The State Water Board, Division of Drinking Water (DDW) has established Secondary MCL's to assist public drinking water systems in managing their drinking water for aesthetic conditions such as taste, color, and odor. The Secondary MCL for aluminum is 200 µg/L for protection of the MUN beneficial use. Title 22 requires compliance with Secondary MCL's on an annual average basis.~~

~~The Code of Federal Regulations promulgated criteria for priority toxic pollutants for California's surface waters as part of section 131.38 Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (California Toxics Rule or CTR), including metals criteria. However, aluminum criteria were not promulgated as part of the CTR. Absent numeric aquatic life criteria for aluminum, WQBEL's in the Central Valley Region's NPDES permits are based on the Basin Plans' narrative toxicity objective. The~~

~~Basin Plans' *Policy for Application of Water Quality Objectives* requires the Central Valley Water Board to consider, "*on a case-by-case basis, direct evidence of beneficial use impacts, all material and relevant information submitted by the discharger and other interested parties, and relevant numerical criteria and guidelines developed and/or published by other agencies and organizations. In considering such criteria, the Board evaluates whether the specific numerical criteria which are available through these sources and through other information supplied to the Board, are relevant and appropriate to the situation at hand and, therefore, should be used in determining compliance with the narrative objective*." Relevant information includes, but is not limited to (1) U.S. EPA NAWQC and subsequent Correction, (2) site-specific conditions of the South Yuba River, the receiving water, and (3) site-specific aluminum studies conducted by dischargers within the Central Valley Region. (Basin Plan, p.IV.17.00; see also, 40 C.F.R. 122.44(d)(vi).)~~

~~**U.S. EPA NAWQC**. U.S. EPA recommended the NAWQC aluminum acute criterion at 750 µg/L based on test waters with a pH of 6.5 to 9.0. U.S. EPA also recommended the NAWQC aluminum chronic criterion at 87 µg/L based upon the following two toxicity tests. All test waters contained hardness at 12 mg/L as $CaCO_3$.~~

~~(1) Acute toxicity tests at various aluminum doses were conducted in various acidic waters (pH 6.0 – 6.5) on 159- and 160-day old striped bass. The 159-day old striped bass showed no mortality in waters with pH at 6.5 and aluminum doses at 390 µg/L, and the 160-day old striped bass showed 58% mortality at a dose of 174.4 µg/L in same pH waters. However, the 160-day old striped bass showed 98% mortality at aluminum dose of 87.2 µg/L in waters with pH at 6.0, which is U.S. EPA's basis for the 87 µg/L chronic criterion. The varied results draw into question this study and the applicability of the NAWQC chronic criterion of 87 µg/L.~~

~~(2) Chronic toxicity effects on 60-day old brook trout were evaluated in circumneutral pH waters (6.5-6.9 pH) in five cells at various aluminum doses (4, 57, 88, 169, and 350 µg/L). Chronic evaluation started upon hatching of eyed eggs of brook trout, and their weight and length were measure after 45 days and 60 days. The 60-day old brook trout showed 24% weight loss at 169 µg/L of aluminum and 4% weight loss at 88 µg/L of aluminum, which is the basis for U.S. EPA's chronic criteria. Though this test study shows chronic toxic effects of 4% reduction in weight after exposure for 60-days, the chronic criterion is based on 4-day exposure; so again, the applicability of the NAWQC chronic criterion of 87 µg/L is questionable.~~

~~**Site-specific Conditions.** U.S. EPA advises that a water effects ratio may be more appropriate to better reflect the actual toxicity of aluminum to aquatic organisms when the pH and hardness conditions of the receiving water are not similar to that of the test conditions.[1] Effluent and South Yuba River monitoring~~

~~[1] "The value of 87 micro-g/L is based on a toxicity test with striped bass in water with pH = 6.5-6.6 and hardness < 10 mg/L. Data in [a 1994 Study] indicate that aluminum is substantially less toxic at higher~~

~~data indicate that the pH and hardness values are similar to the low pH and hardness conditions under which the chronic criterion for aluminum was developed, as shown in the table below. The pH of the South Yuba River, the receiving water, ranged from 5.4 to 9.2 with a median of 7.1 based on 226 monitoring results obtained between 5 July 2011 and 16 June 2014. These water conditions typically are circumneutral pH where aluminum is predominately in the form of $Al(OH)_3$ and non-toxic to aquatic life. The hardness of the South Yuba River ranged from not detected to 44 mg/L, based on 235 samples from 5 July 2011 to 16 June 2014.~~

~~Parameter~~	~~Units~~	~~Test Conditions for Applicability of Chronic Criterion~~	~~Effluent~~	~~Receiving Water~~
~~pH~~	~~standard units~~	~~6.0 – 6.5~~	~~6.5 – 7.8~~	~~5.4 – 9.2~~
~~Hardness, Total (as $CaCO_3$)~~	~~mg/L~~	~~12~~	~~48 – 224~~	~~ND – 44~~
~~Aluminum, Total Recoverable~~	~~µg/L~~	~~87.2 - 390~~	~~ND – 1,970~~	~~47 – 85.1~~

~~**Local Environmental Conditions and Studies.** Twenty-one site-specific aluminum toxicity tests have been conducted within the Central Valley Region. The pH and hardness of the South Yuba River are similar to those at the City of Auburn discharge, as shown in the table below, and thus the results of these site-specific aluminum toxicity tests are relevant and appropriate for the South Yuba River. As shown in the following table, all EC_{50}[1] toxicity study result values are at concentrations of aluminum above 5,000 µg/L. Thus, the toxic effects of aluminum in these surface waters is less toxic (or less reactive) to aquatic species then demonstrated in the toxicity tests that U.S. EPA used for the basis of establishing the chronic criterion of 87 µg/L. This new information, and review of the toxicity tests U.S. EPA used to establish the chronic criterion, indicates that 87 µg/L may be overly stringent but may be applicable to the South Yuba River.~~

~~Central Valley Region Site-Specific Aluminum Toxicity Data~~

~~Discharger~~	~~Test Waters~~	~~Hardness Value~~	~~Total Aluminum EC_{50} Value~~	~~pH~~	~~WER~~
~~***Oncorhynchus mykiss* (rainbow trout)~~					
~~Manteca~~	~~Surface Water/Effluent~~	~~124~~	~~>8600~~	~~9.14~~	~~N/C~~
~~Auburn~~	~~Surface Water~~	~~16~~	~~>16500~~	~~7.44~~	~~N/C~~
~~Modesto~~	~~Surface Water/Effluent~~	~~120/156~~	~~>34250~~	~~8.96~~	~~>229~~
~~Yuba City~~	~~Surface Water/Effluent~~	~~114/164[1]~~	~~>8000~~	~~7.60/7.46~~	~~>53.5~~

~~pH and hardness, but the effects of pH and hardness are not well quantified at this time." U.S. EPA 1999 NAWQC Correction, Footnote L~~

~~[1] The effect concentration is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g. death, immobilization, or serious incapitation) in a given percent of the test organisms, calculated from a continuous model (e.g. Probit Model). EC_{50} is a point estimate of the toxicant concentration that would cause an observable adverse effect in 50 percent of the test organisms. The EC_{50} is used in toxicity testing to determine the appropriate chronic criterion.~~

Discharger	Test Waters	Hardness Value	Total Aluminum EC_{50} Value	pH	WER
***Ceriodaphnia dubia* (water flea)**					
Auburn	Effluent	99	>5270	7.44	>19.3
	Surface Water	16	>5160	7.44	>12.4
Manteca	Surface Water/Effluent	124	>8800	9.14	N/C
	Effluent	117	>8700	7.21	>27.8
	Surface Water	57	7823	7.58	25.0
	Effluent	139	>9500	7.97	>21.2
	Surface Water	104	>11000	8.28	>24.5
	Effluent	128	>9700	7.78	>25.0
	Surface Water	85	>9450	7.85	>25.7
	Effluent	106	>11900	7.66	>15.3
	Surface Water	146	>10650	7.81	>13.7
Modesto	Surface Water/Effluent	120/156	31604	8.96	211
Yuba City	Surface Water/Effluent	114/164[1]	>8000	7.60/7.46	>53.5
Placer County (SMD 1)	Effluent	150	>5000	7.4 – 8.7	>13.7
***Daphnia magna* (water flea)**					
Manteca	Surface Water/Effluent	124	>8350	9.14	N/C
Modesto	Surface Water/Effluent	120/156	>11900	8.96	>79.6
Yuba City	Surface Water/Effluent	114/164[1]	>8000	7.60/7.46	>53.5

The Discharger has not conducted a toxicity test for aluminum; however, the City of Auburn conducted two toxicity tests in Auburn Ravine, shown in the previous table. The City of Auburn is located at an elevation of approximately 1,400 feet above sea level, and is surrounded by forest. As shown, the test water quality characteristics of Auburn Ravine are similar to those in the South Yuba River, with the pH at 7.4 and hardness at 16 mg/L as $CaCO_3$ in comparison to the mean pH at 7.17 and the minimum hardness not detected (mean hardness at 17.6 mg/L) as $CaCO_3$, respectively. Thus, results of site-specific studies conducted in Auburn Ravine would represent conservative assumptions for the South Yuba River since the South Yuba River's water quality characteristics (pH and hardness) are similar. Thus, based on these two similar primary water quality characteristics (pH and hardness) that drive aluminum speciation, the aluminum toxicity within Auburn Ravine is expected to be similar in the South Yuba River. The Auburn Ravine aluminum toxicity study resulted in a site-specific aluminum objective at 1,079 µg/L. Although the conditions in the South Yuba River may be similar to those in Auburn Ravine, the Central Valley Water Board finds that additional toxicity studies are necessary to determine if the chronic criterion of 87 µg/L is not applicable in the South Yuba River.

(b) **RPA Results.** For priority pollutants, the SIP dictates the procedures for conducting the RPA. Aluminum is not a priority pollutant. Therefore, the Central Valley Water Board is not restricted to one particular RPA method. Due to the site-specific conditions of the discharge, the Central Valley Water Board has used its judgment in determining the appropriate method for conducting the

~~RPA for this non-priority pollutant constituent. The most stringent objective is the NAWQC chronic criterion. The RPA was conducted based on the maximum observed effluent aluminum concentration. The maximum effluent aluminum concentration was 1,970 µg/L based on 31 samples collected between July 2011 and June 2014. Therefore, aluminum in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the NAWQC chronic criterion.~~

~~(c) **WQBEL's.** This Order contains a final average monthly effluent limitation (AMEL) and average weekly effluent limitation (AWEL) for aluminum of 49 µg/L and 110 µg/L respectively, based on the NAWQC chronic criterion.~~

~~(d) **Plant Performance and Attainability.** Analysis of the effluent data shows that the MEC of 1,970 µg/L is greater than the applicable WQBEL's. Based on the sample results for the effluent, the limitations appear to put the Discharger in immediate non-compliance. Cease and Desist Order (CDO) R5-2015-0044 provides a compliance schedule to achieve compliance with the final effluent limitations for aluminum by 31 December 2017, in accordance with Water Code section 13300, that requires preparation and implementation of a pollution prevention plan in compliance with Water Code section 13263.3.~~

k. Rational for Effluent Limitations and Discharge Specifications. Modify section IV.C.3.b.iii of Attachment F – Fact Sheet, as shown in strikeout format below: The subsequent sections were also renumbered accordingly.

~~iii. **Copper**~~

~~(e) **WQO.** The CTR includes hardness-dependent criteria for the protection of freshwater aquatic life for copper. These criteria for copper are presented in dissolved concentrations, as 1-hour acute criteria and 4-day chronic criteria. U.S. EPA recommends conversion factors to translate dissolved concentrations to total concentrations. Default U.S. EPA translators were used to calculate the criteria. As discussed in section IV.C.2.e of this Fact Sheet, the applicable acute and chronic criteria for copper are 3.1 µg/L and 2.4 µg/L, respectively.~~

~~(f) **RPA Results.** The MEC for copper was 10.2 µg/L based on 31 samples collected between July 2011 and June 2014. The maximum observed upstream receiving water concentration for copper was 1.2 µg/L based on two samples collected between July 2011 and June 2014. Therefore, copper in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for the protection of freshwater aquatic life.~~

~~(g) **WQBEL's.** This Order contains a final AMEL and MDEL for copper of 1.8 µg/L and 3.1 µg/L, respectively, based on the CTR criterion for the protection of freshwater aquatic life.~~

~~(h) **Plant Performance and Attainability.** Analysis of the effluent data shows that the MEC of 10.2 µg/L is more than the applicable WQBEL's. Based on the sample results for the effluent, the limitations appear to put the Discharger in immediate non-compliance. CDO R5 2015-0044 provides a compliance schedule to achieve compliance with the final effluent limitations for copper by 31 December 2017, in accordance with Water Code section 13300, that requires~~

~~preparation and implementation of a pollution prevention plan in compliance with Water Code section 13263.3.~~

l. WQBEL Calculations. Modify section IV.C.4.a of Attachment F – Fact Sheet, as shown in strikeout format below:

4. WQBEL Calculations

a. This Order includes WQBELs for ~~aluminum,~~ ammonia, BOD_5, ~~copper,~~ lead, manganese, nitrate plus nitrite, pH, total coliform organisms, and TSS. The general methodology for calculating WQBEL's based on the different criteria/objectives is described in subsections IV.C.4.b through e, below. See Attachment H for the WQBEL calculations.

m. WQBEL Calculations. Modify Table F-15, in part, in section IV.C.4.e of Attachment F – Fact Sheet, as shown in strikeout format below:

Table F-15. Summary of Water Quality-Based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
~~Copper, Total Recoverable~~	~~µg/L~~	~~1.8~~	~~--~~	~~3.1~~	~~--~~	~~--~~
~~Aluminum, Total Recoverable~~	~~µg/L~~	~~49~~	~~110~~	~~--~~	~~--~~	~~--~~

n. Final Effluent Limitation Considerations. Modify section IV.D.2, in part, of Attachment F – Fact Sheet, as shown in strikeout format below:

2. Averaging Periods for Effluent Limitations

40 C.F.R. section 122.45(d) requires AWEL's and AMEL's for POTW's unless impracticable. For priority pollutants (i.e., ~~copper and~~ lead), this Order includes AMEL's and MDEL's as required by the SIP. For BOD_5, pH, and TSS, AWEL's have been replaced or supplemented with effluent limitations utilizing shorter averaging periods. The rationale for using shorter averaging periods for these constituents is discussed in section IV.C.3 of this Fact Sheet.

o. Final Effluent Limitation Considerations. Modify section IV.D.3, in part, of Attachment F – Fact Sheet, as shown in underline/strikeout format below: Section IV.D.3.b is also renumbered accordingly.

3. Satisfaction of Anti-Backsliding Requirements

The CWA specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified

based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l).

The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, manganese, silver, and zinc. The effluent limitations for these pollutants are less stringent than those in Order R5-2009-0034. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

a. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits "*except in compliance with Section 303(d)(4).*" CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.

   i. For waters where standards are not attained, CWA section 303(d)(4)(A) specifies that any effluent limit based on a TMDL or other WLA may be revised only if the cumulative effect of all such revised effluent limits based on such TMDL's or WLAs will assure the attainment of such water quality standards.

   ii. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

   The South Yuba River is considered an attainment water for aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, manganese, silver, and zinc because the receiving water is not listed as impaired on the 303(d) list for these constituents[1]. As discussed in section IV.D.4, below, removal and relaxation of the effluent limitations complies with federal and state antidegradation requirements. Thus, removal of the effluent limitations for aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, silver, and zinc and relaxation of effluent limitations for ~~copper and~~ manganese from Order R5-2009-0034 meets the exception in CWA section 303(d)(4)(B).

b. **CWA section 402(o)(2).** CWA section 402(o)(2) provides several exceptions to the anti-backsliding regulations. CWA 402(o)(2)(B)(i) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

   As described further in section IV.C.3.a of this Fact Sheet, updated information that was not available at the time Order R5-2009-0034 was issued indicates that aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, silver, and zinc do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. ~~Additionally, updated information that was not~~

~~available at the time Order R5-2009-0034 was issued indicates that less stringent effluent limitations for copper satisfy requirements in CWA section 402(o)(2).~~ The updated information that supports the relaxation of effluent limitations for these constituents includes the following:

i. **Aluminum.** Based on new effluent monitoring data from the upgraded Facility collected from 1 January 2015 through 31 July 2017, that wasn't available at the time the permit was issued, the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the NAWQC criterion for aluminum.

ii. **Chlorine Residual.** The Discharger converted from chlorine disinfection to UV disinfection in December 2014. Therefore, the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the NAWQC criterion for chlorine residual.

iii. **Copper.** The Discharger conducted a site-specific WER for copper (*DSPUD Copper Water-Effect Ratio Study* prepared by Stantec, dated 17 November 2016), in accordance with applicable USEPA guidance (i.e., EPA-822-R-01-005 and EPA-821-R-02-012), and the results concluded that a site-specific WER of 2.72 for total recoverable copper and for dissolved copper apply to the discharge. Application of the site-specific WER to the effluent discharge results in the Facility no longer exhibiting reasonable potential to cause or contribute to exceedance of the water quality objective for copper. ~~Updated ambient hardness data collected between July 2011 and June 2014 was used to update the CTR aquatic life criteria for copper. Additionally, updated effluent monitoring data was used to calculate an update coefficient of variation (CV) for use in determining effluent limitations for copper. The use of the updated criterion and CV calculation resulted in less stringent effluent limitations for copper.~~

iv. **Cyanide.** Based on effluent and upstream receiving water monitoring data collected between July 2011 and June 2014 and the completion of Facility upgrades in December 2014 which included conversion from chlorine disinfection to UV disinfection, cyanide in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the CTR criteria for the protection of freshwater aquatic life.

v. **Dichlorobromomethane.** Dichlorobromomethane is a common byproduct of chlorine disinfection. The Discharger converted from chlorine disinfection to UV disinfection in December 2014. Therefore, the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the CTR criterion for dichlorobromomethane.

vi. **Electrical Conductivity.** Effluent and upstream receiving water monitoring data collected between July 2011 and June 2014 indicates that electrical conductivity in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the agricultural water goal or the Secondary MCL.

vii. **Persistent Chlorinated Hydrocarbon Pesticides (Aldrin and Alpha-BHC).** Effluent and upstream receiving water monitoring data collected

between July 2011 and June 2014 for aldrin and alpha-BHC indicates that the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of the Basin Plan objective or the CTR criteria for aldrin and alpha-BHC.

viii. **Silver**. Effluent and upstream receiving water monitoring data collected between July 2011 and June 2014 indicates that silver in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of CTR criteria for the protection of freshwater aquatic life.

ix. **Zinc**. Effluent and upstream receiving water monitoring data collected between July 2011 and June 2014 indicates that zinc in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of CTR criteria for the protection of freshwater aquatic life.

Thus, removal of the effluent limitations for aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, silver, and zinc ~~and relaxation of effluent limitations for copper~~ from Order R5-2009-0034 is in accordance with CWA section 402(o)(2)(B)(i), which allows for the removal of effluent limitations based on information that was not available at the time of permit issuance.

p. Final Effluent Limitation Considerations. Modify section IV.D.4, in part, of Attachment F – Fact Sheet, as shown in underline/strikeout format below:

4. Antidegradation Policies

a. **Surface Water.** This Order does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. The Order requires compliance with applicable federal technology-based standards and with WQBEL's where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

This Order removes effluent limitations for aldrin, alpha-BHC, aluminum, chlorine residual, copper, cyanide, dichlorobromomethane, electrical conductivity, silver, and zinc based on updated monitoring data and completion of Facility upgrades demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water. This Order also includes relaxed effluent limitations for ~~copper based on updated hardness data and CV calculation and~~ manganese based on revised averaging periods to be consistent with 40 C.F.R. section 122.45(d). The removal and relaxation of WQBEL's for these parameters will not result~~s~~ in an increase in pollutants concentration or loading, a decrease in the level of treatment or control, or a reduction of water quality. Therefore, the Central Valley Water Board finds that the removal and relaxation of the effluent limitations does not result in an increase in pollutants or any additional

degradation of the receiving water. Thus, the removal and relaxation of effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

q. Final Effluent Limitation Considerations. Modify Table F-17, in part, in section IV.D.5 of Attachment F – Fact Sheet, as shown in strikeout format below:

Summary of Final Effluent Limitations
Discharge Point 001
Table F-17. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis[1]
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
~~Copper, Total Recoverable~~	~~µg/L~~	~~1.8~~	~~--~~	~~3.1~~	~~--~~	~~--~~	~~CTR~~
~~Aluminum, Total Recoverable~~	~~µg/L~~	~~49~~	~~110~~	~~--~~	~~--~~	~~--~~	~~NAWQC~~

r. Rational for Provisions. Modify section VI.B.1.c of Attachment F – Fact Sheet, as shown in underline/strikeout format below:

c. **Water Effects Ratio (WER) and Metal Translators.** With the exception of copper, a~~A~~ default WER of 1.0 has been used in this Order for calculating criteria for applicable inorganic constituents. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total recoverable when developing effluent limitations for ~~copper and~~ lead. The Discharger conducted a site-specific WER for copper (*DSPUD Copper Water-Effect Ratio Study* prepared by Stantec, dated 17 November 2016), in accordance with applicable USEPA guidance (i.e., EPA-822-R-01-005 and EPA-821-R-02-012), and the results concluded that a site-specific WER of 2.72 for total recoverable copper and for dissolved copper apply to the discharge. Based on this new information, the Central Valley Water Board adopted an amendment to Order R5-2017-XXXX on XX December 2017 and effluent limitations and monthly compliance monitoring for copper were removed. If the Discharger performs additional studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

s. Rational for Monitoring and Reporting Requirements. Modify section VII.B.2 of Attachment F – Fact Sheet, as shown in strikeout format below:

B. Effluent Monitoring

2. Effluent monitoring frequencies and sample types for flow (continuous), ~~aluminum (monthly),~~ ammonia (weekly), BOD_5 (twice per week), ~~copper (monthly),~~ hardness (monthly), manganese (monthly), nitrate (weekly), nitrite (weekly), pH (daily), temperature (daily), total dissolved solids (quarterly), and TSS (twice per week) have been retained from Order R5-2009-0034 to determine

compliance with effluent limitations, where applicable, and characterize the effluent for these parameters.

t. Rational for Monitoring and Reporting Requirements. Add section VII.B.4 to Attachment F – Fact Sheet, as shown in underline format below: The subsequent sections were also renumbered accordingly.

B. Effluent Monitoring

4. Monitoring data collected from 1 January 2015 and 31 July 2017, since the upgraded Facility has been in operation, for aluminum and copper did not demonstrate reasonable potential to exceed water quality objectives/criteria. Thus, specific monitoring requirements for aluminum and copper have been removed from this Order.

u. Attachment G. Modify the Table in Attachment G - Summary of Reasonable Potential Analysis, in part, as shown in underline/strikeout format below:

Constituent	Units	MEC	B	C	CMC	CCC	Water & Org	Org. Only	Basin Plan	MCL	Reasonable Potential
Aluminum, Total Recoverable	µg/L	~~1,970~~81	85.1	87	750[2]	87[3]	--	--	--	200	~~Yes~~No[1]
Copper, Total Recoverable	µg/L	~~10.2~~23.4	~~--~~1.2	~~2.4~~ 31[1]	~~3.14~~ 8[1]	~~2.43~~ 1[1]	1,300	--	--	1,000	~~Yes~~No[1]

Footnotes:
(1) See discussion in Fact Sheet section IV.C.3.

v. Attachment H. Remove the "Copper, Total Recoverable" row and the "Aluminum, Total Recoverable" row from the table in Attachment H in its entirety.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **XX December 2017**

PAMELA C. CREEDON, Executive Office