CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
1515 Clay Street, Suite 1400, Oakland, California 94612
waterboards.ca.gov/sanfranciscobay

REVISED TENTATIVE ORDER R2-2021-00XX
NPDES PERMIT CAG382001

This Order set forth general waste discharge requirements (WDRs) for discharges of filter backwash from drinking water facilities.

This Order was adopted on:	**<Adoption Date>**
This Order shall become effective on:	**July 1, 2021**
This Order shall expire on:	**June 30, 2026**
CIWQS regulatory measure number:	**<XXXXXX>**

To obtain coverage under this Order, prospective dischargers must submit the Notice of Intent (NOI) form shown in Attachment B and a filing fee equivalent to the first year's annual fee. Discharge is not authorized until the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), Executive Officer issues an Authorization to Discharge. Authorized Dischargers that intend to continue discharging after this Order's expiration date shall file a new NOI form no later than **September 30, 2025.**

The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified discharges under this general National Pollutant Discharge Elimination System (NPDES) permit (General Permit) as "**minor**."

I hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the Regional Water Board on the date indicated above.

_____
Michael Montgomery, Executive Officer

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ATTACHMENTS

1. GENERAL PERMIT SCOPE

These WDRs shall serve as an NPDES General Permit for discharges of treated filter backwash from drinking water treatment facilities to inland surface waters.

This Order does not cover discharges that can be covered under the State Water Resources Control Board's (State Water Board's) General NPDES Permit for Drinking Water System Discharges (NPDES Permit CAG140001) (Statewide General Permit).

Fact Sheet (Attachment F) sections 1 and 2 provide additional information describing treated filter backwash discharges.

2. FINDINGS

The Regional Water Board finds the following:

2.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370).

2.2. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application process, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E are also incorporated into this Order.

2.3. Notification of Interested Parties. The Regional Water Board notified the prospective enrollees and interested agencies and persons of its intent to prescribe these WDRs and has provided an opportunity to submit written comments and recommendations. Fact Sheet section 8.1 provides details regarding the notification.

2.4. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Fact Sheet section 8.3 provides details regarding the public hearing.

THEREFORE, IT IS HEREBY ORDERED that Order R2-2016-0009 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Water Code division 7 (commencing with § 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, Dischargers authorized to discharge pursuant to this Order shall comply with the requirements in this Order. This action in no

way prevents the Regional Water Board from taking enforcement action for violations of the previous order.

3. DISCHARGE PROHIBITIONS

3.1. Discharge of waste at a location or in a manner different than that described in the NOI and Authorization to Discharge is prohibited.

3.2. Bypassing settling basins or clarifiers identified in the NOI is prohibited, except as provided for in Attachment D section 1.7.

4. EFFLUENT LIMITATIONS

4.1. Effluent Limitations. Discharge from each outfall, as defined in the NOI and Authorization to Discharge, shall comply with the following effluent limitations, with compliance measured at Monitoring Locations EFF-001 through EFF-"n," as described in the Monitoring and Reporting Program (MRP, Attachment E):

Table 1. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
Total Suspended Solids	mg/L	30	45	-	-
Settleable Matter	mL/L-hr	0.1	-	0.2	-
Chlorine, Total Residual	mg/L	-	-	-	0.0
Cyanide [1]	µg/L	4.3	-	8.5	-

Footnote:

[1] These cyanide limits apply unless representative data provided in the NOI demonstrate that both of the following conditions are met:

- The maximum effluent cyanide concentration is less than 5.2 µg/L; and
- If the ambient background concentration observed in the receiving water is greater than 5.2 µg/L, cyanide is not detected in any effluent sample.

If these conditions are met, the Executive Officer will indicate that these cyanide effluent limits do not apply in the Authorization to Discharge.

4.2. Acute Toxicity. Discharge from each outfall, as defined in the NOI and Authorization to Discharge, shall meet the following acute toxicity effluent limitations, with compliance measured at Monitoring Locations EFF-001 through EFF-"n," as described in the MRP:

4.2.1. The 3-sample median survival rate shall not be less than 90 percent survival; and

4.2.2. The single-sample survival rate shall not be less than 70 percent survival.

5. RECEIVING WATER LIMITATIONS

5.1. Discharges shall not cause the following conditions at any place in receiving waters:

5.1.1. Floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses;

5.1.2. Alteration of suspended sediment in such a manner as to cause nuisance or adversely affect beneficial uses or detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life;

5.1.3. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses;

5.1.4. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

5.1.5. Alteration of temperature beyond present natural background levels unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses;

5.1.6. Changes in turbidity that cause nuisance or adversely affect beneficial uses, or increases from normal background light penetration or turbidity greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units, or above 55 nephelometric turbidity units in areas where natural turbidity is less than or equal to 50 nephelometric turbidity units;

5.1.7. Coloration that causes nuisance or adversely affects beneficial uses;

5.1.8. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

5.1.9. Toxic or other deleterious substances in concentrations or quantities that cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration; or

5.1.10. Erosion of the stream bank and streambed.

5.2. Discharges shall not cause the following limits to be exceeded at any place in receiving waters within one foot of the water surface:

5.2.1. The pH shall not be depressed below 6.5 nor raised above 8.5.

5.2.2. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.

5.3. Discharges shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board or State Water Board as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or

amendments thereto, the Regional Water Board may revise or modify this Order in accordance with the more stringent standards.

6. PROVISIONS

6.1. Standard Provisions

The Discharger shall comply with all “Standard Provisions” in Attachment D.

6.2. Monitoring and Reporting Provisions

The Discharger shall comply with the MRP (Attachment E) and future revisions thereto, and applicable sampling and reporting requirements in Attachment D. The Executive Officer may specify additional monitoring requirements in the Authorizations to Discharge.

6.3. Special Provisions

6.3.1. Reopener Provisions

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law or as otherwise authorized by law. A Discharger may request a permit modification based on any of these circumstances. With any such request, the Discharger shall include antidegradation and anti-backsliding analyses as necessary.

6.3.1.1. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters;

6.3.1.2. If new or revised water quality objectives or total maximum daily loads (TMDLs) come into effect for San Francisco Bay or contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect the updated water quality objectives or wasteload allocations. Adoption of the effluent limitations in this Order is not intended to restrict in any way future modifications based on legally-adopted water quality objectives or TMDLs or as otherwise permitted under federal regulations governing NPDES permit modifications;

6.3.1.3. If translator, dilution, or other water quality studies provide a basis for determining that a permit condition should be modified;

6.3.1.4. If a State Water Board precedential decision, new policy, new law, or new regulation is adopted; or

6.3.1.5. If an administrative or judicial decision on a separate NPDES permit or WDRs addresses requirements similar to this discharge.

6.3.2. **Application for General Permit Coverage and Authorization to Discharge**

6.3.2.1. **Notice of Intent.** A prospective discharger seeking Authorization to Discharge pursuant to this Order shall complete and submit the NOI form in Attachment B. A prospective discharger seeking coverage for similar discharges at multiple sites may complete one NOI form that describes all proposed discharges; however, it shall submit separate fees for each site. The Executive Officer may require additional information prior to authorizing any discharge.

6.3.2.2. **Facility Modifications.** At least 30 days prior to any significant facility modification (e.g., changing an outfall location), the Discharger proposing the modification shall submit a modified NOI form (e.g., a mark-up of the original NOI form showing all changes and including a new signature and date). The Discharger shall include a letter describing the changes, their purpose, when they are to go into effect, and any new or additional measures taken or planned to prevent potential non-compliance with this Order's requirements.

6.3.2.3. **NOI Review.** Upon receipt of a complete NOI for a proposed discharge (or a modified NOI for an existing discharge), the Executive Officer will review the application to determine whether the proposed Discharger is eligible to discharge under this Order.

6.3.2.4. **Authorization to Discharge.** If the Executive Officer concludes that a proposed discharge is eligible for coverage under this Order, the Executive Officer will issue an Authorization to Discharge (or a modified Authorization to Discharge, if appropriate). Upon the effective date of the Authorization of Discharge, the Discharger shall comply with the requirements of this Order and its attachments. Any non-compliance with this Order's requirements shall constitute a violation of the CWA and Water Code and may be grounds for enforcement; termination, revocation and reissuance, or modification of the Authorization to Discharge; issuance of an individual permit; or denial of an application for reissuance.

6.3.2.5. **Application to Extend Coverage.** A Discharger that intends to continue discharging after the expiration date of this Order shall file a new NOI form no later than September 30, 2025.

6.3.2.6. **Discharge Termination.** A Discharger may terminate its coverage under this Order by submitting a letter rescinding its NOI and stating the reason for termination. The Executive Officer may also terminate or revoke coverage under this Order for any of the causes specified for an individual permit as set forth in 40 C.F.R. section 122.28(b)(3). After providing notice and

opportunity for a hearing, coverage under this Order may be terminated or modified for cause, including, but not limited to, the following:

6.3.2.6.1. Violation of any term or condition of this Order;

6.3.2.6.2. Misrepresentation or failure to disclose all relevant facts in obtaining coverage under this Order; or

6.3.2.6.3. Change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

6.3.2.7. **Continuation of Expired Permit.** This Order continues in force and effect until it is rescinded or reissued. Only those Dischargers authorized to discharge prior to the expiration date on the first page of this Order may continue to discharge under the continued Order.

6.3.2.8. **Need for Individual NPDES Permit.** The Executive Officer may require any Discharger authorized to discharge pursuant to this Order to subsequently apply for and obtain an individual NPDES permit in the following circumstances:

6.3.2.8.1. The Discharger is not in compliance with the requirements of this Order;

6.3.2.8.2. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants from the facility;

6.3.2.8.3. Effluent limitation guidelines are promulgated for the discharges covered by this Order;

6.3.2.8.4. A new or revised water quality control plan containing requirements applicable to the discharge is approved;

6.3.2.8.5. The requirements of 40 C.F.R. section 122.28(a) (the circumstances under which the Regional Water Board is authorized to issue a general permit) are not met; or

6.3.2.8.6. Any other condition specified in 40 C.F.R. section 122.28(b)(3) is met.

6.3.3. **Operations and Maintenance Manual Review and Status Reports**

6.3.3.1. The Discharger shall maintain Operations and Maintenance Manuals for its filter backwash treatment facilities and make them available for reference and use by appropriate personnel, including those working onsite.

6.3.3.2. The Discharger shall regularly review, and revise or update as necessary, its Operations and Maintenance Manuals so that they remain useful and relevant to current filter backwash equipment and operational practices. In the event of any significant changes in treatment facility equipment or

operational practices, the Discharger shall complete revisions within 90 days of completing such changes.

6.3.3.3. The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its Operations and Maintenance Manuals, including any recommended or planned actions and a time schedule for these actions.

6.3.3.4. The Discharger shall review Operations and Maintenance Manuals at least annually and describe applicable changes in each annual self-monitoring report required by MRP section 6.2.3.1.4.

6.3.4. **Best Management Practices (BMPs) Plan**

The Discharger shall prepare and implement a BMPs Plan that describes steps to ensure that discharges will not adversely affect receiving waters and implement it upon receipt of an Authorization to Discharge. The BMPs Plan shall be retained onsite, revised as necessary to maintain compliance with this Order, and made available upon request of any Regional Water Board representative. The Executive Officer may require additional pollutant control and treatment measures if existing measures are found to be inadequate to control pollutant discharges.

All field personnel, onsite supervisors, and operators shall receive training in the BMPs Plan at least annually. The Discharger shall review and update the effectiveness and adequacy of its BMPs as often as necessary and at least annually. The Discharger shall describe any revisions in each annual self-monitoring report required by MRP section 6.2.3.1.5.

The BMPs Plan shall address potential discharges from all discharge points and must include the following elements:

6.3.4.1. **Facility Operation**

6.3.4.1.1. Describe the filter backwash treatment processes and include a flow diagram.

6.3.4.1.2. Provide the filter backwashing frequency and flow rate.

6.3.4.1.3. Describe chemical usage for filter backwash treatment, if any, and include a section estimating the residual concentration in the discharge as compared to the no adverse effect level concentration as documented in the ecological section of the applicable Safety Data Sheet (SDS) for each chemical used. A copy of the SDS for each chemical used for filter backwash treatment shall be included in the BMP.

6.3.4.1.4. Describe filter backwash treatment methods (e.g., settling basin).

6.3.4.2. **Potential Pollutants.** Describe pollutants that may potentially be generated by the facility. These pollutants may include, but are not be limited to:

6.3.4.2.1. Chemicals used in water treatment;

6.3.4.2.2. Pollutants associated with operation and maintenance of equipment, such as oil and grease and hydraulic fluid;

6.3.4.2.3. Any solids or sediments generated by the operation;

6.3.4.2.4. Stormwater runoff from exposed oil, fuel, or any hazardous material storage locations and containment structures; and

6.3.4.2.5. Sediment (e.g., stream bank conditions at discharge locations may result in erosion and sediment discharges).

6.3.4.3. **Pollution Control and Effluent Treatment Methods.** Describe in detail the control and treatment measures for each of the potential pollutants identified in accordance with section 6.3.4.2 above, including:

6.3.4.3.1. Prevention measures to be implemented to prevent the pollutants from entering the effluent and receiving water;

6.3.4.3.2. Measures to reduce or eliminate the use of copper and copper-containing substances to the maximum extent practical;

6.3.4.3.3. Effluent treatment methods to be implemented onsite to remove the pollutants in the effluent;

6.3.4.3.4. Maintenance procedures and maintenance schedules to maintain the filter backwash wastewater treatment system; and

6.3.4.3.5. Methods to prevent stream bank erosion resulting from the discharge (e.g., bank stabilization, control of discharge rate).

6.3.4.4. **Chlorine and/or Ammonia Management.** The BMPs Plan shall include the following regarding chlorine and/or ammonia management:

6.3.4.4.1. Description of storage and transportation of disinfection chemicals (e.g., chlorine gas, sodium hypochlorite, and ammonia) used at the facility, including storage methods, storage tank size and location, secondary containment, and any exposed pipes used for transport;

6.3.4.4.2. Chlorine and/or ammonia spill and leakage prevention measures, including how chlorine and/or ammonia are handled to prevent spills, and emergency response and cleanup plans in the event of a spill or leak. The BMPs Plan shall include the schedule for routine inspection of chlorine and/or ammonia storage sites and transport piping to prevent leaks;

6.3.4.4.3. Chlorinated and chloraminated water spill response procedures. The Discharger shall install an alarm system to warn of chlorinated and chloraminated water overflows or spills. The BMPs Plan shall describe procedures for dechlorination of spills or overflow water; and

6.3.4.4.4. Water release procedures, including procedures for total chlorine residual monitoring and dechlorination of chlorinated and/or chloraminated water to be released or discharged.

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

Arithmetic Mean (μ)
Also called the average, sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$

where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples

Average Monthly Effluent Limitation (AMEL)
Highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
Highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative
Taken up by an organism from its surrounding medium through gill membranes, through epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Known to cause cancer in living organisms.

Coefficient of Variation (CV)
Measure of data variability calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Either: (1) the total mass of a constituent discharged over a calendar day (12:00 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit) for a constituent with limitations expressed in units of mass; or (2) the unweighted arithmetic mean measurement of a constituent over a day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period is considered the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
Sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit
Amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
Value derived from the water quality criterion or objective, dilution credit, and ambient background concentration that is used, in conjunction with the CV for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in U.S. EPA guidance (*Technical Support Document for Water Quality-based Toxics Control*, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
Concentration that results from the confirmed detection of a substance below the ML by the analytical method.

Estuaries
Waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters are considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220; Suisun Bay; Carquinez Strait downstream to the Carquinez Bridge; and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inland Surface Waters
All surface waters of the state that are not the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
Highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
Lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
Highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
Middle measurement in a data set. The median of a data set is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2+1)})/2$ (i.e., the midpoint between n/2 and n/2+1).

Method Detection Limit (MDL)
Minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Appendix B.

Minimum Level (ML)
Concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Limited volume of receiving water allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results less than the laboratory's MDL.

Persistent Pollutants
Substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program
Program of waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of a Pollutant Minimization Program is to reduce all potential sources of a priority pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. Cost effectiveness may be considered when establishing the requirements of a Pollutant Minimization Program. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), is considered to fulfill the Pollutant Minimization Program requirements.

Pollution Prevention
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board or Regional Water Board.

Reporting Level (RL)
ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. For priority pollutants, the MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from State Implementation Plan (SIP) Appendix 4 in accordance with SIP section 2.4.2 or established in accordance with SIP section 2.4.3. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) beneficial use.

Standard Deviation (σ)
Measure of variability calculated as follows:

Standard deviation = $\sigma = (\Sigma[(x - \mu)^2]/(n - 1))^{0.5}$

where: x is the observed value
μ is the arithmetic mean of the observed values
n is the number of samples

ABBREVIATIONS

%	Percent
µg/L	Micrograms per liter
1/Blending Event	Once per blending event
1/Day	Once per day
1/Month	Once per month
1/Quarter	Once per quarter
1/Week	Once per week
1/Year	Once per year
2/Month	Two times per month
2/Week	Twice per week
2/Year	Twice per year
3/Week	Three times per week
4/Week	Four times per week
5/Week	Five times per week
AMEL	Average monthly effluent limitation
AWEL	Average weekly effluent limitation
B	Background concentration
C	Water quality criterion or objective
C-24	24-hour composite
CFU/100 mL	Colony forming units per 100 milliliters
Continuous	Measured continuously
Continuous/D	Measured continuously, and recorded and reported daily
Continuous/H	Measured continuously, and recorded and reported hourly
CV	Coefficient of Variation
DNQ	Detected, but not quantified

DL	Detection level
ECA	Effluent Concentration Allowance
Grab	Grab sample
MDEL	Maximum Daily Effluent Limitation
MDL	Method detection limit
MEC	Maximum effluent concentration
MG	Million gallons
mg/L	Milligrams per liter
mg/L as N	Milligrams per liter as nitrogen
MGD	Million gallons per day
ML	Minimum level
MPN/100 mL	Most probable number per 100 milliliters
ND	Not detected
NTU	Nephelometric turbidity units
RL	Reporting level
RPA	Reasonable potential analysis
s.u.	Standard pH units

ATTACHMENT B – NOTICE OF INTENT FORM

This **NOTICE OF INTENT** form shall be completed and submitted to apply for authorization to discharge filter backwash from drinking water treatment facilities to inland surface waters pursuant to NPDES Permit CAG382001.

1. OWNER INFORMATION AND CERTIFICATION

This certification shall be signed in accordance with Attachment D section 5.2.2. The Discharger hereby agrees to comply with and be responsible for all conditions specified in NPDES Permit CAG382001.

<table>
<tr><td colspan="3">I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 and imprisonment for knowing violations.

Signature Date

Printed Name Title</td></tr>
<tr><td colspan="3">Company/ Organization</td></tr>
<tr><td colspan="3">Facility Street Address</td></tr>
<tr><td>City, County</td><td>State</td><td>Zip Code</td></tr>
<tr><td colspan="3">Contact Person Name and Title</td></tr>
<tr><td colspan="2">Contact Person Email</td><td>Phone Number</td></tr>
</table>

☐ Check here if additional owner information is attached to this form.

2. DULY AUTHORIZED REPRESENTATIVE

Duly Authorized Representative: The following individual (or any individual occupying the position listed below) may act as the facility's duly authorized representative and may sign and certify submittals in accordance with Attachment D section 5.2.3. This individual shall be responsible for the overall operation of the facility or for facility environmental matters. Name and Title
Company/ Organization

Email	Phone Number

☐ Check here if information for additional duly authorized representative is attached to this form.

3. BILLING INFORMATION

Name		
Mailing Street Address		
City	State	Zip Code
Contact Person's Name and Title		
Contact Person Email		Phone Number

4. DISCHARGE POINTS AND RECEIVING WATERS

Discharge Points	Latitude	Longitude	Receiving Water Name
001			
002			
003			
004			

* If discharging to a storm drain system, attach documentation indicating approval to discharge from the agency responsible for the system.

5. DISCHARGE AND RECEIVING WATER QUALITY

Summarize or submit all monitoring data collected during the past five years, including effluent and receiving water data. Complete the tables below or submit the data in an Excel document. New dischargers may estimate concentrations. Provide separate data summary tables for each discharge point (outfall) and receiving water.

5.1. EFFLUENT DISCHARGE DATA

Effluent monitoring shall be collected at any point between the point of discharge to the receiving water and the point at which all waste tributary to the outfall is present.

Parameter	Highest Value	Range	Units	Test Method	Method Detection Limit	Number of Samples
Chlorine, Total Residual			mg/L			
Cyanide			µg/L			
Total Suspended Solids			mg/L			
Settleable Matter			mL/L-hr			
Turbidity			NTU			
pH			s.u.			
Acute Toxicity			% survival			
Copper [1]			µg/L			
Arsenic [1]			µg/L			
Cadmium [1]			µg/L			
Chromium (III) [1]			µg/L			
Chromium (VI) [1]			µg/L			
Lead [1]			µg/L			
Mercury [1]			µg/L			
Nickel [1]			µg/L			
Selenium [1]			µg/L			
Silver [1]			µg/L			
Zinc [1]			µg/L			

Footnote:

[1] All metals shall be reported as total recoverable metal.

5.2. RECEIVING WATER DATA

Receiving water monitoring shall be collected at a point in the receiving water where discharge effects would not be expected (e.g., upstream of the outfall).

Parameter	Highest Value	Range	Units	Test Method	Method Detection Limit	Number of Samples
Turbidity			NTU			
Total Suspended Solids			mg/L			
pH			s.u.			
Hardness			mg/L as $CaCO_3$			
Cyanide			µg/L			
Copper [1]			µg/L			
Arsenic [1]			µg/L			
Cadmium [1]			µg/L			
Chromium (III) [1]			µg/L			
Chromium (VI) [1]			µg/L			
Lead [1]			µg/L			
Mercury [1]			µg/L			
Nickel [1]			µg/L			
Selenium [1]			µg/L			
Silver [1]			µg/L			
Zinc [1]			µg/L			

Footnote:

[1] All metals shall be reported as total recoverable metal.

6. SITE LAYOUT MAP

Provide topographic site layout map with the following information:

- Legal facility boundaries;
- Location of all water and wastewater treatment units, such as settling basins;
- Intake and discharge point locations; and
- Receiving waters (and storm drains, if applicable).

7. FLOW CHART

Attach flow charts, line drawings, or diagrams showing the filter backwash wastewater flow from treatment system to discharge.

8. SITE-SPECIFIC BEST MANAGEMENT PRACTICES (BMPS) PLAN

Provide a site-specific BMPs plan that addresses all specific means of controlling pollutant discharges from the filter backwash wastewater treatment system (see Provision 6.3.4 of the Order).

9. APPLICATION FEE AND MAILING INSTRUCTIONS

Submit a check payable to "State Water Resources Control Board" for the appropriate application fee to the following address:

San Francisco Bay Regional Water Quality Control Board
Attn: NPDES Wastewater Division
1515 Clay Street, Suite 1400
Oakland, CA 94612

For the current fee for general NPDES permit category 3, see Water Code section 2200(b)(10) (www.waterboards.ca.gov/resources/fees/water_quality/#npdes).

For Dischargers authorized under the previous order that wish to continue discharge under this Order, a check for the permit application fee is not required. Instead, these authorized Dischargers must continue to pay annual fees.

Submit this form (with signature and attachments) via email to R2NPDES.GeneralPermits@waterboards.ca.gov or as otherwise indicated at www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/general_permits.html.

ATTACHMENT C – INSTRUCTIONS FOR NOTICE OF INTENT FORM

These instructions explain how to complete the Notice of Intent (NOI) form shown in Attachment B. Submittal of an NOI indicates a Discharger's commitment to comply with the terms of this Order, which authorizes discharges of filter backwash from drinking water treatment facilities to inland surface waters.

1. OWNER INFORMATION AND CERTIFICATION

The owner is the organization or person who owns or leases the facility or land where the drinking water filter facility is located. For a facility that is one of several owned by a corporation, indicate the corporation name and the name by which the facility is known to the employees (i.e., ABC Inc. - DEF Facility). Provide the street address or a description of the facility location (i.e., 1234 15th Drive or northwest corner of 1st Street and X Avenue). Each facility must obtain separate coverage under this Order.

The person certifying the NOI form must meet the requirements described in Attachment D section 5.2.2. Review these requirements carefully. Specific requirements apply to corporations, partnerships, sole proprietorships, and public agencies.

2. DULY AUTHORIZED REPRESENTATIVE

The person described in Attachment D section 5.2.2 may designate a duly authorized representative to sign permit-related submittals in accordance with Attachment D section 5.2.3. Alternatively, a duly authorized representative may be designated through separate correspondence, particularly if the NOI form language does not sufficiently limit the delegated authority.

3. BILLING INFORMATION

Indicate to whom the annual permit fee should be billed.

4. DISCHARGE POINTS AND RECEIVING WATER

Identify all points where the facility discharges wastewater to surface waters or storm drains, and provide latitudes and longitudes (using degrees, minutes, and seconds, or at least five decimal places). Name the receiving waters to which discharges flow (permitted discharges may flow through storm drains if authorized by storm drain system owners). Attach additional pages as necessary.

5. DISCHARGE AND RECEIVING WATER QUALITY

Summarize discharge and receiving water monitoring data collected during the past five years in the tables given or submit the data in an Excel document. For existing facilities, all of the parameters must be tested by a State-certified laboratory and reported in this table. If discharge data have not already been provided to the Regional Water Board, provide a copy of the laboratory data sheets and chain of custody documents, as applicable. Test results shall be obtained from a sample or samples representative of

the discharge. New Dischargers may estimate concentrations. Provide separate data summary tables for each discharge point and receiving water. Attach additional sheets if needed.

6. SITE LAYOUT MAP

Provide a topographic site layout map. The map must illustrate the legal facility boundaries and extend at least one mile beyond the boundaries.

Indicate discharge points on the location map and include all of the required information. The discharge points may include where the discharge exits the facility and enters the roadway right-of-way and then flows into a separate storm drainage system and/or where the discharge directly enters surface waters. Identify discharge points with numbers that correspond to the discharge points in section 4 of the NOI. On the map, discharge points may be shown where the discharge enters receiving waters, or where the discharge leaves the facility and enters a separate storm drain system. If relevant, also show intake locations.

7. FLOW CHART

The flow chart must indicate all portions of the filter backwash wastewater treatment system, including the discharge of treated filter backwash wastewater to the receiving water, and the approximate amounts of flow through each process or discharge. Flows may be estimated if data are unavailable.

8. SITE-SPECIFIC BEST MANAGEMENT PRACTICES (BMPS) PLAN

Attach a site-specific BMPs Plan that addresses all means of controlling pollutant discharges from the facility (see Provision 6.3.4 of the Order). Confidential facility information may be omitted from the submittal but must be provided upon the Executive Officer's request.

9. APPLICATION FEE AND MAILING INSTRUCTION

The NOI is incomplete without payment of the full permit fee, unless the NOI is for a discharge authorized under the previous order and the Discharger is also in good standing regarding payment of annual fees. A separate fee is required for each facility. As of 2021, the application fee is $2,811. The State Water Resources Control Board may modify the fee at any time.

For the current fee for general NPDES permit category 3, see www.waterboards.ca.gov/resources/fees/water_quality/#npdes.

ATTACHMENT D – STANDARD PROVISIONS

CONTENTS

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

1.1.1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

1.1.2. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

1.3. Duty to Mitigate. The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

1.4. Proper Operation and Maintenance. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

1.5. Property Rights

1.5.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

1.5.2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

1.6. Inspection and Entry. The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

1.6.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and

1.6.4. Sample or monitor, at reasonable times, for the purposes of ensuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

1.7. Bypass

1.7.1. **Definitions**

1.7.1.1. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

1.7.1.2. “Severe property damage” means substantial physical damage to property; damage to the treatment facilities, which causes them to become inoperable; or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur that does not cause exceedances of effluent limitations, but only if it is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance sections 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. § 122.41(m)(2).)

1.7.3. **Prohibition of bypass.** Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

1.7.3.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

1.7.3.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

1.7.3.3. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance section 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

1.7.4. **Approval.** The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance section 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

1.7.5. **Notice**

1.7.5.1. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)

1.7.5.2. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions – Reporting section 5.5 below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)

1.8. Upset. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance section 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

1.8.2. **Conditions necessary for a demonstration of upset.** A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

1.8.2.1. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

1.8.2.2. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

1.8.2.3. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting section 5.5.2.2 below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

1.8.2.4. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance section 1.3 above. (40 C.F.R. § 122.41(n)(3)(iv).)

1.8.3**. Burden of proof.** In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

2.2. Duty to Reapply. If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

2.3. Transfers. This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

3.2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

3.2.2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N, for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

4.1. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

4.2. Records of monitoring information shall include:

4.2.1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

4.2.2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

4.2.3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4.2.4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

4.2.5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

4.2.6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

4.3. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

4.3.1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

4.3.2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information. The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information that the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

5.2.1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting sections 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k).)

5.2.2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental

compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

For a municipal, state, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3).).

5.2.3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting section 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting section 5.2.2 above (40 C.F.R. § 122.22(b)(1));

5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

5.2.3.3. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

5.2.4. If an authorization under Standard Provisions – Reporting section 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting section 5.2.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5.2.5. Any person signing a document under Standard Provisions – Reporting section 5.2.2 or 5.2.3 above shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – Reporting sections 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting section 5.2, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

5.3. Monitoring Reports

5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)

5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

5.3.4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

5.4. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

5.5. Twenty-Four Hour Reporting

5.5.1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

5.5.2. The following shall be included as information that must be reported within 24 hours:

5.5.2.1. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.5.3. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.6. Planned Changes. The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order unless the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a). (40 C.F.R. § 122.41(l)(1)(ii).) If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions – Notification Levels section 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii).)

5.7. Anticipated Noncompliance. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity

that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

5.8. Other Noncompliance. The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting sections 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting section 5.5 above.

5.9. Other Information. When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data. The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. § 127.2(c)]. U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, Water Code sections 13268, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Non-Municipal Facilities. Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

7.1.1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

7.1.1.1. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

7.1.1.2. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4 dinitrophenol and 2-methyl 4,6 dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

7.1.1.3. Five (5) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

7.1.1.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

7.1.2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

7.1.2.1. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

7.1.2.2. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

7.1.2.3. Ten (10) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

7.1.2.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

7.2. Publicly Owned Treatment Works (POTWs)

7.2.1. All POTWs shall provide adequate notice to the Regional Water Board of any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)).

7.2.2. All POTWs shall provide adequate notice to the Regional Water Board of any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)

7.2.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Clean Water Act section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State laws and regulations.

1. GENERAL MONITORING PROVISIONS

1.1. The Discharger shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 C.F.R. section 122.63.

1.2. The Discharger shall conduct all monitoring in accordance with Attachment D section 3. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit or the Discharger's Authorization to Discharge.

1.3. For the analysis of monitoring samples, the Discharger shall use laboratories certified by the State Water Resources Control Board (State Water Board) in accordance with Water Code section 13176 and shall obtain quality assurance/quality control data with laboratory reports. For any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, disinfectant residual) analyzed by a noncertified laboratory, the Discharger shall implement a Quality Assurance-Quality Control Program. The Discharger shall keep a manual onsite containing the steps followed in this program and shall demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.

2. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with this Order:

Table E-1. Monitoring Locations

Type	Name	Description
Effluent	EFF-001 through EFF-"n"	Any point in the outfall between the point of discharge to the receiving water and the point at which all waste tributary to the outfall is present.
Receiving Water	RSW-001	A point in the receiving water where discharge effects would not be expected (e.g., upstream of the outfall).

3. EFFLUENT MONITORING

3.1. When discharging, the Discharger shall monitor discharges at Monitoring Locations EFF-001 through EFF-"n" in accordance with Table E-2 below.

3.2. If a sampling result exceeds a maximum daily or average weekly effluent limitation, or is outside the pH effluent limitation range, the Discharger shall, within 24 hours after the result is received, increase its sampling frequency to daily until the results from two samples collected on consecutive days indicate compliance with the limitation.

3.3. If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter, the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling indicates that the parameter complies with the average monthly effluent limitation.

Table E-2. Effluent Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow [1]	MG/MGD	Continuous or Daily	1/Day
Chlorine, Total Residual [2]	mg/L	Grab or Continuous	1/4 Hours
Cyanide	µg/L	Grab	1/Year [3]
Total Suspended Solids	mg/L	Grab	2/Year
Settleable Matter	mL/L-hr	Grab	2/Year
Turbidity	NTU	Grab	2/Year
pH	s.u.	Grab	2/Year
Acute Toxicity	% survival	Grab	2/Year [4]
Copper, Total Recoverable	µg/L	Grab	Once
Arsenic, Total Recoverable	µg/L	Grab	Once
Cadmium, Total Recoverable	µg/L	Grab	Once
Chromium (III), Total Recoverable	µg/L	Grab	Once
Chromium (VI), Total Recoverable	µg/L	Grab	Once
Lead, Total Recoverable	µg/L	Grab	Once
Mercury, Total Recoverable [5]	µg/L	Grab	Once
Nickel, Total Recoverable	µg/L	Grab	Once
Selenium, Total Recoverable	µg/L	Grab	Once
Silver, Total Recoverable	µg/L	Grab	Once
Zinc, Total Recoverable	µg/L	Grab	Once

Footnotes:

[1] The daily average flow rate (MGD) and the total monthly flow volume (MG) shall be reported in self-monitoring reports.

[2] The Discharger shall calibrate and maintain total residual chlorine analyzers to reliably quantify values of 0.1 mg/L and greater. This 0.1 mg/L shall be the minimum level (ML) and reporting limit (RL) for total residual chlorine.

If the Discharger monitors chlorine residual continuously, then the Discharger shall describe any and all excursions of the chlorine limit and corrective measures applied to address excursions in transmittal letters of self-monitoring reports. However, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance shall be based only on discrete readings from the continuous data every 4 hours on the hour, beginning at midnight. If there is no discharge at midnight, compliance shall be based on discrete readings from the continuous data every 4 hours, beginning at the start of discharge. The Regional Water Board reserves the right to use all continuous monitoring data for discretionary enforcement.

The Discharger may elect to use a continuous on-line monitoring system for measuring or determining that residual dechlorinating agent is present. This monitoring system may be used to prove that anomalous residual chlorine exceedances measured by on-line chlorine analyzers are false positives because it is chemically improbable to have chlorine present in the presence of sodium bisulfite or calcium thiosulfate. If convincing evidence indicates that chlorine residual exceedances are false positives, the exceedances are not violations of this Order's total chlorine residual limit.

[3] If the Discharger's Authorization to Discharge states that cyanide limits do not apply, then the Discharger may reduce cyanide sampling to "once."

[4] Acute toxicity tests shall be performed in accordance with MRP section 4. If there has been no toxicity for the past three consecutive years (i.e., discharge has been in compliance with the acute toxicity limitations), the Discharger may reduce the toxicity testing frequency to "1/year" as long as it continues to comply with the acute toxicity limitations. If there has been no toxicity for the past three consecutive years, and if the facility does not use polymer in its filter backwash treatment and does not use chloramines for disinfection, the Discharger may reduce the toxicity testing frequency to "1/2 years" as long as it continues to comply with the acute toxicity limitations.

[5] The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring. The minimum level for mercury shall be 2 ng/l (or 0.002 ug/l).

4. TOXICITY TESTING

4.1. Compliance with the acute toxicity effluent limitations shall be evaluated at Monitoring Locations EFF-001 through EFF-"n" by measuring survival of test organisms exposed to 96-hour static renewal bioassays. Samples shall be collected on days coincident with effluent sampling.

4.2. Test organisms shall be rainbow trout *(Oncorhynchus mykiss*). Alternatively, the Executive Officer may specify a more sensitive organism or, if testing a particular organism proves unworkable, the most sensitive organism available.

4.3. All bioassays shall be performed according to the most up-to-date protocols in 40 C.F.R. part 136, currently *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition (EPA-821-R-02-012). If these protocols prove unworkable, the Executive Officer and the Environmental Laboratory Accreditation Program may grant exceptions in writing upon the Discharger's request with justification.

4.4. If the Discharger demonstrates that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limit may be determined after test samples are adjusted to remove the influence of those substances. Written acknowledgement that the Executive Officer concurs with the Discharger's demonstration and that the adjustment will not remove the influence of other substances must be obtained prior to any such adjustment. The Discharger may manually adjust the pH of whole effluent acute toxicity samples prior to performing bioassays. Effluent shall be dechlorinated prior to testing if it contains chlorine.

4.5. Bioassay water monitoring shall include pH, dissolved oxygen, and temperature on a daily basis; and hardness and alkalinity on the first day. These results shall be reported.

4.6. If final or intermediate results of an acute bioassay test indicate a violation or threatened violation (e.g., the percentage of surviving test organisms is less than 70 percent), the Discharger shall initiate a new test as soon as practical. The Discharger shall repeat the test until a test fish survival rate of 90 percent or greater is observed.

4.7. The Discharger shall investigate the cause of any mortalities and report its findings in the next self-monitoring report.

5. RECEIVING WATER MONITORING

5.1. The Discharger shall monitor receiving waters at Monitoring Location RSW-001 in accordance with Table E-3 below:

Table E-3. Receiving Water Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Turbidity	NTU	Grab	Once
Total Suspended Solids	s.u.	Grab	Once
pH	s.u.	Grab	Once
Hardness	mg/L as $CaCO_3$	Grab	Once
Cyanide	µg/L	Grab	Once
Copper, Total Recoverable	µg/L	Grab	Once
Arsenic, Total Recoverable	µg/L	Grab	Once
Cadmium, Total Recoverable	µg/L	Grab	Once
Chromium (III), Total Recoverable	µg/L	Grab	Once
Chromium (VI), Total Recoverable	µg/L	Grab	Once
Lead, Total Recoverable	µg/L	Grab	Once
Mercury, Total Recoverable [1]	µg/L	Grab	Once
Nickel, Total Recoverable	µg/L	Grab	Once
Selenium, Total Recoverable	µg/L	Grab	Once
Silver, Total Recoverable	µg/L	Grab	Once
Zinc, Total Recoverable	µg/L	Grab	Once

Footnote:

[1] The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring. The minimum level for mercury is 2 ng/l (or 0.002 ug/l).

5.2. Receiving water monitoring is not required when there is no water in the receiving water other than the discharge.

5.3. The Executive Officer may waive receiving water monitoring requirements where access for sampling is unsafe or excessively difficult. If the Discharger seeks a waiver from receiving water monitoring, the Discharger shall provide justification for the waiver with its NOI.

6. REPORTING REQUIREMENTS

6.1. General Monitoring and Reporting Requirements. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

6.2. Self-Monitoring Reports (SMRs)

6.2.1. **Format.** The Discharger shall submit self-monitoring reports and cover letters via email to R2NPDES.GeneralPermits@waterboards.ca.gov. However, at any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit SMRs using the State Water Board's

California Integrated Water Quality System (CIWQS) website (www.waterboards.ca.gov/water_issues/programs/ciwqs).The CIWQS website will provide additional information for SMR submittal in the event of a planned service interruption.

6.2.2. **Annual Self-Monitoring Reports.** The Discharger shall submit annual SMRs by March 1 each year covering the previous calendar year. The annual SMR shall contain the items below:

6.2.2.1. **Transmittal Letter.** Each SMR shall be submitted with a transmittal letter that includes the following:

6.2.3.1.1. Clear identification of any violations or a clear statement that there were no violations.

6.2.3.1.2 Detailed description of any violations, their causes, and corrective actions taken or planned to resolve them and prevent recurrence. This shall include violations of any prohibition, effluent limitation, discharge specification, or receiving water limitation, and a detailed description of any failure to follow the BMPs Plan.

6.2.3.1.3. Explanation for any data invalidation. Data should not be submitted in an SMR if it does not meet quality assurance/quality control standards. However, if the Discharger wishes to invalidate any measurement after it was submitted in an SMR, a letter shall identify the measurement suspected to be invalid and state the Discharger's intent to submit, within 60 days, a formal request to invalidate the measurement. This request shall include the original measurement in question, the reason for invalidating the measurement, all relevant documentation that supports invalidation (e.g., laboratory sheet, log entry, test results), and the corrective actions taken or planned (with a time schedule for completion) to prevent recurrence of the sampling or measurement problem.

6.2.3.1.4. Annual Operations and Maintenance Manual Review status report as required by Provision 6.3.3.4.

6.2.3.1.5. Annual BMPs Plan evaluation as required by Provision 6.3.4.

6.2.3.1.6. Signature and certification in accordance with Attachment D section 5.2.

6.2.3.2. **Compliance Evaluation Summary.** Each SMR shall include a compliance evaluation summary that addresses each parameter for which the permit specifies effluent limitations, the number of samples taken during the monitoring period, and the number of samples that exceed the effluent limitations.

6.2.3.3. **Required Monitoring.** Each SMR shall include tabulations of all required analyses and observations, including parameters, dates, times, monitoring

locations, types of samples, test results, method detection limits, method minimum levels, and method reporting levels (if applicable), signed by the laboratory director or other responsible official.

6.2.4. **Monitoring Periods.** Monitoring periods for all required monitoring shall be as set forth below unless otherwise specified:

Table E-4. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
1/4 Hours	Effective date of Authorization to Discharge	Any 4-hour period (e.g., beginning at midnight and continuing through 3:59 a.m.)
1/Day	Effective date of Authorization to Discharge	Any 24-hour period that reasonably represents a calendar day for sampling purposes (e.g., beginning at midnight and continuing through 11:59 p.m.)
2/Year	Closest January 1 or July 1 before or after effective date of Authorization to Discharge [1]	January 1 through June 30 July 1 through December 31
1/Year	Closest January 1 before or after effective date of Authorization to Discharge [1]	January 1 through December 31
1/2 Years	Closest January 1 before or after effective date of Authorization to Discharge [1]	January 1 through December 31 of following year
Once	Effective date of Authorization to Discharge	Once such that the results are reported with the new NOI form required on the first page of the Order

Footnote:

[1] Monitoring performed during the previous order term may be used to satisfy monitoring required by this Order.

6.2.5. **RL and MDL Reporting.** The Discharger shall report the Reporting Level (RL) and Method Detection Limit (MDL) with each sample result as determined by the procedure in 40 C.F.R. part 136. The Discharger may select any analytical methods described in 40 C.F.R. part 136; however, the RLs shall be below applicable water quality objectives. Otherwise, RLs shall be as low as possible. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

6.2.5.1. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

6.2.5.2. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified" or DNQ. The estimated chemical concentration of the sample shall also be reported. For purposes of data collection, the Discharger shall require the laboratory to write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data

quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers appropriate.

6.2.5.3. Sample results less than the laboratory's MDL shall be reported as "Not Detected" or ND.

6.2.5.4. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. The table below lists the minimum levels for the pollutants monitored under this Order.

Table E-5. Minimum Levels

CTR No.	Pollutant/ Parameter	Suggested Analytical Method [1]	Minimum Level for Treated Filter Backwash Discharges (µg/L)
2	Arsenic	206.3	2
4	Cadmium	200 or 213	0.5
5a	Chromium (III)	SM 3500	-
5b	Chromium (VI)	SM 3500	5
6	Copper	200.9	10
7	Lead	200.9	2
8	Mercury	1631	0.002
9	Nickel	249.2	50
10	Selenium	200.8 or SM 3114B or C	2
11	Silver	272.2	2
13	Zinc	200 or 289	20
14	Cyanide	SM 4500 CN^-C or I	5

Footnote:

[1] The suggested method is the U.S. EPA Method unless otherwise specified (SM = Standard Methods). The Discharger may use another U.S. EPA approved or recognized method if it has a level of quantification below the applicable water quality objective.

6.2.6. Compliance Determination

6.2.6.1. **Reporting Levels.** Compliance with effluent limitations shall be determined using sample reporting protocols defined above, in the Fact Sheet, and in Attachments A and D. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and, if applicable, greater than or equal to the RL.

6.2.6.2. **Multiple Samples.** When determining compliance with effluent limitations (other than median or instantaneous effluent limitations) and more than one sample result is available, the Discharger shall compute the arithmetic mean. If the data set contains one or more results that are "Detected, but Not

Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall instead compute the median in accordance with the following procedure:

6.2.6.2.1. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

6.2.6.2.2. The median of the data set shall be determined. If the data set has an odd number of data points, the median is the middle value. If the data set has an even number of data points, the median is the average of the two values around the middle, unless one or both of these values is ND or DNQ, in which case the median shall be the lower of the two results (where DNQ is lower than a quantified value and ND is lower than DNQ).

6.2.6.3. **Duplicate Samples.** The Discharger shall report the average of duplicate sample analyses when reporting for a single sample result (or the median if one or more of the duplicates is DNQ or ND [see section 6.2.6.2, above]).

6.3. Discharge Monitoring Reports (DMRs). The Discharger shall submit Discharge Monitoring Reports (DMRs) in accordance with Attachment D section 5.3.2 if instructed to do so by the Regional Water Board or State Water Board.

6.4. Violations and Unauthorized Discharges

6.4.1. Within 24 hours of becoming aware of a violation of this Order, the Discharger shall report by telephone or email to the Regional Water Board staff overseeing this Order (see Authorization to Discharge).

6.4.2. The Discharger shall report spills to the California Office of Emergency Services (telephone 800-852-7550) when spills meet or exceed applicable reportable quantities for hazardous materials.

6.4.3. The Discharger shall submit a written report to the Regional Water Board within five business days following the telephone or email notification described above unless directed otherwise by Regional Water Board staff in writing. Electronic submittal is acceptable. The written report shall include the following:

6.4.3.1. Date, time, and duration of violation or spill;

6.4.3.2. Location of violation or spill (street address or description of location);

6.4.3.3. Nature of violation or material spilled;

6.4.3.4. Volume and quantity of any material involved;

6.4.3.5. Receiving water affected, if any;

6.4.3.6. Cause of violation or spill;

6.4.3.7. Estimated size of affected area;

6.4.3.8. Observed receiving waters impacts (e.g., oil sheen, fish kill, or water discoloration);

6.4.3.9. Actions taken to correct violation or to contain, minimize, or clean up spill;

6.4.3.10. Future corrective actions planned to prevent recurrence and implementation schedule; and

6.4.3.11. Persons or agencies notified.

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section 2.2 of the Order, the Regional Water Board incorporates this Fact Sheet as findings supporting the issuance of the Order.

1. PERMIT INFORMATION

1.1. This Order regulates discharges of treated filter backwash from drinking water treatment facilities to inland surface waters. It reissues National Pollutant Discharge Elimination System (NPDES) General Permit CAG382001, which the Regional Water Board reissued through Order R2-2016-0009 (previous order).

1.2. Site owners and operators that complete a Notice of Intent (NOI) form (Attachment B) and apply for an Authorization to Discharge under this Order, and that are granted such authorization, are hereinafter called “Dischargers.” For purposes of this Order, references to “discharger” or “permittee” in applicable federal and State laws, regulations, plans, and policies are held to be equivalent to references to the Discharger herein.

1.3. This Order does not cover discharges that can be covered under the statewide General NPDES Permit for Drinking Water System Discharges (Order WQ 2014-0194-DWQ, NPDES Permit CAG140001). For these discharges, dischargers must seek coverage under NPDES Permit CAG140001. This Order is necessary because NPDES Permit CAG140001 does not currently apply to filter backwash discharges.

2. FACILITY DESCRIPTION

2.1. Filter Backwash Treatment and Discharges

2.1.1. **Description**. Drinking water treatment facilities normally include coagulation/flocculation, sedimentation, filtration, and disinfection processes. Filtration is used to clarify the source water and improve taste by removing particles from the water, such as clay, silt, natural organic matter, and microorganisms. Filter backwash is generated when the filters are washed to remove accumulated solids through the use of reverse pressure and water flow. Backwashing involves the following general steps, and may vary from facility to facility:

- The filters are taken offline and each is spray washed with water. This forces the accumulated particles on the filters into suspension.
- After the wash cycle occurs, backwashing begins and previously filtered water flows through the filter in the reverse direction. Most or all of the accumulated particles are flushed out.

- The filters are then rewashed (filter-to-waste) and returned online.
- The filter backwash wastewater flows into settling basins where the solids settle out. Clarifiers may also be used to remove solids from filter backwash in place of, or in addition to, settling basins.
- Depending on chlorine content, the filter backwash decant from the settling basins or clarifiers may undergo residual chlorine reduction before being discharged to an inland surface water. Chlorine reduction may be achieved by using dechlorination chemicals or by storing filter backwash in holding tanks to allow residual chlorine to naturally decay.
- Ammonia may be added to wash water during the cleaning and flushing cycles in very low concentrations. The volume of wash water used is less than one percent of the total filter backwash discharge volume.

Throughout this Order, the terms "filter backwash" and "filter backwash wastewater" include the water used to spray-wash, filter backwash, filter-to-waste (rewash), and any other settling basin filter backwash water.

2.1.2. **Facilities.** At least two dischargers are anticipated to seek coverage under this Order: (1) the San Francisco Public Utilities Commission (SFPUC) for the Harry Tracy Water Treatment Plant and associated San Andreas Reservoir; and (2) the City of Napa (Napa) for the Hennessey Water Treatment Plant and associated Lake Hennessey.

2.1.3. **Discharge Points and Receiving Waters.** Receiving waters consist of inland surface waters of the San Francisco Bay Region. Drinking water treatment facilities are located in the upper parts of watersheds and typically discharge to inland surface waters (i.e., freshwater), such as reservoirs, lakes, or creeks. The NOI form in Attachment B requires each discharger to specify its discharge locations and to provide a map and diagram indicating all discharge paths to surface waters.

2.2. Previous Requirements. The table below presents the previous order's effluent limitations from the previous order term:

Table F-1. Previous Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Maximum
Total Suspended Solids	mg/L	30	45	-	-
Settleable Matter	mL/L-hr	0.1	-	0.2	-
Chlorine, Total Residual	mg/L	-	-	-	0.0
Copper [1]	µg/L	4.3	-	8.7	-
Whole Effluent Acute Toxicity	% Survival	[2]			

Footnotes:

[1] Copper limits applied unless representative discharge data provided in the NOI demonstrated that the discharge copper concentration was less than 6 µg/L.

[2] Representative effluent samples were to meet the following acute toxicity limits:

a. The survival of bioassay test organisms in 96-hour static renewal bioassays of undiluted effluent were to be:

i. a 3-sample median value of not less than 90 percent survival; and

ii. a single-sample maximum of not less than 70 percent survival.

b. These acute toxicity limits were defined as follows:

i. 3-sample median was defined as follows: if one of the past two or fewer samples showed less than 90 percent survival, then survival of less than 90 percent on the next sample represented an effluent limit violation.

ii. Any bioassay test showing survival of 70 percent or greater was not an effluent limit violation. A bioassay test showing survival of less than 70 percent was an effluent limit violation.

2.3. Compliance Summary. During the previous order term, SFPUC violated the acute toxicity effluent limit six times, likely due to equipment failures, accumulation of solids in an equalization basin, and/or incorrect polymer dosing. SFPUC reported that it observed no adverse impacts in the receiving water following each violation. The Regional Water Board issued a Notice of Violation for these violations and required SFPUC to submit an updated Best Management Practices Plan that incorporates corrective actions to prevent reoccurrence.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

3.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. EPA, and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit for point source discharges to surface waters from enrolled facilities.

3.2. California Environmental Quality Act. Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act, Public Resources Code division 13, chapter 3 (commencing with § 21100).

3.3. State and Federal Laws, Regulations, Policies, and Plans

3.3.1. **Water Quality Control Plan.** The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, this Order implements State Water Board Resolution 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Receiving water beneficial uses include some or all of the following:

Agricultural Supply	Industrial Service Supply
Areas of Special Biological Significance	Preservation of Rare or

Cold Freshwater Habitat	Endangered Species
Freshwater Replenishment	Water Contact Recreation
Groundwater Recharge	Non-Contact Water Recreation
Fish Migration	Fish Spawning
Municipal and Domestic Supply	Warm Freshwater Habitat
Commercial and Sport Fishing	Wildlife Habitat
Industrial Process Supply	

3.3.2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** The NTR and CTR contain federal water quality criteria for priority pollutants. U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 NTR criteria apply in California. U.S. EPA adopted the CTR on May 18, 2000. The CTR promulgated new toxics criteria for California and incorporated the NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001.

3.3.3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established through the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. Requirements of this Order implement the SIP.

3.3.4. **Mercury Provisions.** On May 2, 2017, the State Water Board adopted Resolution 2017-0027, which *approved Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions* (Mercury Provisions), thereby establishing water quality objectives for mercury in most State waters. The Mercury Provisions establish mercury fish tissue water quality objectives based on beneficial uses and translate those objectives into mercury water column criteria. The water quality objectives supersede the four-day average freshwater mercury objective in Basin Plan Table 3-4. Requirements of this Order implement the Mercury Provisions.

3.3.5. **Domestic Water Quality.** In accordance with Water Code section 106.3, it is the policy of the State of California is that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order advances that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

3.3.6. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 require that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

3.3.7. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

3.3.8. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code §§ 2050 to 2097) or Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

3.4. Impaired Water Bodies on CWA section 303(d) List. On April 6, 2018, U.S. EPA approved a revised list of impaired waters pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not done so already, the Regional Water Board plans to adopt total maximum daily loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for nonpoint sources and are established to achieve water quality standards.

Inland surface waters are listed as impaired for the following: chlordane, coliform bacteria, DDT (dichlorodiphenyltrichloroethane), diazinon, dieldrin, heptachlor epoxide, mercury, nickel, nutrient/eutrophication biological indicators, nutrients, organic enrichment/low dissolved oxygen, pathogens, PCBs (polychlorinated biphenyls), pH, pyrethroids, sediment toxicity, sedimentation/ siltation, selenium, temperature, toxaphene, toxicity, and trash.

Treated filter backwash discharges that would be authorized under this Order are not expected to be a measurable source of the pollutants listed above and thus will not contribute to the impairments. Based on representative data on treated filter backwash shown in Fact Sheet section 4.3.3, the concentration of chlordane, dieldrin, heptachlor epoxide, mercury, nickel, and selenium PCBs, and toxaphene have not been detected above the lowest applicable water quality objectives.

Coliform bacteria, low dissolved oxygen, nutrient/eutrophication biological indicators, nutrients, organic enrichment/low dissolved oxygen, and pathogens are not expected to be in treated filter backwash discharges because the source water used for drinking water is typically of high quality with very low levels of these pollutants. Moreover, disinfection at the drinking water treatment facilities would further reduce levels of pathogenic and organic compounds (nutrients) and any residues would remain with the sediments settled from the filter backwash prior to discharge.

For pH and toxicity, this Order specifies limits that will ensure that the discharges do not result in exceedance of objectives. While there were reported effluent toxicity violations at the SFPUC facility during the previous permit term, surveys after the discharges found no adverse impacts to the receiving water from the discharges. This Order retains acute toxicity effluent limitations.

This Order specifies limits on total suspended solids and settleable matter and prohibits bypass of systems that remove sediments from discharges. These requirements will ensure that discharges will not contribute to sediment toxicity or sedimentation or siltation in inland waters.

For temperature and trash, filter backwash discharges will not contribute to these impairments because heat is not used in the processes, and, if there were any trash from source waters, the trash would be screened out prior to or as part of treatment.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of receiving waters.

4.1. Discharge Prohibitions

4.1.1. Prohibitions in this Order

4.1.1.1. **Discharge Prohibition 3.1 (No discharge other than as described in NOI and Authorization to Discharge):** This prohibition is based on 40 C.F.R. section 122.21(a) and Water Code section 13260, which require filing an application and Report of Waste Discharge before a discharge can occur. Discharges not described in an NOI and Authorization to Discharge are prohibited.

4.1.1.2. **Discharge Prohibition 3.2 (No bypassing settling basins or clarifiers):** This prohibition is based on 40 C.F.R. section 122.41(m), which generally prohibits bypasses (see Attachment D, section 1.7). This prohibition requires that discharges not bypass settling basins or clarifiers because these units are the primary pollutant controls at the facilities this Order covers. These units will be identified in the NOI and will be considered when granting authorization to discharge. Bypassing could greatly reduce discharge quality.

4.1.2. **Basin Plan Discharge Prohibition 1.** Basin Plan Table 4-1, Discharge Prohibition 1, prohibits the discharge of any wastewater that has particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1, or into any nontidal water. This prohibition is intended to provide an added degree of protection from the continuous effect of discharges and provide a buffer against the effects of abnormal discharges caused by temporary upsets or malfunctions. Treated filter backwash discharges from drinking water treatment facilities are not continuous or subject to upset. Basin Plan section 4.2 allows exceptions to Discharge Prohibition 1 in the following circumstances:

- An inordinate burden would be placed on the Discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means;
- A discharge is approved as part of a reclamation project;
- Net environmental benefits will be derived as a result of the discharge; or
- A discharge is approved as part of a groundwater cleanup project.

The Basin Plan further states:

> In reviewing requests for exceptions, the Water Board will consider the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequences of such discharges.

This Order grants an exception to Basin Plan Discharge Prohibition 1 for the following reasons:

- Providing an initial dilution of at least 10:1 or transporting the discharges many miles to a tidal waterbody would be impracticable for this type of discharge because these discharges are located in upper parts of watersheds and discharge to shallow streams. Construction of diffuser systems is not practical in shallow streams; some of which also may not flow naturally in summer months. Transport of the discharge to tidal waters is cost prohibitive since it would require new piping through many miles of urban areas. Thus, compliance with this prohibition would constitute an inordinate burden for dischargers.

- An equivalent level of environmental protection is provided because Provisions 6.3.3 and 6.3.4 of the Order require development and implementation of plans to ensure proper operation and maintenance and best management practices to control potential pollutants.

4.2. Technology-Based Effluent Limitations

4.2.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The CWA requires that technology-based effluent limitations be established based on several levels of control:

- **Best practicable treatment control technology (BPT).** BPT represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

- **Best available technology economically achievable (BAT).** BAT represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- **Best conventional pollutant control technology (BCT).** BCT represents the control from existing industrial point sources of conventional pollutants, including biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. BCT standards are established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.

- **New source performance standards (NSPS).** NSPS represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines, and standards representing application of BPT, BAT, BCT, and NSPS. There are no promulgated effluent limitations, guidelines, or standards for the types of discharges this Order covers. CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of best professional judgment to derive technology-based effluent limitations on a case-by-case basis whenever U.S. EPA has not promulgated effluent limitations, guidelines, and standards. When best professional judgment is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3. This Order does not include any technology-based effluent limitations based on best professional judgment.

Basin Plan Table 4-2 contains additional technology-based requirements.

4.2.2. Applicable Limitations

4.2.2.1. **Total Suspended Solids.** The total suspended solids effluent limitations are based on Basin Plan Table 4-2.

4.2.2.2. **Settleable Matter.** The settleable matter effluent limitations are based on Basin Plan Table 4-2.

4.2.2.3. **Total Residual Chlorine.** The total residual chlorine effluent limitation is based on Basin Plan Table 4-2.

4.3. Water Quality-Based Effluent Limitations

4.3.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(d) require permits to include limitations more stringent than federal technology-based requirements where necessary to achieve water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, water quality-based effluent limitations (WQBELs) must be established using (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting a narrative criterion, supplemented with relevant information. The process for determining

reasonable potential and calculating WQBELs when necessary is intended to achieve applicable water quality objectives and criteria, and thereby protect designated beneficial uses of receiving waters.

4.3.2. Beneficial Uses and Water Quality Criteria and Objectives

Fact Sheet section 3.3.1 identifies the potential beneficial uses of the receiving waters for discharges subject to this Order. Water quality criteria and objectives to protect these beneficial uses are described below.

4.3.2.1. **Basin Plan Objectives.** The Basin Plan specifies numeric water quality objectives for many pollutants to protect aquatic life and municipal drinking water supplies (see Basin Plan sections 3.3.21 and 3.3.22). It also specifies narrative water quality objectives, such as the narrative toxicity objective, “All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.

4.3.2.2. **CTR Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of “water and organisms” and others are for consumption of “organisms only.” Waters with the municipal or domestic supply beneficial use designation are subject to the “water and organisms” criteria.

4.3.2.3. **NTR Criteria.** The NTR establishes numeric aquatic life and human health criteria for a number of toxic pollutants for San Francisco Bay waters upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta.

4.3.2.4. **Mercury Objectives.** The Mercury Provisions specify mercury fish tissue water quality objectives based on beneficial uses, and the implementing provisions translate those objectives into mercury water column criteria depending on water body type and beneficial uses. Inland surface waters include slow moving water bodies (e.g., lakes and reservoirs) and flowing water bodies (e.g., creeks and streams), and can support commercial and sport fishing; cold freshwater habitat; warm freshwater habitat; preservation of rare, threatened, or endangered species; and wildlife habitat beneficial uses. Treated filter backwash discharges are exempt from all of the implementation provisions in Mercury Provisions section IV.D.2 because the discharges are not covered by an individual non-stormwater NPDES permit (see Mercury Provisions sections IV.D.1 and IV.D.2).

4.3.2.5. **Receiving Water Salinity.** Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water are to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent

of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to water with salinities in between these two categories, or tidally-influenced freshwaters that support estuarine beneficial uses, the water quality objectives are the lower of the salt or freshwater criteria (the latter calculated based on ambient hardness) for each substance. The reasonable potential analyses and WQBELs in this Order are based on freshwater water quality criteria because the drinking water facilities covered by this Order discharge to inland freshwaters.

4.3.2.6. **Receiving Water Hardness.** Some freshwater objectives for metals are hardness dependent (as hardness increases, the toxicity of certain metals decreases). Napa collected weekly hardness samples from Lake Hennessey as part of monitoring requirements for another NPDES permit, and SFPUC collected one hardness sample from the San Andreas Reservoir. The minimum observed hardness value of 48 mg/L as calcium carbonate was used to calculate the freshwater water quality objectives.

4.3.2.7. **Metals Translators.** Regulations at 40 C.F.R. section 122.45(c) require effluent limitations for metals to be expressed as total recoverable metal. Since the water quality objectives for metals are typically expressed as dissolved metal, translators must be used to convert metals concentrations from dissolved to total recoverable and vice versa. The CTR contains default translators; however, site-specific conditions, such as water temperature, pH, total suspended solids, and organic carbon may affect the form of metal (dissolved, non-filterable, or otherwise) present and therefore available to cause toxicity. In general, dissolved metals are more available and more toxic to aquatic life than other forms. Site-specific translators can account for site-specific conditions, thereby preventing overly stringent or under-protective water quality objectives. CTR default translators were used for all metals in this Order's reasonable potential analysis and WQBEL calculations.

4.3.3. Reasonable Potential Analysis

4.3.3.1. **Available Information.** The reasonable potential analysis for this Order is based on effluent and ambient background data collected from April 2016 through August 2020 by SFPUC, which operates the Harry Tracy Water Treatment Plant and associated San Andreas Reservoir, and Napa, which operates the Hennessey Water Treatment Plant and associated Lake Hennessey.

4.3.3.2. **Priority Pollutants.** SIP section 1.3 sets forth the methodology used to assess whether priority pollutants have reasonable potential to exceed CTR and NTR water quality objectives. Here, SIP section 1.3 is also used as guidance to assess whether priority pollutants have reasonable potential to exceed water quality objectives designed to protect municipal supply (i.e., maximum contaminant levels).

The analysis begins with identifying the maximum effluent concentration (MEC) observed for each pollutant based on available effluent concentration data and the ambient background concentration (B). SIP section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential:

- **Trigger 1** is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective (MEC ≥ water quality objective).
- **Trigger 2** is activated if the ambient background concentration observed in the receiving water is greater than the lowest applicable water quality objective (B > water quality objective) and the pollutant is detected in any effluent sample.
- **Trigger 3** is activated if a review of other information indicates that a WQBEL is needed to protect beneficial uses.

The maximum effluent concentrations, most stringent applicable water quality criteria and objectives, and ambient background concentrations used in the analysis are presented in the following table, along with the reasonable potential analysis results (yes, no, or unknown) for each pollutant. Based on this analysis, the only priority pollutant that demonstrates reasonable potential is cyanide.

Table F-2. Reasonable Potential Analysis for Priority Pollutants

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1][2]	B or Minimum DL (µg/L) [1][2]	RPA Result [3]
1	Antimony	6	0.052	0.088	No
2	Arsenic	10	1.4	0.43	No
3	Beryllium	4	<0.35	<035	No
4	Cadmium	0.6	0.41	<0.17	No
5a	Chromium (III)	50	<0.20	<0.20	No
5b	Chromium (VI)	11	0.040	0.093	No
6	Copper	5.0	4.7	0.88	No
7	Lead	1.2	<0.2	0.18	No
8	Mercury [4]	0.050	<0.0003	<0.0003	No
9	Nickel	28	5.5	2.9	No
10	Selenium	5	0.076	<0.05	No
11	Silver	1.1	<0.008	<0.008	No
12	Thallium	1.7	<0.040	<0.040	No
13	Zinc	64	16	<0.6	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1][2]	B or Minimum DL (µg/L) [1][2]	RPA Result [3]
14	**Cyanide**	**5.2**	**6.3**	**7.3**	**Yes**
15	Asbestos (fibers/L)	7,000,000	<0.2	<0.2	No
16	2,3,7,8-TCDD	1.3×10^{-8}	<0.45	<0.45	No
17	Acrolein	320	<0.21	<0.17	No
18	Acrylonitrile	0.059	<0.068	<1.8	No
19	Benzene	1	<0.053	<0.18	No
20	Bromoform	4.3	<0.057	<0.15	No
21	Carbon Tetrachloride	0.25	<0.053	<0.16	No
22	Chlorobenzene	70	<0.067	<0.18	No
23	Chlorodibromomethane	0.41	<0.058	<0.17	No
24	Chloroethane	No Criterion	<0.083	<0.38	No
25	2-Chloroethylvinyl ether	No Criterion	<0.11	<0.28	No
26	Chloroform	No Criterion	3.1	<0.19	No
27	Dichlorobromomethane	0.56	<0.065	<0.16	No
28	1,1-Dichloroethane	5	<0.010	<0.19	No
29	1,2-Dichloroethane	0.38	<0.060	<0.18	No
30	1,1-Dichloroethylene	0.057	<0.062	<0.21	No
31	1,2-Dichloropropane	0.52	<0.065	<0.18	No
32	1,3-Dichloropropylene	10	<0.058	<0.16	No
33	Ethylbenzene	300	<0.028	<0.26	No
34	Methyl Bromide	48	<0.11	<0.3	No
35	Methyl Chloride	No Criterion	<0.065	<0.3	No
36	Methylene Chloride	4.7	<0.021	<0.4	No
37	1,1,2,2-Tetrachloroethane	0.17	<0.099	<0.15	No
38	Tetrachloroethylene	0.8	<0.071	<0.19	No
39	Toluene	150	<0.058	<0.19	No
40	1,2-Trans-Dichloroethylene	10	<0.056	<0.22	No
41	1,1,1-Trichloroethane	200	<0.060	<0.19	No
42	1,1,2-Trichloroethane	0.60	<0.051	<0.16	No
43	Trichloroethylene	2.7	<0.065	<0.2	No
44	Vinyl Chloride	0.5	<0.12	<0.25	No
45	2-Chlorophenol	120	<0.045	<0.4	No
46	2,4-Dichlorophenol	93	<0.032	<0.4	No
47	2,4-Dimethylphenol	540	<0.032	<0.4	No
48	2-Methyl- 4,6-Dinitrophenol	13.4	<0.79	<0.3	No
49	2,4-Dinitrophenol	70	<0.50	<0.2	No
50	2-Nitrophenol	No Criterion	<0.055	<0.4	No
51	4-Nitrophenol	No Criterion	<0.73	<0.5	No
52	3-Methyl 4-Chlorophenol	No Criterion	<0.038	<0.5	No
53	Pentachlorophenol	0.28	<0.057	<0.005	No
54	Phenol	21,000	<0.41	<0.3	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1][2]	B or Minimum DL (µg/L) [1][2]	RPA Result [3]
55	2,4,6-Trichlorophenol	2.1	<0.034	<0.5	No
56	Acenaphthene	1,200	<0.061	<0.016	No
57	Acenaphthylene	No Criterion	<0.011	<0.014	No
58	Anthracene	9,600	<0.029	<0.01	No
59	Benzidine	0.00012	<0.72	<4	No
60	Benzo(a)Anthracene	0.0044	<0.023	<0.011	No
61	Benzo(a)Pyrene	0.0044	<0.030	<0.011	No
62	Benzo(b)Fluoranthene	0.0044	<0.030	<0.011	No
63	Benzo(ghi)Perylene	No Criterion	<0.029	<0.012	No
64	Benzo(k)Fluoranthene	0.0044	<0.029	<0.017	No
65	Bis(2-Chloroethoxy)Methane	No Criterion	<0.058	<0.5	No
66	Bis(2-Chloroethyl)Ether	0.031	<0.037	<0.4	No
67	Bis(2-Chloroisopropyl)Ether	1,400	<0.040	<0.4	No
68	Bis(2-Ethylhexyl)Phthalate	1.8	<0.58	<0.15	No
69	4-Bromophenyl Phenyl Ether	No Criterion	<0.043	<0.5	No
70	Butylbenzyl Phthalate	3,000	1.5	<0.063	No
71	2-Chloronaphthalene	1,700	<0.054	<0.4	No
72	4-Chlorophenyl Phenyl Ether	No Criterion	<0.047	<0.5	No
73	Chrysene	0.0044	<0.028	<0.014	No
74	Dibenzo(a,h)Anthracene	0.0044	<0.035	<0.02	No
75	1,2-Dichlorobenzene	600	<0.043	<0.27	No
76	1,3-Dichlorobenzene	400	<0.042	<0.18	No
77	1,4-Dichlorobenzene	5	<0.050	<0.18	No
78	3,3 Dichlorobenzidine	0.04	<0.89	<5	No
79	Diethyl Phthalate	23,000	<0.59	<0.051	No
80	Dimethyl Phthalate	313,000	<0.062	<0.039	No
81	Di-n-Butyl Phthalate	2,700	0.084	<0.074	No
82	2,4-Dinitrotoluene	0.11	<0.028	<0.013	No
83	2,6-Dinitrotoluene	No Criterion	<0.036	<0.036	No
84	Di-n-Octyl Phthalate	No Criterion	<0.037	<0.027	No
85	1,2-Diphenyhydrazine	0.040	<0.044	<0.5	No
86	Fluoranthene	300	<0.033	<0.01	No
87	Fluorene	1,300	<0.049	<0.01	No
88	Hexachlorobenzene	0.00075	<0.0012	<0.041	No
89	Hexachlorobutadiene	0.44	<0.050	<0.4	No
90	Hexachlorocyclopentadiene	50	<0.034	<0.038	No
91	Hexachloroethane	1.9	<0.051	<0.4	No
92	Indeno(1,2,3-cd)Pyrene	0.0044	<0.035	<0.02	No
93	Isophorone	8.4	<0.052	<0.02	No
94	Naphthalene	No Criterion	<0.047	<0.014	No
95	Nitrobenzene	17	<0.063	<0.5	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1][2]	B or Minimum DL (µg/L) [1][2]	RPA Result [3]
96	N-Nitrosodimethylamine	0.00069	<0.18	<0.3	No
97	N-Nitrosodi-n-Propylamine	0.005	<0.033	<0.5	No
98	N-Nitrosodiphenylamine	5.0	<0.045	<0.3	No
99	Phenanthrene	No Criterion	<0.049	<0.008	No
100	Pyrene	960	<0.047	<0.008	No
101	1,2,4-Trichlorobenzene	5	<0.056	<0.25	No
102	Aldrin	0.00013	<0.00070	<0.002	No
103	Alpha-BHC	0.0039	<0.00080	<0.003	No
104	Beta-BHC	0.014	<0.0017	<0.003	No
105	Gamma-BHC	0.019	<0.00090	<0.003	No
106	Delta-BHC	No Criterion	<0.0011	<0.003	No
107	Chlordane	0.00057	<0.0065	<0.02	No
108	4,4'-DDT	0.00059	<0.0010	<0.003	No
109	4,4'-DDE	0.00059	<0.00050	<0.004	No
110	4,4'-DDD	0.00083	<0.00080	<0.004	No
111	Dieldrin	0.00014	<0.00050	<0.004	No
112	Alpha-Endosulfan	0.056	<0.00070	<0.003	No
113	beta-Endosulfan	0.056	<0.00050	<0.003	No
114	Endosulfan Sulfate	110	<0.00060	<0.004	No
115	Endrin	0.036	<0.00070	<0.004	No
116	Endrin Aldehyde	0.76	0.021	<0.004	No
117	Heptachlor	0.00021	<0.00070	<0.003	No
118	Heptachlor Epoxide	0.00010	<0.00040	<0.002	No
119-125	PCBs sum	0.00017	<0.50	<0.50	No
126	Toxaphene	0.0002	<0.013	<0.3	No

Footnotes:

[1] The MEC and ambient background concentration are the actual detected concentrations unless preceded by a "<" sign, in which case the value shown is the minimum detection level (MDL).

[2] The MEC or ambient background concentration is "Unavailable" when there are no monitoring data for the constituent.

[3] RPA Results = Yes, if MEC ≥ WQC, B > WQC and MEC is detected, or Trigger 3
= No, if MEC and B are < WQC or all effluent data are undetected
= Unknown (U) if no criteria have been promulgated or data are insufficient.,

[4] There is no reasonable potential for these discharges to contribute to exceedances of the mercury fish tissue water quality objectives set forth in the Mercury Provisions because drinking water treatment facilities are insignificant sources of mercury (no mercury is used in the treatment processes) and no mercury has been detected in any of these discharges.

4.3.3.3. **Municipal and Agricultural Supply Pollutants.** Basin Plan section 3.3.22 sets forth water quality objectives to protect municipal and domestic supply (MUN) and agricultural supply (AGR) beneficial uses. Basin Plan section 3.6 sets forth additional surface water quality objectives to protect municipal and domestic supply in the Alameda Creek watershed above Niles. The beneficial uses of the receiving waters for the anticipated filter backwash discharges include municipal and domestic supply, but not agricultural

supply. The reasonable potential analysis for municipal and domestic supply pollutants that are also priority pollutants is incorporated into Fact Sheet section 4.3.3.2, above. None of these pollutants exhibits reasonable potential. The remaining municipal supply pollutants are not expected to be found in the discharges covered under this Order.

4.3.3.4. **Acute Toxicity.** Basin Plan section 4.5.5.3.1 requires acute toxicity monitoring and limitations, implying there is reasonable potential for the discharge to cause or contribute to exceedances of the acute toxicity water quality objective.

4.3.4. Water Quality-Based Effluent Limitations

WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives.

4.3.4.1. **WQBEL Calculations.** The following table shows the cyanide WQBEL calculations as required by SIP section 1.4. These cyanide limits apply unless representative data provided in the NOI demonstrate conditions are met as described in Table 1, footnote 1 of the Order.

Table F-3. WQBEL Calculations

Pollutant	Cyanide
Units	µg/L
Basis and Criteria type	Basin Plan and CTR Aquatic Life
CTR Aquatic Life Criteria - Acute	22
CTR Aquatic Life Criteria - Chronic	5.2
CTR Human Health Criteria - Organisms Only	220,000
CTR Human Health Criteria - Water & Organisms	700
Site-Specific Objective Criteria - Acute	-
Site-Specific Objective Criteria - Chronic	-
Title 22 Municipal Supply - Primary MCL	150
Title 22 Municipal Supply - Secondary MCL	-
Water Effects Ratio (WER)	1
Lowest WQO	5.2
Site Specific Translator - MDEL	-
Site Specific Translator - AMEL	-
Dilution Factor (D)	0
No. of samples per month	4
Aquatic life criteria analysis required? (Y/N)	Y
HH criteria analysis required? (Y/N)	Y
Applicable Acute WQO	22
Applicable Chronic WQO	5.2
HH Criteria	150

Pollutant	Cyanide
Background (Maximum Conc. for Aquatic Life Calc.)	7.3
Background (Average Conc. for Human Health Calc.)	4.8
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N
ECA Acute	22
ECA Chronic	5.2
ECA HH	700
No. of data points <10 or at least 80% of data reported non-detect? (Y/N)	Y
Avg of effluent data points	4.5
Std Dev of effluent data points	2.6
CV Calculated	0.59
CV (Selected) - Final	0.60
ECA Acute Mult99	0.32
ECA Chronic Mult99	0.53
LTA Acute	7.1
LTA Chronic	2.7
Minimum of LTAs	2.7
AMEL Mult95	1.6
MDEL Mult99	3.1
AMEL (Aquatic Life)	4.3
MDEL (Aquatic Life)	8.5
MDEL/AMEL Multiplier	2.0
AMEL (Human Health)	700
MDEL (Human Health)	1400
Minimum of AMEL for Aq. Life vs HH	4.3
Minimum of MDEL for Aq. Life vs HH	8.5
Previous Order Limit - AMEL	-
Previous Order Limit - MDEL	-
Final Limit - AMEL	4.3
Final Limit - MDEL	8.5

4.3.4.2. **Acute Toxicity.** This Order includes acute toxicity effluent limitations based on Basin Plan Table 4-3.

4.4. Discharge Requirement Considerations

4.4.1. **Anti-Backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4), and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous order. The requirements of this Order are at least as stringent as those in the previous order. This Order does not retain effluent limits for copper from the previous order because data no longer indicate reasonable potential for copper to exceed water quality objectives. This is consistent with State Water Board Order WQ 2001-16.

4.4.2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. It does not authorize lowering water quality as compared to the level of discharge authorized in the previous order, which is the baseline by which to measure whether degradation will occur. This Order does not allow for an increased flow, a reduced level of treatment, or increased effluent limitations relative to the previous order.

4.4.3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based requirements implement minimum, applicable federal technology-based requirements. In addition, this Order contains more stringent effluent limitations as necessary to meet water quality standards. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement CWA requirements.

This Order's WQBELs have been derived to implement water quality objectives that protect beneficial uses. The beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating these WQBELs are based on the CTR, as implemented in accordance with the SIP, which U.S. EPA approved on May 18, 2000. U.S. EPA approved most Basin Plan beneficial uses and water quality objectives prior to May 30, 2000. Beneficial uses and water quality objectives submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). U.S. EPA approved the remaining beneficial uses and water quality objectives, so they are also applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in sections 5.1 and 5.2 of the Order are based on Basin Plan narrative and numeric water quality objectives. The receiving water

limitation in section 5.3 of the Order requires compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specific categories of permits in accordance with 40 C.F.R. section 122.42. Dischargers must comply with these provisions. The conditions set forth in 40 C.F.R. sections 122.41(a)(1) and (b) through (n) apply to all state-issued NPDES permits and must be incorporated into permits either expressly or by reference.

In accordance with 40 C.F.R. section 123.25(a)(12), states may omit or modify conditions to impose more stringent requirements. This Order contains provisions that supplement the standard provisions in Attachment D. This Order omits the federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the State's enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates Water Code section 13387(e) by reference.

6.2. Monitoring and Reporting Provisions

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. For more information, see Fact Sheet section 7.

6.3. Special Provisions

6.3.1. Reopener Provisions

These provisions are based on 40 C.F.R. sections 122.62 and 122.63 and allow modification of this Order and its effluent limitations as necessary in response to updated water quality objectives, regulations, or other new and relevant information that may become available in the future, and other circumstances as allowed by law.

6.3.2. Application for General Permit Coverage and Authorization to Discharge

Based on 40 C.F.R. section 122.28(b), this provision requires each Discharger to submit an NOI and, upon receiving an Authorization to Discharge from the Executive Officer, to comply with this Order. Pursuant to 40 C.F.R.

section 122.28(b)(3), it also authorizes the Executive Officer to terminate any Authorization to Discharge or require a Discharger to apply for an individual permit. The provision regarding continuation of an expired permit is based on 40 C.F.R. section 122.6(d) and California Code of Regulations, title 23, section 2235.4.

6.3.3. Operations and Maintenance Manual Review and Status Reports

The purpose of this provision is to ensure that operations and maintenance procedures are in place that are useful and relevant to current equipment and operational practices. This provision is based on 40 C.F.R. section 122.41(e), partly justifying an exception to Basin Plan Discharge Prohibition 1.

6.3.4. Best Management Practices Plan

This provision requires Dischargers to develop and implement BMPs plans to control and abate pollutant discharges to surface waters. This provision is based on 40 C.F.R. section 122.41 and provides an equivalent level of environmental protection, partly justifying an exception to Basin Plan Discharge Prohibition 1.

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

The following provides the rationale for the monitoring and reporting requirements in the MRP.

7.1. Effluent Monitoring

Effluent flow monitoring is necessary to understand Facility operations. Monitoring for metals and other parameters is necessary to evaluate compliance with this Order's effluent limitations and to conduct future reasonable potential analyses. Cyanide monitoring is required more frequently for Dischargers for which the effluent limitations are applicable. Consistent with SIP section 1.3, this Order does not require effluent monitoring of the remaining priority pollutants because anticipated discharges are not expected to contain these priority pollutants at concentrations not already present in the influent and because these pollutants are not expected to pose any significant adverse impact on water quality.

7.2. Toxicity Testing

Acute toxicity tests are necessary to evaluate compliance with this Order's effluent limitations.

7.3. Receiving Water Monitoring

Receiving water monitoring is necessary to conduct future reasonable potential analyses.

8. PUBLIC PARTICIPATION

The Regional Water Board considered the issuance of WDRs that will serve as an NPDES permit for filter backwash discharges from drinking water treatment facilities in the San Francisco Bay Region. As a step in the WDRs adoption process, Regional Water Board staff developed tentative WDRs and encouraged public participation in the WDRs adoption process.

8.1. Notification of Interested Parties. The Regional Water Board notified Dischargers and interested agencies and persons of its intent to prescribe WDRs and provided an opportunity to submit written comments and recommendations. The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website (waterboards.ca.gov/sanfranciscobay).

8.2. Written Comments. Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were due by email, in person, or by traditional mail, to the attention of Debbie Phan.

Written comments were due at the Regional Water Board office by 5:00 p.m. on April 15, 2021.

8.3. Public Hearing. The Regional Water Board held a public hearing on the tentative WDRs during its meeting at the following date and time:

Date: Wednesday, May 12, 2021
Time: 9:00 a.m.
Contact: Debbie Phan, (510) 622-2116, Debbie.Phan@waterboards.ca.gov

Interested persons were provided notice of the hearing and information on how to participate. During the public hearing, the Regional Water Board heard testimony pertinent to the discharges, WDRs, and permit. For accuracy of the record, important testimony was requested to be in writing.

If the date or venue of any public hearing changes, the changes will be reflected in the most current agenda posted on the Regional Water Board's website (waterboards.ca.gov/sanfranciscobay).

8.4. Reconsideration of Waste Discharge Requirements. Any person aggrieved by this Regional Water Board action 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. The State Water Board must receive the petition at the following address within 30 calendar days of the date of Regional Water Board action:

State Water Resources Control Board
Office of Chief Counsel

P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

A petition may also be filed by email at waterqualitypetitions@waterboards.ca.gov.

For instructions on how to file a water quality petition for review, see the Water Board's petition instructions (waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml).

8.5. Information and Copying. Supporting documents and comments received are on file and may be inspected at the Regional Water Board by making an appointment with the Regional Water Board's custodian of records. Document copying may be arranged by calling (510) 622-2300.

8.6. Register of Interested Persons. Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference the general permit, and provide a name, email address, and phone number.

8.7. Additional Information. Requests for additional information or questions regarding this Order should be directed to Debbie Phan, (510) 622-2116, Debbie.Phan@waterboards.ca.gov.