CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TENTATIVE ORDER R5-2024-0044

AMENDING
ORDER R5-2022-0006-02
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
CAG995002

WASTE DISCHARGE REQUIREMENTS
LIMITED THREAT DISCHARGES TO SURFACE WATER

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

1. On 17 February 2022, the Central Valley Water Board adopted Waste Discharge Requirements Order R5-2022-0006 (NPDES CAG995002) for Limited Threat Discharges To Surface Water (Limited Threat General Order). The Limited Threat General Order was amended to R5-2022-0006-01 by Order R5-2023-0015 on 27 April 2023 and amended to R5-2022-0006-02 by order R5-2023-0058 on 14 December 2023.

2. The Limited Threat General Order applies to individuals, public agencies, private businesses, and other legal entities discharging limited threat wastewater to waters of the United States within the Central Valley Region, including categories of wastewater considered clean or relatively pollutant-free and pose little or no threat to water quality.

3. This Order amends the Limited Threat General Order to include an enrollment discharge category for dischargers applying alum for phosphorous sequestration. Alum, for purposes of the Limited Threat General Order, refers to the class of chemicals used to sequester phosphorus that have aluminum as their active ingredient (such as aluminum sulfate and sodium aluminate). Application of alum to surface water is intended to address harmful algal blooms by reducing phosphorus concentrations, and proper application poses little or no threat to water quality.

4. Additional requirements for dischargers enrolling in this new category for alum application are proposed, including the submission and implementation of an Alum Application Plan (AAP) and the public noticing of the alum application schedule. Specific monitoring and reporting requirements have also been added for discharges in this category to ensure beneficial uses in receiving waters are protected before, during, and after alum application.

5. The amendment also includes additional effluent limitations specific to chromium (VI) and total copper to allow enrollment of additional types of groundwater cleanup sites and expands the number of parameters that may be monitored in the influent and receiving waters. The additional monitor parameters will allow for treatment system influent monitoring to determine system effectiveness and determine if there are impacts to respective receiving waters. In addition, the amendment also proposes minor edits and corrections, consistent with applicable water quality control plans and regulations, including language related to the implementation of Secondary Maximum Contaminant

Levels (MCLs) for protection of the Municipal and Domestic Supply (MUN) beneficial use and the Conservative Pathway of the Salt Control Program.

6. For Dischargers currently enrolled under Order R5-2022-0006-02, the proposed amendments listed in Findings 3 through 5 above do not result in changes to their existing Notice of Applicability.

7. 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 an NPDES permit for an existing source is statutorily exempt.

8. The Central Valley Water Board has notified the Dischargers and interested agencies and persons of its intent to amend Waste Discharge Requirements for these discharges and has provided them with an opportunity to submit their written views and recommendations.

9. Consistent with Water Code section 189.7, the Central Valley Water Board conducted outreach in disadvantaged and tribal communities that may be affected by the updates to this General Order. The Board has also considered information readily available to Central Valley Water Board staff. The Board does not anticipate that this amendment will result in adverse water quality impacts or environmental justice concerns within the scope of the Board's authority.

BOARD ACTION
IT IS HEREBY ORDERED THAT:

Effective immediately, Waste Discharge Requirements Order R5-2022-0006-02 (NPDES CAG995002) is amended solely as shown in items 1 through 42, below.

1. The Order number is changed from R5-2022-0006-02 to R5-2022-0006-03 throughout the Limited Threat General Order.

2. **Cover Page.** Modify the last paragraph as follows:
   I, Patrick Pulupa, 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 **17 February 2022**, amended by Order R5-2023-0015 on **27 April 2023**, amended by Order R5-2023-0058 on 14 December 2023 and amended by Order R5-2024-0044 on **23 August 2024**.

3. Section I, Discharge Information. Modify the section to include a fourth main bullet at the end of the section, as follows:

   - Alum application to reduce phosphorous in receiving waters. For the purposes of this permit, the term "alum" will be used to describe the class of chemicals used to sequester phosphorous that have aluminum as their active ingredient (such as aluminum sulfate and sodium aluminate).

4. Section II.A.1.g, Notification Requirements. Modify the language in item g of sub-section 1. Requirements for all Discharges, as follows:

   g. Analytical results of water sampling for the applicable pollutants specified in Table I-1 of Attachment I for the type of wastewater to be discharged;

5. Section II.A.2, Notification Requirements. Add item f after item e, as follows:

   f. Alum Application Plan (AAP). Dischargers that are applying alum for phosphorous sequestration need to submit and implement an Alum Application Plan (AAP) as required in Sections V.B.6 and IX.C.6.b and described in Attachment K.

6. Section II.B.1, Notification Requirements. Add the following as the last sentence in the second paragraph in sub-section 1. New Discharges and as the last sentence in the second paragraph of sub-section 2. Existing Discharges as follows:

   For Dischargers applying alum for phosphorous sequestration, updated baseline monitoring sampling shall be performed as specified in Table I-1 of Attachment I within 5 years of the last baseline monitoring sampling.

7. Section II.C, Notification Requirements. Modify items 4 and 5 in the section, as follows:

   4. A representative sample of the wastewater or representative samples of receiving water, as applicable, have been analyzed for the constituents listed in Table I-1 of Attachment I;

   5. The analytical test results of the wastewater from Step 4 above, have been compared to the screening levels for the constituents listed in Attachment I;

8. Section III.B, Findings. Modify the language in section B. Basin Plans, as follows:

   B. Basin Plans. The Central Valley Water Board adopted a Water Quality Control Plan, Fifth Edition, February 2019, for the Sacramento and San Joaquin River Basins and a Water Quality Control Plan, Third Edition, May 2018, for the Tulare Lake Basin (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. Requirements in this Order implement the Basin Plans.

9. Section III.B, Findings. Modify the language in section C. Background and Rationale for Requirements, as follows:

   C. Background and Rationale for Requirements. The Central Valley Water Board developed the requirements in this Order based on readily available information and permit requirements for several similar dischargers and the requirements contained in Order R5-2016-0076-01. The Fact Sheet (Attachment D), which contains background information and rationale for the requirements in this Order, is hereby incorporated

into and constitutes Findings for this Order. Attachments A through C, E through I, and K are also incorporated into this Order.

10. Section V.A.1.d, Effluent Limitations. Modify the language in item d of sub-section 1. All Discharges, as follows:

    d. **Salinity.** The salinity of all discharges within the Sacramento and San Joaquin River Basins and within the Tulare Lake Basin shall not exceed any applicable TMDLs, Delta standards, or Basin Plan water quality objectives or numeric limits. Effluent limitations shall be established on a water-body-specific basis, as applicable and shall be as electrical conductivity (EC), total dissolved solids (TDS), chloride, and/or boron. Absent a site-specific numeric salinity water quality objective, **dischargers under the Salt Control Program's Conservative Permitting Approach shall not exceed the following effluent limitations, as specified in the Notice of Applicability:**

        i. **Discharges to Receiving Waters with the Agricultural Supply (AGR) Beneficial Use, Electrical Conductivity.** The monthly average effluent electrical conductivity shall not exceed 700 µmhos/cm.

        ii. **Discharges to Receiving Waters with the Municipal and Domestic Supply (MUN) Beneficial Use, Electrical Conductivity.** For a calendar year, the annual average effluent electrical conductivity shall not exceed 900 µmhos/cm.

    For receiving waters designated with both the AGR and MUN Beneficial Use, the more stringent effluent limitation shall apply. For discharges where a site-specific numeric salinity objective has been developed and adopted into the Basin Plan for the protection of the AGR beneficial use and/or MUN beneficial use, the Board shall continue to apply that objective, as appropriate.

11. Section V.A.1, Effluent Limitations. Modify item 2 under the Table 3A and 3B Note section, below Table 3B, as follows:

    2. Iron and Manganese. Effluent limitations are based on the Secondary Maximum Contaminant Levels for taste and odor. Results can be evaluated from samples that have been passed through a 1.5-micron filter to evaluate compliance with the Secondary MCL criteria. The effluent limitations are only applicable for discharges lasting more than one year from project start date (both continuous and intermittent).

12. Section V.A.1.f, Effluent Limitations. Modify the language in item f of sub-section 1. All Discharges, as follows:

    f. Effluent Limitations for Priority Pollutants. The priority pollutants, subject to effluent limitations as identified in the NOA from the Executive Officer, shall not exceed the effluent limitations in Table 5A for discharges to receiving waters with MUN and Table 5B for discharges to receiving waters without MUN below. Effluent limitations for chromium (VI) and total copper vary according to the Coefficient of Variation (CV) of the effluent data. The CV is a measure of the data variability and is

calculated as the standard deviation divided by the arithmetic mean of the observed values.

13. Section V.A.1, Effluent Limitations. Modify Table 5A. Effluent Limitations for Priority Pollutants with MUN, as shown in part as follows:

Table 5A. Effluent Limitations for Priority Pollutants with MUN

CTR Number	Parameter	Units	AMEL	MDEL
1	Antimony, Total	µg/L	6	12
2	Arsenic, Total	µg/L	10	20
3	Beryllium, Total	µg/L	4	8
4	Cadmium, Total	µg/L	See Table 6A	See Table 6A
5a	Chromium (III)	µg/L	See Table 6B	See Table 6B
5b	Chromium (VI)	µg/L	See Table 5C	See Table 5C
6	Copper, Total	µg/L	See Table 6C-A - 6C-F	See Table 6C-A - 6C-F
7	Lead, Total	µg/L	See Table 6D	See Table 6D

14. Section V.A.1, Effluent Limitations. Modify Table 5B. Effluent Limitations for Priority Pollutants without MUN, shown in part as follows:

Table 5B. Effluent Limitations for Priority Pollutants without MUN

CTR Number	Parameter	Units	AMEL	MDEL
1	Antimony, Total	µg/L	4300	8600
2	Arsenic, Total	µg/L	120	250
3	Beryllium, Total	µg/L	--	--
4	Cadmium, Total	µg/L	See Table 6A	See Table 6A
5a	Chromium (III)	µg/L	See Table 6B	See Table 6B
5b	Chromium (VI)	µg/L	See Table 5C	See Table 5C
6	Copper, Total	µg/L	See Table 6C-A- 6C-F	See Table 6C-A - 6C-F

15. Section V.A.1, Effluent Limitations. Modify section to include Table 5C. Chromium (VI) Effluent Limitations in µg/L, as follows:

Table 5C. Chromium (VI) Effluent Limitations in µg/L

CV	Chromium (VI), AMEL	Chromium (VI) MDEL
0.1	11	12
0.2	10	14
0.3	10	15
0.4	9.6	16

0.5	8.7	16
0.6	8.0	16
0.7	7.4	16
0.8	7.0	16
0.9	6.6	16
1.0	6.3	16
1.1	6.1	16
1.2	5.9	16
1.3	5.8	16
1.4	5.6	16
1.5	5.5	16
1.6	5.5	16
1.7	5.4	16
1.8	5.3	16
1.9	5.3	16
2.0	5.2	16
2.1	5.2	16
2.2	5.1	16
2.3	5.1	16
2.4	5.1	16
2.5	5.0	16
2.6	5.0	16
2.7	5.0	16
2.8	5.0	16
2.9	4.9	16
3.0	4.9	16
3.1	4.9	16
3.2	4.9	16
3.3	4.9	16
3.4	4.8	16
3.5	4.8	16
3.6	4.8	16
3.7	4.8	16
3.8	4.7	16
3.9	4.7	16
4.0	4.6	16

16. Section V.A.1.g, Effluent Limitations. Modify the language in item g of sub-section 1. All Discharges, as follows:

    g. Effluent Limitations for Hardness-Dependent Metals. The priority pollutants, subject to effluent limitations as identified in the NOA from the Executive Officer, shall not exceed the respective effluent limitations contained in Tables 6A through 6G, below for cadmium, chromium (III), copper, lead, nickel, silver, and zinc. In this

General Order, effluent limitations for cadmium, chromium (III), copper, lead, nickel, silver, and zinc are based aquatic-life criteria and a range of hardness concentrations, with the middle value selected. The CV is used to calculate the effluent limitations for the hardness-dependent metals. A range of CV values are included to calculate the effluent limitations for copper in Tables 6C-A through 6C-F. A CV of 0.6 will be used by the Central Valley Water Board to calculate effluent limitations for all other hardness-dependent metals. Effluent limitations specified in Tables 6A through 6G are applicable to both MUN and non-MUN beneficial uses unless otherwise noted.

17. Section V.A.1, Effluent Limitations. In this section, remove previous Table 6C and replace it with Tables 6C-A through 6C-F. Effluent Limitations – Cooper, Total in µg/L, as follows:

Table 6C-A. Effluent Limitations – Copper, Total in µg/L

CV	0 ≤ H < 5 AMEL	0 ≤ H < 5 MDEL	5 ≤ H < 10 AMEL	5 ≤ H < 10 MDEL	10 ≤ H < 15 AMEL	10 ≤ H < 15 MDEL	15 ≤ H < 20 AMEL	15 ≤ H < 20 MDEL	20 ≤ H < 25 AMEL	20 ≤ H < 25 MDEL
0.1	0.37	0.43	0.99	1.1	1.5	1.8	2.0	2.4	2.5	2.9
0.2	0.33	0.43	0.92	1.2	1.5	2.0	2.0	2.6	2.4	3.2
0.3	0.29	0.43	0.81	1.2	1.3	2.0	1.8	2.7	2.3	3.4
0.4	0.26	0.43	0.73	1.2	1.2	2.0	1.6	2.7	2.0	3.4
0.5	0.23	0.43	0.66	1.2	1.1	2.0	1.5	2.7	1.9	3.4
0.6	0.22	0.43	0.61	1.2	0.98	2.0	1.4	2.7	1.7	3.4
0.7	0.20	0.43	0.57	1.2	0.92	2.0	1.3	2.7	1.6	3.4
0.8	0.19	0.43	0.53	1.2	0.86	2.0	1.2	2.7	1.5	3.4
0.9	0.18	0.43	0.51	1.2	0.82	2.0	1.1	2.7	1.4	3.4
1.0	0.17	0.43	0.48	1.2	0.78	2.0	1.1	2.7	1.4	3.4
1.1	0.17	0.43	0.47	1.2	0.75	2.0	1.0	2.7	1.3	3.4
1.2	0.16	0.43	0.45	1.2	0.73	2.0	1.0	2.7	1.3	3.4
1.3	0.16	0.43	0.44	1.2	0.71	2.0	0.98	2.7	1.2	3.4
1.4	0.15	0.43	0.43	1.2	0.70	2.0	0.96	2.7	1.2	3.4
1.5	0.15	0.43	0.42	1.2	0.68	2.0	0.94	2.7	1.2	3.4
1.6	0.15	0.43	0.42	1.2	0.67	2.0	0.92	2.7	1.2	3.4
1.7	0.15	0.43	0.41	1.2	0.66	2.0	0.91	2.7	1.2	3.4
1.8	0.14	0.43	0.40	1.2	0.65	2.0	0.90	2.7	1.1	3.4
1.9	0.14	0.43	0.40	1.2	0.65	2.0	0.89	2.7	1.1	3.4
2.0	0.14	0.43	0.40	1.2	0.64	2.0	0.88	2.7	1.1	3.4
2.1	0.14	0.43	0.39	1.2	0.64	2.0	0.87	2.7	1.1	3.4
2.2	0.14	0.43	0.39	1.2	0.63	2.0	0.87	2.7	1.1	3.4
2.3	0.14	0.43	0.39	1.2	0.63	2.0	0.86	2.7	1.1	3.4
2.4	0.14	0.43	0.39	1.2	0.62	2.0	0.86	2.7	1.1	3.4
2.5	0.14	0.43	0.38	1.2	0.62	2.0	0.85	2.7	1.1	3.4
2.6	0.14	0.43	0.38	1.2	0.62	2.0	0.85	2.7	1.1	3.4
2.7	0.13	0.43	0.38	1.2	0.61	2.0	0.84	2.7	1.1	3.4
2.8	0.13	0.43	0.38	1.2	0.61	2.0	0.84	2.7	1.1	3.4
2.9	0.13	0.43	0.38	1.2	0.61	2.0	0.83	2.7	1.1	3.4

CV	0 ≤ H < 5 AMEL	0 ≤ H < 5 MDEL	5 ≤ H < 10 AMEL	5 ≤ H < 10 MDEL	10 ≤ H < 15 AMEL	10 ≤ H < 15 MDEL	15 ≤ H < 20 AMEL	15 ≤ H < 20 MDEL	20 ≤ H < 25 AMEL	20 ≤ H < 25 MDEL
3.0	0.13	0.43	0.37	1.2	0.61	2.0	0.83	2.7	1.1	3.4
3.1	0.13	0.43	0.37	1.2	0.60	2.0	0.83	2.7	1.0	3.4
3.2	0.13	0.43	0.37	1.2	0.60	2.0	0.82	2.7	1.0	3.4
3.3	0.13	0.43	0.37	1.2	0.60	2.0	0.82	2.7	1.0	3.4
3.4	0.13	0.43	0.37	1.2	0.60	2.0	0.82	2.7	1.0	3.4
3.5	0.13	0.43	0.37	1.2	0.59	2.0	0.82	2.7	1.0	3.4
3.6	0.13	0.43	0.37	1.2	0.59	2.0	0.81	2.7	1.0	3.4
3.7	0.13	0.43	0.36	1.2	0.59	2.0	0.81	2.7	1.0	3.4
3.8	0.13	0.43	0.36	1.2	0.59	2.0	0.81	2.7	1.0	3.4
3.9	0.13	0.43	0.36	1.2	0.59	2.0	0.81	2.7	1.0	3.4
4.0	0.13	0.43	0.36	1.2	0.58	2.0	0.80	2.7	1.0	3.4

Table 6C-B. Effluent Limitations – Copper, Total in µg/L

CV	25 ≤ H < 30 AMEL	25 ≤ H < 30 MDEL	30 ≤ H < 35 AMEL	30 ≤ H < 35 MDEL	35 ≤ H < 40 AMEL	35 ≤ H < 40 MDEL	40 ≤ H < 45 AMEL	40 ≤ H < 45 MDEL	45 ≤ H < 50 AMEL	45 ≤ H < 50 MDEL
0.1	3.0	3.5	3.5	4.0	3.9	4.5	4.3	5.0	4.8	5.5
0.2	2.9	3.8	3.3	4.4	3.8	5.0	4.2	5.6	4.6	6.1
0.3	2.8	4.1	3.2	4.8	3.6	5.5	4.1	6.1	4.5	6.7
0.4	2.5	4.1	2.9	4.9	3.3	5.6	3.7	6.3	4.1	6.9
0.5	2.2	4.1	2.6	4.9	3.0	5.6	3.4	6.3	3.8	6.9
0.6	2.1	4.1	2.4	4.9	2.8	5.6	3.1	6.3	3.5	6.9
0.7	1.9	4.1	2.3	4.9	2.6	5.6	2.9	6.3	3.2	6.9
0.8	1.8	4.1	2.1	4.9	2.4	5.6	2.7	6.3	3.0	6.9
0.9	1.7	4.1	2.0	4.9	2.3	5.6	2.6	6.3	2.9	6.9
1.0	1.6	4.1	1.9	4.9	2.2	5.6	2.5	6.3	2.8	6.9
1.1	1.6	4.1	1.9	4.9	2.1	5.6	2.4	6.3	2.7	6.9
1.2	1.5	4.1	1.8	4.9	2.1	5.6	2.3	6.3	2.6	6.9
1.3	1.5	4.1	1.8	4.9	2.0	5.6	2.3	6.3	2.5	6.9
1.4	1.5	4.1	1.7	4.9	2.0	5.6	2.2	6.3	2.5	6.9
1.5	1.4	4.1	1.7	4.9	1.9	5.6	2.2	6.3	2.4	6.9
1.6	1.4	4.1	1.7	4.9	1.9	5.6	2.1	6.3	2.4	6.9
1.7	1.4	4.1	1.6	4.9	1.9	5.6	2.1	6.3	2.3	6.9
1.8	1.4	4.1	1.6	4.9	1.8	5.6	2.1	6.3	2.3	6.9
1.9	1.4	4.1	1.6	4.9	1.8	5.6	2.1	6.3	2.3	6.9
2.0	1.3	4.1	1.6	4.9	1.8	5.6	2.0	6.3	2.3	6.9
2.1	1.3	4.1	1.6	4.9	1.8	5.6	2.0	6.3	2.2	6.9
2.2	1.3	4.1	1.6	4.9	1.8	5.6	2.0	6.3	2.2	6.9
2.3	1.3	4.1	1.5	4.9	1.8	5.6	2.0	6.3	2.2	6.9
2.4	1.3	4.1	1.5	4.9	1.8	5.6	2.0	6.3	2.2	6.9
2.5	1.3	4.1	1.5	4.9	1.7	5.6	2.0	6.3	2.2	6.9
2.6	1.3	4.1	1.5	4.9	1.7	5.6	2.0	6.3	2.2	6.9

CV	25 ≤ H < 30 AMEL	25 ≤ H < 30 MDEL	30 ≤ H < 35 AMEL	30 ≤ H < 35 MDEL	35 ≤ H < 40 AMEL	35 ≤ H < 40 MDEL	40 ≤ H < 45 AMEL	40 ≤ H < 45 MDEL	45 ≤ H < 50 AMEL	45 ≤ H < 50 MDEL
2.7	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.2	6.9
2.8	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
2.9	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.0	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.1	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.2	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.3	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.4	1.3	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.5	1.2	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.6	1.2	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.7	1.2	4.1	1.5	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.8	1.2	4.1	1.4	4.9	1.7	5.6	1.9	6.3	2.1	6.9
3.9	1.2	4.1	1.4	4.9	1.7	5.6	1.9	6.3	2.1	6.9
4.0	1.2	4.1	1.4	4.9	1.6	5.6	1.9	6.3	2.1	6.9

Table 6C-C. Effluent Limitations – Copper, Total in µg/L

CV	50 ≤ H < 55 AMEL	50 ≤ H < 55 MDEL	55 ≤ H < 60 AMEL	55 ≤ H < 60 MDEL	60 ≤ H < 65 AMEL	60 ≤ H < 65 MDEL	65 ≤ H < 70 AMEL	65 ≤ H < 70 MDEL	70 ≤ H < 75 AMEL	70 ≤ H < 75 MDEL
0.1	5.2	6.0	5.6	6.5	6.0	7.0	6.4	7.5	6.9	7.9
0.2	5.0	6.7	5.4	7.2	5.8	7.7	6.2	8.3	6.6	8.8
0.3	4.9	7.3	5.3	7.9	5.6	8.5	6.0	9.0	6.4	9.6
0.4	4.6	7.6	5.0	8.3	5.4	9.0	5.8	9.7	6.2	10
0.5	4.1	7.6	4.5	8.3	4.9	9.0	5.2	9.7	5.6	10
0.6	3.8	7.6	4.1	8.3	4.5	9.0	4.8	9.7	5.2	10
0.7	3.5	7.6	3.9	8.3	4.2	9.0	4.5	9.7	4.8	10
0.8	3.3	7.6	3.6	8.3	3.9	9.0	4.2	9.7	4.5	10
0.9	3.2	7.6	3.4	8.3	3.7	9.0	4.0	9.7	4.3	10
1.0	3.0	7.6	3.3	8.3	3.6	9.0	3.8	9.7	4.1	10
1.1	2.9	7.6	3.2	8.3	3.4	9.0	3.7	9.7	4.0	10
1.2	2.8	7.6	3.1	8.3	3.3	9.0	3.6	9.7	3.8	10
1.3	2.8	7.6	3.0	8.3	3.2	9.0	3.5	9.7	3.7	10
1.4	2.7	7.6	2.9	8.3	3.2	9.0	3.4	9.7	3.7	10
1.5	2.6	7.6	2.9	8.3	3.1	9.0	3.3	9.7	3.6	10
1.6	2.6	7.6	2.8	8.3	3.1	9.0	3.3	9.7	3.5	10
1.7	2.6	7.6	2.8	8.3	3.0	9.0	3.2	9.7	3.5	10
1.8	2.5	7.6	2.8	8.3	3.0	9.0	3.2	9.7	3.4	10
1.9	2.5	7.6	2.7	8.3	3.0	9.0	3.2	9.7	3.4	10
2.0	2.5	7.6	2.7	8.3	2.9	9.0	3.1	9.7	3.4	10
2.1	2.5	7.6	2.7	8.3	2.9	9.0	3.1	9.7	3.3	10
2.2	2.4	7.6	2.7	8.3	2.9	9.0	3.1	9.7	3.3	10
2.3	2.4	7.6	2.6	8.3	2.9	9.0	3.1	9.7	3.3	10
2.4	2.4	7.6	2.6	8.3	2.8	9.0	3.1	9.7	3.3	10
2.5	2.4	7.6	2.6	8.3	2.8	9.0	3.0	9.7	3.2	10
2.6	2.4	7.6	2.6	8.3	2.8	9.0	3.0	9.7	3.2	10
2.7	2.4	7.6	2.6	8.3	2.8	9.0	3.0	9.7	3.2	10
2.8	2.4	7.6	2.6	8.3	2.8	9.0	3.0	9.7	3.2	10
2.9	2.3	7.6	2.6	8.3	2.8	9.0	3.0	9.7	3.2	10
3.0	2.3	7.6	2.5	8.3	2.8	9.0	3.0	9.7	3.2	10
3.1	2.3	7.6	2.5	8.3	2.7	9.0	3.0	9.7	3.2	10
3.2	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.3	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.4	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.5	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.6	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.7	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.7	3.1	10
3.8	2.3	7.6	2.5	8.3	2.7	9.0	2.9	9.6	3.1	10
3.9	2.3	7.6	2.5	8.3	2.7	9.0	2.8	9.6	3.0	10
4.0	2.3	7.6	2.5	8.3	2.6	8.9	2.8	9.5	3.0	10

Table 6C-D. Effluent Limitations – Copper, Total in µg/L

CV	75 ≤ H < 80 AMEL	75 ≤ H < 80 MDEL	80 ≤ H < 85 AMEL	80 ≤ H < 85 MDEL	85 ≤ H < 90 AMEL	85 ≤ H < 90 MDEL	90 ≤ H < 95 AMEL	90 ≤ H < 95 MDEL	95 ≤ H < 100 AMEL	95 ≤ H < 100 MDEL
0.1	7.3	8.4	7.7	8.9	8.0	9.3	8.4	9.8	8.8	10
0.2	7.0	9.3	7.4	9.8	7.8	10	8.2	11	8.5	11
0.3	6.8	10	7.2	11	7.5	11	7.9	12	8.2	12
0.4	6.4	11	6.7	11	7.1	12	7.5	13	7.8	13
0.5	5.8	11	6.1	11	6.4	12	6.8	13	7.1	13
0.6	5.3	11	5.6	11	5.9	12	6.2	13	6.5	13
0.7	4.9	11	5.2	11	5.5	12	5.8	13	6.1	13
0.8	4.6	11	4.9	11	5.2	12	5.5	13	5.7	13
0.9	4.4	11	4.7	11	4.9	12	5.2	13	5.4	13
1.0	4.2	11	4.5	11	4.7	12	5.0	13	5.2	13
1.1	4.1	11	4.3	11	4.5	12	4.8	13	5.0	13
1.2	3.9	11	4.2	11	4.4	12	4.6	13	4.9	13
1.3	3.8	11	4.1	11	4.3	12	4.5	13	4.7	13
1.4	3.8	11	4.0	11	4.2	12	4.4	13	4.6	13
1.5	3.7	11	3.9	11	4.1	12	4.3	13	4.5	13
1.6	3.6	11	3.8	11	4.1	12	4.3	13	4.5	13
1.7	3.6	11	3.8	11	4.0	12	4.2	13	4.4	13
1.8	3.5	11	3.7	11	3.9	12	4.1	13	4.4	13
1.9	3.5	11	3.7	11	3.9	12	4.1	13	4.3	13
2.0	3.5	11	3.7	11	3.9	12	4.1	13	4.3	13
2.1	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.2	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.3	3.4	11	3.6	11	3.8	12	4.0	13	4.2	13
2.4	3.4	11	3.6	11	3.8	12	3.9	13	4.1	13
2.5	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.6	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.7	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.8	3.3	11	3.5	11	3.7	12	3.9	13	4.1	13
2.9	3.3	11	3.5	11	3.7	12	3.9	13	4.0	13
3.0	3.3	11	3.5	11	3.6	12	3.8	13	4.0	13
3.1	3.3	11	3.4	11	3.6	12	3.8	13	4.0	13
3.2	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.3	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.4	3.2	11	3.4	11	3.6	12	3.8	13	4.0	13
3.5	3.2	11	3.4	11	3.6	12	3.8	13	3.9	13
3.6	3.2	11	3.4	11	3.6	12	3.8	13	3.9	13
3.7	3.2	11	3.4	11	3.6	12	3.7	13	3.9	13
3.8	3.2	11	3.4	11	3.5	12	3.7	13	3.9	13
3.9	3.2	11	3.4	11	3.5	12	3.7	13	3.9	13
4.0	3.2	11	3.3	11	3.5	12	3.7	12	3.8	13

Table 6C-E. Effluent Limitations – Copper, Total in µg/L

CV	100 ≤ H < 120 AMEL	100 ≤ H < 120 MDEL	120 ≤ H < 140 AMEL	120 ≤ H < 140 MDEL	140 ≤ H < 160 AMEL	140 ≤ H < 160 MDEL	160 ≤ H < 180 AMEL	160 ≤ H < 180 MDEL	180 ≤ H < 200 AMEL	180 ≤ H < 200 MDEL
0.1	9.8	11	11	13	13	15	14	16	16	18
0.2	9.5	13	11	14	12	16	14	18	15	20
0.3	9.1	14	11	16	12	18	13	20	15	22
0.4	8.8	15	10	17	12	19	13	21	14	24
0.5	8.3	15	9.7	18	11	21	12	23	14	25
0.6	7.6	15	8.9	18	10	21	12	23	13	26
0.7	7.1	15	8.3	18	9.5	21	11	23	12	26
0.8	6.7	15	7.8	18	9.0	21	10	23	11	26
0.9	6.3	15	7.4	18	8.5	21	9.6	23	11	26
1.0	6.1	15	7.1	18	8.1	21	9.2	23	10	26
1.1	5.9	15	6.9	18	7.8	21	8.8	23	9.8	26
1.2	5.7	15	6.6	18	7.6	21	8.6	23	9.5	26
1.3	5.5	15	6.5	18	7.4	21	8.3	23	9.3	26
1.4	5.4	15	6.3	18	7.2	21	8.1	23	9.0	26
1.5	5.3	15	6.2	18	7.1	21	8.0	23	8.9	26
1.6	5.2	15	6.1	18	7.0	21	7.9	23	8.7	26
1.7	5.1	15	6.0	18	6.9	21	7.8	23	8.6	26
1.8	5.1	15	5.9	18	6.8	21	7.7	23	8.5	26
1.9	5.0	15	5.9	18	6.7	21	7.6	23	8.4	26
2.0	5.0	15	5.8	18	6.7	21	7.5	23	8.3	26
2.1	4.9	15	5.8	18	6.6	21	7.4	23	8.3	26
2.2	4.9	15	5.7	18	6.6	21	7.4	23	8.2	26
2.3	4.9	15	5.7	18	6.5	21	7.3	23	8.1	26
2.4	4.8	15	5.7	18	6.5	21	7.3	23	8.1	26
2.5	4.8	15	5.6	18	6.4	21	7.2	23	8.1	26
2.6	4.8	15	5.6	18	6.4	21	7.2	23	8.0	26
2.7	4.8	15	5.6	18	6.4	21	7.2	23	8.0	26
2.8	4.7	15	5.5	18	6.3	21	7.1	23	7.9	26
2.9	4.7	15	5.5	18	6.3	21	7.1	23	7.8	25
3.0	4.7	15	5.5	18	6.3	21	7.0	23	7.7	25
3.1	4.7	15	5.5	18	6.2	20	6.9	23	7.6	25
3.2	4.7	15	5.4	18	6.1	20	6.8	22	7.5	25
3.3	4.6	15	5.3	18	6.0	20	6.7	22	7.4	24
3.4	4.6	15	5.3	17	6.0	20	6.6	22	7.3	24
3.5	4.5	15	5.2	17	5.9	20	6.6	22	7.2	24
3.6	4.5	15	5.1	17	5.8	19	6.5	22	7.1	24
3.7	4.4	15	5.1	17	5.8	19	6.4	21	7.0	24
3.8	4.4	15	5.0	17	5.7	19	6.3	21	7.0	23
3.9	4.3	15	5.0	17	5.6	19	6.3	21	6.9	23
4.0	4.3	14	4.9	17	5.6	19	6.2	21	6.8	23

Table 6C-F. Effluent Limitations – Copper, Total in µg/L

CV	200 ≤ H < 250 AMEL	200 ≤ H < 250 MDEL	250 ≤ H < 300 AMEL	250 ≤ H < 300 MDEL	300 ≤ H < 350 AMEL	300 ≤ H < 350 MDEL	350 ≤ H < 400 AMEL	350 ≤ H < 400 MDEL	H ≥ 400 AMEL	H ≥ 400 MDEL
0.1	18	21	21	25	25	29	28	32	29	34
0.2	17	23	21	27	24	32	27	36	28	38
0.3	17	25	20	30	23	35	26	39	28	41
0.4	16	27	19	32	22	37	25	42	27	45
0.5	16	29	19	35	22	40	24	45	26	48
0.6	15	30	18	36	21	42	24	47	25	50
0.7	14	30	17	36	20	43	23	49	24	52
0.8	13	30	16	36	19	43	21	49	23	52
0.9	12	30	15	36	18	43	20	49	21	52
1.0	12	30	14	36	17	43	19	49	21	52
1.1	11	30	14	36	16	43	19	49	20	52
1.2	11	30	13	36	16	43	18	49	19	52
1.3	11	30	13	36	15	43	18	49	19	52
1.4	11	30	13	36	15	43	17	49	18	52
1.5	10	30	13	36	15	43	17	49	18	52
1.6	10	30	12	36	14	43	17	49	18	52
1.7	10	30	12	36	14	43	16	49	17	52
1.8	10	30	12	36	14	43	16	49	17	52
1.9	10	30	12	36	14	43	16	49	17	52
2.0	10	30	12	36	14	43	16	49	17	52
2.1	10	30	12	36	14	43	16	49	17	52
2.2	10	30	12	36	14	43	16	49	17	52
2.3	10	30	12	36	14	43	15	49	16	51
2.4	10	30	11	36	13	42	15	48	16	51
2.5	9.4	30	11	36	13	42	15	47	16	50
2.6	9.4	30	11	36	13	42	15	47	15	50
2.7	9.3	30	11	36	13	41	14	46	15	49
2.8	9.2	30	11	35	13	41	14	46	15	48
2.9	9.0	29	11	35	12	40	14	45	15	48
3.0	8.9	29	11	34	12	40	14	45	15	47
3.1	8.8	29	10	34	12	39	14	44	14	47
3.2	8.7	28	10	34	12	39	13	44	14	47
3.3	8.5	28	10	33	12	39	13	44	14	46
3.4	8.4	28	10	33	12	38	13	43	14	46
3.5	8.3	28	10	33	11	38	13	43	14	45
3.6	8.2	27	10	33	11	38	13	42	13	45
3.7	8.1	27	10	32	11	37	13	42	13	44
3.8	8.0	27	10	32	11	37	12	42	13	44
3.9	7.9	27	9.4	32	11	37	12	41	13	44
4.0	7.9	27	9.3	31	11	36	12	41	13	43

18. Section V.B.6, Effluent limitations. Add sub-section V.6, as follows:

    6. **Alum Application for Phosphorus Sequestration**

       The Discharger shall implement best management practices (BMPs) provided in its approved AAP when applying alum for phosphorus sequestration to reduce or prevent impacts to beneficial uses of the receiving water.

19. Section IX.D.2.b.ii, Provisions. Modify the language in item c of sub-section 2.b.ii. Chronic Toxicity Monitoring Trigger Exceeded, as follows:

    (c) If the results of the accelerated monitoring toxicity tests exceed the 6-week median, the discharge may no longer be eligible for coverage under this Order. To continue coverage under this Order, the Discharger must demonstrate to the satisfaction of the Executive Officer that the discharge is not causing chronic toxicity in the receiving water. Otherwise, in order to continue discharging to surface water the discharger must submit a report of waste discharge for application for an individual NPDES permit. The discharge to surface water shall not continue until the Executive Officer authorizes continued coverage under this General Order or until the Central Valley Water Board adopts an individual NPDES permit for the discharge. For compliance with the Basin Plan's toxicity objective, this General Order requires the following discharges to conduct chronic whole effluent toxicity (WET) testing, as specified in the MRP (Attachment C, section V): Discharges greater than or equal to 120 days in duration, 0.25 MGD in volume, of liquid mine waste, or with treatment shall conduct chronic toxicity testing as specified in the NOA to determine whether the effluent is contributing chronic toxicity to the receiving water.

20. Section IX.C.6, Other Special Provisions. Modify the section to include sub-section b. Requirements for Dischargers Applying Alum for Phosphorus Sequestration, and update previous sub-section C to D. Special Provisions, as follows:

    b. **Requirements for Dischargers Applying Alum for Phosphorus Sequestration**.

       i. **Application Schedule.** The Discharger shall provide a phone number or other specific contact information to all persons who request the Discharger's application schedule. The Discharger shall provide the requester with the most current application schedule and inform the requester if the schedule is subject to change. Information may be made available by electronic means, including posting prominently on a well-known website.

       ii. **Public Notice Requirements.** Every calendar year, at least 15 days prior to the first application of alum, the Discharger shall notify potentially affected public agencies. The Discharger shall post the notification on its website if available. The notification shall include the following information:

           (a) A statement of the discharger's intent to apply alum;

(b) Purpose of use;

(c) General time period and locations of expected use;

(d) Any water use restrictions or precautions during treatment; and

(e) A phone number that interested persons may call to obtain additional information from the Discharger.

iii. **Alum Application Plan (AAP).** Dischargers shall submit an AAP with their Notice of Intent documents. Elements of the AAP are described in Attachment K.

iv. **AAP Processing, Approval and Modifications.** Upon receipt of the AAP, staff will review the AAP for completeness and applicability for this General Permit and post on the Board's website for a 30-day public comment period. If no comments are received and staff deem the AAP complete, the AAP will be incorporated into the NOA. If comments are received, staff will work with the Discharger to address comments to allow for NOA issuance as expeditiously as possible. Once approved, the AAP will be incorporated into the NOA.

Changes to the AAP must be submitted to NPDES permitting for approval and may require additional public comment prior to issuance of an amended NOA

21. Attachment C.II, Monitoring Locations. Modify the first paragraph as follows:

II. MONITORING LOCATIONS

Dischargers applying alum for phosphorous sequestration will establish receiving water monitoring locations in their Alum Application Plan (AAP), per requirements set forth in Attachment K. All other Dischargers shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this General Order:

22. Attachment C.III, Influent Monitoring Requirements. Add sub-section A and renumber the subsequent sub-sections accordingly and following Attachment C – Monitoring and Reporting Program tables accordingly, as follows:

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

1. When required in the Discharger's NOA, the Discharger shall monitor the waste discharge at Monitoring Location INF-001 in accordance with Table C-2 and the testing requirements described in section III.A.2 below. The NOA will specify which constituents must be monitored regularly for each discharge point, the minimum sampling frequency (e.g., 2/Week, 1/Month, 1/Quarter), and where applicable, units and sample type. Monitoring results are to be submitted in the SMRs.

Table C-2. Influent Monitoring

CTR Number	Parameter	Units	Sample Type
--	Influent Flow Rate	As specified in the NOA	As specified in the NOA
--	Total Suspended Solids	mg/L	Grab
--	Dissolved Oxygen	mg/L	Grab
--	pH	standard units	Grab
--	Temperature	°F	Grab
--	Electrical Conductivity @ 25°C	µmhos/cm	Grab
--	Total Dissolved Solids	mg/L	Grab
--	Color	Color Units	Grab
--	Oil and Grease	mg/L	Grab
--	Turbidity	NTU	Grab
--	Aluminum, Total	µg/L	Grab
--	Barium, Total	µg/L	Grab
--	Boron	mg/L	Grab
--	Chloride	mg/L	Grab
--	Chromium, Total	µg/L	Grab
--	Fluoride	µg/L	Grab
--	Iron, Total	µg/L	Grab
--	Manganese, Total	µg/L	Grab
--	Mercury, Methyl	ng/L	Grab
--	Molybdenum	µg/L	Grab
--	Nitrate Nitrogen, Total (as N)	mg/L	Grab
--	Nitrite (as N)	mg/L	Grab
--	Nitrate plus Nitrite (as N)	mg/L	Grab
--	Perchlorate	µg/L	Grab
--	Phosphorus, Total (as P)	mg/L	Grab
--	Sulfate	mg/L	Grab
--	Sulfide (as S)	mg/L	Grab
--	Sulfite (as SO_3)	mg/L	Grab
--	Tributyltin	µg/L	Grab
--	1,2-Dichloroethene (cis and trans DCE)	µg/L	Grab
--	1,2-Dibromo-3-Chloropropane (DBCP)	µg/L	Grab
--	1,2,3-Trichloropropane (TCP)	µg/L	Grab
--	1,3-Butadiene	µg/L	Grab
--	1,3-Dichloropropene (cis and trans)	µg/L	Grab
--	2-Butanone (Methyl ethyl ketone or MEK)	µg/L	Grab
--	2-Chloroethylvinyl ether	µg/L	Grab
--	2-Hexanone (Methyl n-butyl ketone)	µg/L	Grab
--	3-Methyl-4-Chlorophenol	µg/L	Grab
--	Acetone	µg/L	Grab
--	Carbon Disulfide	µg/L	Grab
--	Chloromethane (Methyl chloride)	µg/L	Grab

CTR Number	Parameter	Units	Sample Type
--	MTBE (Methyl tertiary butyl ether)	µg/L	Grab
--	Styrene	µg/L	Grab
--	Trichlorofluoromethane (Freon 11)	µg/L	Grab
--	Xylenes	µg/L	Grab
1	Antimony, Total	µg/L	Grab
2	Arsenic, Total	µg/L	Grab
3	Beryllium, Total	µg/L	Grab
4	Cadmium, Total	µg/L	Grab
5a	Chromium (III)	µg/L	Grab
5b	Chromium (VI)	µg/L	Grab
6	Copper, Total	µg/L	Grab
7	Lead, Total	µg/L	Grab
8	Mercury, Total	µg/L	Grab
9	Nickel, Total	µg/L	Grab
10	Selenium, Total	µg/L	Grab
11	Silver, Total	µg/L	Grab
12	Thallium, Total	µg/L	Grab
13	Zinc, Total	µg/L	Grab
14	Cyanide, Total (as CN)	µg/L	Grab
17	Acrolein	µg/L	Grab
18	Acrylonitrile	µg/L	Grab
19	Benzene	µg/L	Grab
20	Bromoform	µg/L	Grab
21	Carbon Tetrachloride (Freon 10)	µg/L	Grab
22	Chlorobenzene	µg/L	Grab
23	Chlorodibromomethane	µg/L	Grab
24	Chloroethane	µg/L	Grab
25	2-Chloroethylvinyl Ether	µg/L	Grab
26	Chloroform	µg/L	Grab
27	Dichlorobromomethane	µg/L	Grab
28	1,1-Dichloroethane (DCA)	µg/L	Grab
29	1,2-Dichloroethane (DCA)	µg/L	Grab
30	1,1-Dichloroethylene (DCE)	µg/L	Grab
31	1,2-Dichloropropane	µg/L	Grab
32	1,3-Dichloropropylene	µg/L	Grab
33	Ethylbenzene	µg/L	Grab
34	Methyl Bromide (Bromomethane)	µg/L	Grab
35	Methyl Chloride (Chloromethane)	µg/L	Grab
36	Methylene Chloride (Dichloromethane)	µg/L	Grab
37	1,1,2,2-Tetrachloroethane	µg/L	Grab
38	Tetrachloroethylene (PCE)	µg/L	Grab
39	Toluene	µg/L	Grab
40	1,2-Trans-Dichloroethylene (DCE)	µg/L	Grab

CTR Number	Parameter	Units	Sample Type
41	1,1,1-Trichloroethane (TCA)	µg/L	Grab
42	1,1,2-Trichloroethane (TCA)	µg/L	Grab
43	Trichloroethylene (TCE)	µg/L	Grab
44	Vinyl Chloride (Chloroethene)	µg/L	Grab
45	2-Chlorophenol	µg/L	Grab
46	2,4-Dichlorophenol	µg/L	Grab
47	2,4-Dimethylphenol	µg/L	Grab
48	2-Methyl-4,6-Dinitrophenol	µg/L	Grab
49	2,4-Dinitrophenol	µg/L	Grab
50	2-Nitrophenol	µg/L	Grab
51	4-Nitrophenol	µg/L	Grab
52	3-Methyl-4-Chlorophenol	µg/L	Grab
53	Pentachlorophenol (PCP)	µg/L	Grab
54	Phenol	µg/L	Grab
55	2,4,6-Trichlorophenol	µg/L	Grab
56	Acenaphthene	µg/L	Grab
57	Acenaphthylene	µg/L	Grab
58	Anthracene	µg/L	Grab
59	Benzidine	µg/L	Grab
60	Benzo(a)Anthracene	µg/L	Grab
61	Benzo(a)Pyrene	µg/L	Grab
62	Benzo(b)Fluoranthene	µg/L	Grab
63	Benzo(ghi)Perylene	µg/L	Grab
64	Benzo(k)Fluoranthene	µg/L	Grab
65	Bis(2-Chloroethoxy)Methane	µg/L	Grab
66	Bis(2-Chloroethyl)Ether	µg/L	Grab
67	Bis(2-Chloroisopropyl)Ether	µg/L	Grab
68	Bis(2-Ethylhexyl)Phthalate	µg/L	Grab
69	4-Bromphenyl Phenyl Ether	µg/L	Grab
70	Butylbenzyl Phthalate	µg/L	Grab
71	2-Chloronaphthalene	µg/L	Grab
72	4-Chlorophenyl Phenyl Ether	µg/L	Grab
73	Chrysene	µg/L	Grab
74	Dibenzo(a,h)Anthracene	µg/L	Grab
75	1,2-Dichlorobenzene	µg/L	Grab
76	1,3-Dichlorobenzene	µg/L	Grab
77	1,4-Dichlorobenzene	µg/L	Grab
78	3,3-Dichlorobenzidine	µg/L	Grab
79	Diethyl Phthalate	µg/L	Grab
80	Dimethyl Phthalate	µg/L	Grab
81	Di-n-Butyl Phthalate	µg/L	Grab
82	2,4-Dinitrotoluene	µg/L	Grab
83	2,6-Dinitrotoluene	µg/L	Grab

CTR Number	Parameter	Units	Sample Type
84	Di-n-Octyl Phthalate	µg/L	Grab
85	1,2-Diphenylhydrazine	µg/L	Grab
86	Fluoranthene	µg/L	Grab
87	Fluorene	µg/L	Grab
88	Hexachlorobenzene	µg/L	Grab
89	Hexachlorobutadiene	µg/L	Grab
90	Hexachlorocyclopentadiene	µg/L	Grab
91	Hexachloroethane	µg/L	Grab
92	Indeno(1,2,3-cd)Pyrene	µg/L	Grab
93	Isophorone	µg/L	Grab
94	Naphthalene	µg/L	Grab
95	Nitrobenzene	µg/L	Grab
96	N-Nitrosodimethylamine	µg/L	Grab
97	N-Nitrosodi-n-Propylamine	µg/L	Grab
98	N-Nitrosodiphenylamine	µg/L	Grab
99	Phenanthrene	µg/L	Grab
100	Pyrene	µg/L	Grab
101	1,2,4-Trichlorobenzene	µg/L	Grab
102	Aldrin	µg/L	Grab
103	alpha-BHC (benzene hexachloride)	µg/L	Grab
104	beta-BHC (benzene hexachloride)	µg/L	Grab
105	gamma-BHC (benzene hexachloride or lindane)	µg/L	Grab
106	delta-BHC (benzene hexachloride)	µg/L	Grab
107	Chlordane	µg/L	Grab
108	4,4'-DDT	µg/L	Grab
109	4,4'-DDE	µg/L	Grab
110	4,4'-DDD	µg/L	Grab
111	Dieldrin	µg/L	Grab
112	alpha-Endosulfan	µg/L	Grab
113	beta-Endolsulfan	µg/L	Grab
114	Endosulfan Sulfate	µg/L	Grab
115	Endrin	µg/L	Grab
116	Endrin Aldehyde	µg/L	Grab
117	Heptachlor	µg/L	Grab
118	Heptachlor Epoxide	µg/L	Grab
119-125	Polychlorinated Biphenyls (PCBs)	µg/L	Grab
126	Toxaphene	µg/L	Grab

2. **Table C-2 Testing Requirements**. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table C-2:

    a. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by

the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 CFR part 136 allowed sample type.

b. **Handheld Field Meter.** A handheld field meter may be used for **volume, flow, dissolved oxygen, electrical conductivity, temperature, total dissolved solids, turbidity**, and **pH**, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

c. **Temperature** and **pH** shall be recorded at the time of **un-ionized ammonia** sample collection.

d. **Aluminum.** 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. Results can be evaluated from samples that have been passed through a 1.5-micron filter to evaluate compliance with the Secondary MCL criteria.

e. **Iron, Total, and Manganese, Total.** Results can be evaluated from samples that have been passed through a 1.5-micron filter to evaluate compliance with the Secondary MCL criteria.

f. **Total Mercury and Methyl Mercury.** Unfiltered methyl mercury and total mercury samples shall be taken using **clean hands/dirty hands procedures**, as described in U.S. EPA method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, for collection of equipment blanks (section 9.4.4.2). The analysis of methyl mercury and total mercury shall be by U.S. EPA method 1630 and1631 (Revision E), respectively, with a **reporting limit of 0.05 ng/L for methyl mercury and 0.5 ng/L for total mercury**.

g. **Nitrate and Nitrite.** Monitoring for nitrite and nitrate shall be conducted concurrently.

h. **Priority Pollutants**. For all priority pollutant constituents listed in Table C-2 (Bis (2-ethylhexyl) phthalate, Persistent Chlorinated Hydrocarbon Pesticides and Priority Pollutants and Other Constituents of Concern) the RL shall be consistent with sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) and the SSM Rule specified under 40 C.F.R. sections 122.21(e)(3)and 122.44(i)(1)(iv).

i. **Bis (2-ethylhexl) phthalate**. In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected contaminant.

j. **Persistent Chlorinated Hydrocarbon Pesticides** shall include: aldrin, dieldrin, chlordane, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorocyclohexane (alpha-BHC, beta-BHC, delta-BHC, and gamma-BHC or lindane), endosulfan (alpha and beta), endosulfan sulfate, toxaphene, 4,4'DDD, 4,4'DDE, and 4,4'DDT.

k. **Polychlorinated Biphenyls (PCBs)**. Applies to the sum of PCB aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

23. Attachment C.IV.A.2, Effluent Monitoring Requirements. Modify item i and add item j in sub-section 2 and renumber the following items after item i, Table C-3 Testing Requirements, as follows:

i. **Aluminum.** 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. Results can be evaluated from samples that have been passed through a 1.5-micron filter to evaluate compliance with the Secondary MCL criteria.

j. **Iron, Total, and Manganese, Total.** Results can be evaluated from samples that have been passed through a 1.5-micron filter to evaluate compliance with the Secondary MCL criteria.

24. Attachment C.VIII.A.1, Receiving Water Monitoring Requirements. Modify Table C-6. Receiving Water Monitoring Requirements, as follows including renumbering to Table C-7:

Table C-7. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type
pH	standard units	Grab
Dissolved Oxygen	mg/L	Grab
Electrical Conductivity @ 25°C	µmhos/cm	Grab
Hardness, Total (as $CaCO_3$)	mg/L	Grab
Temperature	°F	Grab
Turbidity	NTU	Grab
Aluminum, Total	µg/L	Grab
Aluminum, Dissolved	µg/L	Grab
Phosphorous, Total	mg/L	Grab
Dissolved Organic Carbon	mg/L	Grab

Parameter	Units	Sample Type
Total Dissolved Solids	mg/L	Grab
Un-ionized Ammonia Nitrogen, Total (as N)	mg/L	Grab

25. Attachment C.X.A, Reporting Requirements. Modify the language in item 2 of sub-section A. General Monitoring and Reporting Requirements, as follows:

    2. Before commencing a new discharge, a representative sample of the effluent or representative samples of the receiving waters, as applicable, shall be collected and analyzed for all the constituents identified in Table I-1, compared with the appropriate screening levels, and submitted with the NOI.

26. Attachment C.X.D, Reporting Requirements. Modify sub-section D. Other Reports to include an additional item, item 5, as follows:

    5. **Alum Application Plan (AAP).** Dischargers applying alum for phosphorous sequestration need to complete an AAP as required in Sections V.B.6 and IX.C.6.b and described in Attachment K.

27. Attachment D.II.A, Facility Description. Modify section II. A. Facility Description, to include items 11 and renumber existing item 11 as item 12, as follows:

    11. Alum application for phosphorous sequestration

        a. Application of alum to surface water is intended to address harmful algal blooms by reducing phosphorus concentrations. Alum binds with phosphorus and settles out of the water column. When properly applied, alum application poses little or no threat to water quality. Consistent with the Clean Water Act, while the alum itself when applied to receiving water for phosphorous sequestration is not a pollutant, any residual or excess from the application constitutes a pollutant requiring an NPDES permit.

    12. Miscellaneous wastewaters without a treatment system

28. Attachment D.III. A.5, Notification Requirements. Modify sub-section A. Requirements for All Dischargers item 5's list, to include items r and renumber existing item r as item s, as follows:

    r. Alum application for phosphorous sequestration

    s. Other

29. Attachment D.III.A.7, Notification Requirements. Modify sub-section 7 as follows:

7. Analytical results of sampling of the effluent or receiving water, as applicable, for the applicable pollutants specified in Table I-1 of Attachment I for the type of wastewater to be discharged;

   a. New Discharges. Upon receipt of the complete Notice of Intent, the Executive Officer shall determine the applicability of the proposed discharge to this General Order. If the discharge is deemed eligible for coverage under this General Order, the Executive Officer will issue a NOA to the Discharger. The NOA will specify that the discharge is authorized under the terms and conditions of this General Order and will prescribe effluent limitations where necessary and include a monitoring and reporting program. New discharges that are not covered by an existing individual or general NPDES permit may not commence discharging until issuance of a NOA. If the discharge is not eligible for coverage under this General Order, the Executive Officer will notify the Discharger in writing with instructions on how to proceed.

   New analytical results must be submitted every 5 years or less from the date of the NOA and every 5 years after that, for the pollutants specified in Table I-1 of Attachment I for the type of wastewater discharged. For Dischargers applying alum for phosphorous sequestration, updated baseline monitoring sampling shall be performed as specified in Table I-1 of Attachment I within 5 years of the last baseline monitoring sampling.

   This General Order shall apply to the individuals, public agencies, private businesses, and other legal entities that have submitted a complete NOI and have received a NOA from the Executive Officer.

   b. Existing Discharges. Current enrollees authorized to discharge under the existing Limited Threat General Order R5-2016-0076-01 (NPDES Permit CAG995002) are automatically authorized under this General Order to continue discharging.

   New analytical results for the pollutants specified in Table I-1 of Attachment I for the type of wastewater discharged must be submitted every 5 years or less from the effective date of the current NOA. Those dischargers that last submitted analytical results specified in Table I-1 of Attachment I more than 5 years ago must submit updated data with an acceptable NOI within 180 days of the effective date of this Order. For Dischargers applying alum for phosphorous sequestration, updated baseline monitoring sampling shall be performed as specified in Table I-1 of Attachment I within 5 years of the last baseline monitoring sampling.

   Upon submittal of an acceptable NOI, the Executive Officer will issue a revised NOA to existing enrollees that coverage under the General Order will continue, specifying any new and continuing effluent limitations and a monitoring and reporting program. Failure to submit a new and acceptable NOI, as described above, may result in termination of coverage.

30. Attachment D.III.B, Additional Requirements for Specific Discharges. Modify sub-section B. Additional Requirements for Specific Discharges, to include item 6, as follows:

    6. **Alum application for the sequestration of phosphorous.**
    An Alum Application Plan (AAP) as described in Attachment K must be submitted with the NOI package for Dischargers applying alum for the sequestration of phosphorous. The AAP may be used to fulfill the requirements of the NOI's Project Description as described above in Section III.A.2 of this attachment.

31. Attachment D, IV, General Order. Add the following as the last sentence to the second paragraph for Section A New Discharges and as the last sentence to the second paragraph of Section B Existing Discharges:

    For Dischargers applying alum for phosphorous sequestration, updated baseline monitoring sampling shall be performed as specified in Table I-1 of Attachment I within 5 years of the last baseline monitoring sampling.

32. Attachment D.IV.G, General Order. Modify the first paragraph in sub-section G. Discharge Criteria, as follows:

    G. **Discharge Criteria**

    Eligible Dischargers enrolling under this General Order are required to analyze the wastewater or receiving water, as applicable, for constituents listed in the appropriate column of Table I-1 in Attachment I and submit the results with the Notice of Intent (NOI) or application. Dischargers applying alum for phosphorus sequestration will need to include an Alum Application Plan (AAP) as described in Attachment K.

33. Attachment D.VI.B.2.g, Rationale for Effluent Limitations and Discharge Specifications. Add subsection g as follows:

    g. Technology-Based Effluent Limitations for Alum Application for Phosphorus Sequestration

    The effluent limitations for alum application include the requirement to implement an approved Alum Application Plan (AAP) that describes appropriate best management practices (BMPs), including an appropriate rate of application and measures to take into account application conditions, such as pH levels in the receiving water. The BMPs within the AAP will be implemented to prevent and minimize any impacts caused by the discharge and assure the protection of water quality within the receiving waters and represent the appropriate level of control under CWA section 301(b) and 40 C.F.R. section 125.3. The development of BMPs provides the flexibility necessary to establish controls to prevent and minimize any impacts while allowing the Discharger to implement appropriate BMPs based on the specific application.

    40 C.F.R. section 122.44(k)(3) allows the use of other requirements such as BMPs in lieu of numeric effluent limits if, among other reasons, numeric effluent limits are infeasible. Alum application for phosphorus sequestration is designed for direct application to water

bodies to address excess phosphorus concentrations. It is infeasible to establish numeric effluent limits because, consistent with the Clean Water Act, this General Order regulates the discharge of any residuals from alum application, rather than the direct application to receiving waters for phosphorus sequestration. Accordingly, the precise location at which a numeric effluent limitation would apply is not easily determinable. Additionally, alum applications may be short in duration and result in variable residual concentrations throughout the receiving waters, making it difficult to establish a numeric limitation at each location. Therefore, the effluent limitation for alum application more appropriately and feasibly includes the requirement to implement an approved AAP that describes appropriate BMPs.

34. Attachment D.VI.C.3, Rationale for Effluent Limitations and Discharge Specifications. Modify the first sentence in item 3.a. Determining the Need for WQBELs, of sub-section C. Water Quality Based Effluent Limitations (WQBELs), as follows:

3. Determining the Need for WQBELs

a**. All Limited Threat Discharges, with the exception of discharges related to alum application for the sequestration of phosphorous (See Section D.VI.B.2.g).**

35. Attachment D.VIII.B. Rationale for Provisions. Modify sub-section B. Special Provisions, items 5, as follows:

5. Special Provisions

a. **Application Schedule.** The Discharger shall provide a phone number or other specific contact information to all persons who request the Discharger's application schedule. The Discharger shall provide the requester with the most current application schedule and inform the requester if the schedule is subject to change. Information may be made available by electronic means, including posting prominently on a well-known website.

b. **Public Notice Requirements.** Every calendar year, at least 15 days prior to the first application of algaecide or aquatic herbicide, the Discharger shall notify potentially affected public agencies. The Discharger shall post the notification on its website if available. The notification shall include the following information:

i. statement of the discharger's intent to apply algaecide or aquatic herbicide(s);

ii. Name of algaecide and aquatic herbicide(s);

iii. Purpose of use

iv. General time period and locations of expected use;

v. Any water use restrictions or precautions during treatment;

iv. A phone number that interested persons may call to obtain additional information from the Discharger.

c. **Alum Application Plan (AAP).** Dischargers shall submit an AAP with their Notice of Intent documents. Elements of the AAP are described in Attachment K.

d. **AAP Processing, Approval and Modifications.** Upon receipt of the AAP, staff will review the AAP for completeness and applicability for this General Permit and post on the Board's website for a 30-day public comment period. If no comments are received and staff deem the AAP complete, the AAP will be incorporated into the NOA. If comments are received, staff will work with the Discharger to address comments to allow for NOA issuance as expeditiously as possible. Once approved, the AAP will be incorporated into the NOA.

Changes to the AAP must be submitted to NPDES permitting for approval and may require additional public comment prior to issuance of an amended NOA

36. Attachment E, Request for Termination of Coverage. Modify the language in Attachment E as follows:

ATTACHMENT E – REQUEST FOR TERMINATION OF COVERAGE

PROJECT NAME_____

_____

PROJECT COUNTY_____

GENERAL ORDER NUMBER R5-2022-0006-03_____

WDID NUMBER_____

CIWQS NUMBER_____

DISCHARGE STOP DATE_____

TOTAL VOLUME OF DISCHARGE_____

TOTAL ELAPSED TIME OF DISCHARGE_____

CERTIFICATION
"I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. The project named above is terminated. There is no longer a discharge to surface water. The treatment system (if applicable) has been dismantled. I request a Notice of Termination from the Executive Officer. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

A. Printed Name: _____

B. Signature:_____ **C. Date:**_____

D. Title: _____

E. Company Name: _____

F. Company Address: _____

Please complete this form and email to the appropriate Regional Board permitting contact at the link below:

Waste Discharges to Surface Water – NPDES Program (https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/contacts/) In addition, send a copy (cc) to the following email address:

centralvalleysacramento@waterboards.ca.gov

Please address the email to the attention of the NPDES Section.

37. Attachment I.I, Selection of Monitoring for Submittal with NOI. Modify the first paragraph in the section, as follows:

I. Selection of Monitoring for Submittal with NOI

Dischargers seeking authorization to discharge under this General Order shall sample and analyze a representative sample of the wastewater or representative samples of receiving water (for alum application baseline monitoring only), for the constituents contained in the appropriate column in Table I-1. The analytical results for wastewater samples shall be compared to the screening levels in Sections II and III of this attachment. Discharges that exceed screenings levels in Sections II and III may require effluent limitations and treatment to remain eligible for enrollment under this General Order. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants in order to evaluate compliance with the screening level. All analytical results and water quality criteria comparisons shall be submitted in the NOI.

38. Attachment I.I, Selection of Monitoring for Submittal with NOI. Modify Table I-1. Selection of Monitoring for Submittal with NOI, to include the Baseline Monitoring for Alum Applications column with corresponding rows and text edits, as shown in part as follows:

Constituents and Parameters	**Petroleum Fuel Projects**	**Baseline Monitoring for Alum Applications**	**Other**
CTR Priority Pollutants (See Table I-3 below)	Yes	No	Yes

Constituents and Parameters	Petroleum Fuel Projects	Baseline Monitoring for Alum Applications	Other
Dissolved Oxygen Hardness pH Temperature Electrical Conductivity (@ 25 ºC)	Yes	Yes (only pH, Hardness and Electrical Conductivity)	Yes
Biochemical Oxygen Demand (BOD) Total Suspended Solids (TSS) Turbidity	Yes	No	Yes
Known Parameters of Concern	Yes (Petroleum Fuel Constituents, see Table I-6)	Yes (Total Phosphorous and Dissolved Aluminum)	Yes
Un-ionized Ammonia Nitrogen (as N) (only for the Tulare Lake Basin)	No	No	Yes
Chlorine, Total Residual	No	No	No
Aluminum, Total Dissolved Organic Carbon Iron, Total Manganese, Total	No	Yes (Total Aluminum and Dissolved Organic Carbon only)	Yes

39. Attachment J, Notice of Intent. Modify the Attachment J's title as follows:

ATTACHMENT J – NOTICE OF INTENT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF
GENERAL ORDER R5-2022-0006-03
NPDES CAG995002
FOR
LIMITED THREAT DISCHARGES TO SURFACE WATERS

40. Attachment J.4, Notice of Intent. Modify item 4. Discharge Type, to include an additional checkbox, titled Alum application, as follows:

4. Discharge Type

To be submitted by all Dischargers. Check all that apply.

☐ Well Development Water	☐ Construction Dewatering
☐ Pump/Well Testing	☐ Water Supply System
☐ Pipeline/Tank Pressure Testing	☐ Filter Backwash
☐ Pipeline/Tank Flushing or Dewatering	☐ Condensate
☐ Aggregate Mine	☐ Superchlorination
☐ Groundwater Extraction and/or Cleanup Project	☐ Equipment Decontamination
☐ Liquid Mine Waste	☐ Wastewater from Cleanup Site
☐ Ambient Streamflow Augmentation	☐ Alum application
☐ Other/Describe	

41. Attachment J, Notice of Intent. Modify Attachment J to include modifications to items 12 and 13. Certification, as follows**:**

12. Additional Requirements for Dischargers applying alum for phosphorous sequestration

An Alum Application Plan (AAP) as described in Attachment K must be submitted with the NOI package. The AAP may be used to fulfill the requirements of the above Section 2 Project Description.

13. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

A. Printed Name:_____

B. Signature:_____ C. Date:_____

D. Title:_____

42. Modify the Limited Threat General Order to add an additional Attachment, Attachment K-Alum Application Plan (AAP), as follows:

ATTACHMENT K – ALUM APPLICATION PLAN (AAP)

The Alum Application Plan (AAP) is required for dischargers who are applying alum to reduce phosphorous in receiving waters. For the purposes of this permit, the term “alum” will be used to describe the class of chemicals used to sequester phosphorous that have aluminum as their active ingredient (such as aluminum sulfate and sodium aluminate). The AAP shall be submitted with the Notice of Intent documents.

The AAP shall contain, but not be limited to, the following elements, to address each proposed treatment area:

1. **Project Summary:**

   Provide an overall summary of the proposed project, including the approximate startup date and duration.

2. **Problem Statement:**

   Identify the need for the use of alum

3. **Receiving Water(s):**

   Identify the receiving water(s) impacted by the alum application (e.g. lake, creek, or river). Provide a description of the treatment area within in the receiving water(s). If applicable, list the gates or control structures to be used to control the extent of receiving waters potentially affected by the alum application and provide an inspection schedule of those gates or control structures to ensure they are operational. Include a site map showing the location of the proposed treatment area and monitoring points.

4. **Description of Alum Performance**

   Describe the potential water quality benefits of alum application.

5. **Water Body Impacts:**

   Identify potential effects on the waterbody and water quality parameters (e.g pH), such as the need for buffering.

6. **Aquatic Organism Impacts:**

   Identify potential effects on aquatic organisms

7. **Project Objectives and Hypothesized Results:**

   Describe the objectives and the expected results of the alum treatment.

8. Techniques and Equipment:

Provide a description of the application techniques, equipment, and procedural steps that will be used for application of the alum. Include a description of the Best Management Practices (BMPs) to be implemented. The BMPs shall include, at a minimum:

1. Measures that prevent alum spills and for alum spill containment during the event of a spill;
2. Measures to ensure that only an appropriate rate of application is applied and the treatment is relatively uniform and mixed;
3. Measures to cease alum application or controls to be implemented if the pH drops below 6.5.
4. Measures to cease alum application when wind speed is greater than 15 miles per hour.
5. The Discharger's plan in educating its staff and alum applicators on how to avoid any potential adverse effects of alum application; and
6. Discussion on planning and coordination with farmers and agencies with water rights diversions so that beneficial uses of the water are not impacted during the treatment period
7. Measures for storing or disposing of any unused alum or buffering agents.

9. Calculations:

Provide calculations showing how the Discharger will determine the actual amount of alum that will be applied during treatment. These calculations must also include any assumptions that may be used, the reasons why those assumptions were made, and the source of the data used to make the assumptions.

10. Monitoring Plan:

Provide the details of monitoring that will occur prior to, during, and after, treatment with the alum. The sampling and analysis program must be developed and implemented in accordance with the General Monitoring Provisions, Receiving Water Monitoring and Reporting Requirements contained in sections I, VII and X, respectively, of the Monitoring and Reporting Program (Attachment C). At a minimum, the monitoring must include the following:

A. Baseline Monitoring – As described in Attachment I, Table I-1, the discharger must take water samples to establish baseline conditions in the receiving water(s) for the following parameters:
    a. pH
    b. Electrical Conductivity
    c. Dissolved organic carbon (DOC)
    d. Total hardness (CaCO3)
    e. Aluminum, Total
    f. Aluminum, Dissolved

g. Total Phosphorus

B. Application Monitoring
   i. Surface water pH and electrical conductivity samples will be taken just prior to application of alum. Continuous monitoring of pH at 15 minute intervals shall be conducted during the application of the alum.
   ii. Electrical conductivity, total recoverable aluminum and dissolved aluminum samples shall be collected immediately after the alum application.
   iii. Visual observations shall be recorded before, during and immediately after the alum application.
C. Post-application Monitoring – two weeks after treatment and monthly thereafter for 3 months, the Discharger shall sample for:
   i. pH
   ii. Electrical Conductivity
   iii. Dissolved organic carbon (DOC)
   iv. Total hardness (CaCO3)
   v. Total recoverable aluminum
   vi. Total Phosphorus
   vii. Visual observations
D. Representative Monitoring Location(s) - The monitoring location(s) shall be representative of the waterbody-wide conditions, with at least one shoreline and one open water location. Describe the rationale for the selection of representative monitoring locations. The latitude and longitude coordinates for each monitoring location must be recorded. Samples must be taken from the same location(s) prior to, during and after the alum application.

11. Proposed Schedule

A schedule for proposed treatment(s), monitoring, and reporting. Timing should address aquatic plant biomass that may interfere with inactivation of sediment phosphorus (i.e., early spring or fall treatment may be the most optimal timeframe).

12. Reporting

Reporting for alum application must include:

A. Date and Location of application
B. Name of applicator(s)
C. Type and amount of product used
D. Total area treated
E. Application details, such as flow, and level of water body, time application started and stopped, and application rate and concentration.
F. Results of any water quality parameter monitoring required as part of the alum application
G. Laboratory analysis records, which must include analysis method and units of measure.

H. Any observed, or measured, impacts or stress to aquatic organisms or wildlife.
I. Description of whether the project objectives were achieved.
J. Certification that the applicator(s) followed the AAP

13. Bibliography

A bibliography containing citations to the references of currently available scientific journal articles or other sources of information used in developing the plan for alum application.

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 CWC 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 that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day.
Links to the laws and regulations applicable to filing petitions
(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the Internet or will be provided upon request.

I, PATRICK PULUPA, 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 23 August 2024.

Date: 2024.09.16 15:26:39 -07'00'

PATRICK PULUPA, Executive Officer