REVISED TENTATIVE ORDER R2-2021-XXXX
NPDES No. CA0030236

The following discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Stevens Creek Quarry, Inc.
Facility Name	Cupertino Quarry
Facility Address	12100 Stevens Canyon Road Cupertino, CA, 95014 Santa Clara County
CIWQS Place Number	863643

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Industrial stormwater commingled with rock and sand processing water, and runoff from materials stockpiles.	37.30094	-122.09219	Rattlesnake Creek
002	Industrial stormwater from Middle Quarry Floor, including Quarry Truck Shop, Fueling Area, and fuel storage tanks, commingled with runoff from materials stockpiles.	37.29625	-122.08525	Swiss Creek
003	Industrial stormwater commingled with recycled concrete and asphalt processing water, and runoff from materials stockpiles.	37.29614	-122.08517	Swiss Creek
004	Industrial stormwater commingled with topsoil plant processing water, runoff from City of Cupertino Garden Waste Recycle Center, materials stockpiles, and materials transfer areas.	37.29578	-122.08475	Swiss Creek
005	Non-industrial stormwater.	37.30094	-122.09461	Rattlesnake Creek
006	Industrial stormwater from upper quarry roads commingled with rock and sand processing water, and runoff from materials stockpiles.	37.30067	-122.09042	Rattlesnake Creek

Table 3. Administrative Information

This Order was adopted on:	
This Order shall become effective on:	July 1, 2021
This Order shall expire on:	June 30, 2026
CIWQS Regulatory Measure Number	
The Discharger shall file a Report of Waste Discharge for updated WDRs in accordance with California Code of Regulations, title 23, and as an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	October 3, 2025
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, San Francisco Bay Region, have classified this discharge as follows:	Minor

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

_____

Michael Montgomery, Executive Officer

Contents

Tables

Attachments

I. FACILITY INFORMATION

Information describing the Stevens Creek Quarry Inc., Cupertino Quarry (Facility) is summarized in Table 1 and Fact Sheet (Attachment F) sections I and II.

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), finds the following:

A. 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). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States as listed in Table 2 subject to the WDRs in this Order.

B. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information the Discharger submitted as part of its application, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F) 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, G, and S are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. No provisions and requirements in this Order are included to implement State law only.

D. Technical Information Requirement. On November 8, 2018, the Executive Officer ordered the Discharger to provide technical information about Facility discharges and their effects on Rattlesnake and Swiss creeks pursuant to Water Code section 13267. The Monitoring and Reporting Program (MRP) (Attachment E) incorporates and updates those information requirements; therefore, the November 8, 2018, order is no longer needed and can be rescinded.

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

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

THEREFORE, IT IS HEREBY ORDERED that the November 8, 2018, order to submit technical information pursuant to Water Code section 13267 is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions of Water Code division 7 (commencing with § 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the 13267 order.

III. DISCHARGE PROHIBITIONS

A. Discharge of treated or untreated wastewater at a location or in a manner different than described in this Order is prohibited.

B. Discharge from Discharge Points 001 through 006 is prohibited except when caused by increased flow due to ongoing or recent precipitation.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Discharge Points 001 and 006

The Discharger shall comply with the following effluent limitations at Discharge Points 001 and 006, with compliance measured at Monitoring Locations EFF-001 and EFF-006 as described in the MRP.

Table 4. Effluent Limitations – Discharge Points 001 and 006

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
Oil and Grease	mg/L	10	20	—	—
pH [1]	s.u.	—	—	6.5	8.5
Settleable Matter	mL/L-hr	—	1.0	—	—
Chromium (III)	µg/L	370	740	—	—
Copper	µg/L	17	34	—	—
Lead	µg/L	8.8	18	—	—
Nickel	µg/L	96	190	—	—
Selenium	µg/L	4.1	8.2	—	—
Zinc	µg/L	130	270	—	—

Unit Abbreviations:

µg/L = micrograms per liter
mg/L = milligrams per liter
mL/L-hr = milliliters per liter-hour
s.u. = standard units

Footnote:

[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. § 401.17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (i) the total time during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the required pH range shall exceed 60 minutes

B. Discharge Points 002, 003, and 004

The Discharger shall comply with the following effluent limitations at Discharge Points 002, 003, and 004, with compliance measured at Monitoring Locations EFF-002, EFF-003, and EFF-004 as described in the MRP.

Table 5. Effluent Limitations – Discharge Points 002, 003, and 004

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
Oil and Grease	mg/L	10	20	—	—
pH [1]	s.u.	—	—	6.5	8.5
Settleable Matter	mL/L-hr	—	1.0	—	—
Chromium (VI)	µg/L	5.6	16	—	—
Copper	µg/L	14	34	—	—
Lead	µg/L	8.1	19	—	—
Nickel	µg/L	93	200	—	—
Selenium	µg/L	4.0	8.4	—	—
Cyanide	µg/L	4.3	8.5	—	—

Unit Abbreviations:

µg/L = micrograms per liter
mg/L = milligrams per liter
mL/L-hr = milliliters per liter-hour
s.u. = standard units

Footnote:

[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. § 401.17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (i) the total time during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the required pH range shall exceed 60 minutes.

C. Discharge Point 005

The Discharger shall comply with Provision VI.A.3 for Discharge Point 005.

D. Acute Toxicity (Discharge Points 001, 002, 003, 004, and 006)

Discharges at Discharge Points 001, 002, 003, 004, and 006 shall comply with the following effluent limitation: no bioassay test shall show survival of less than 70 percent. Compliance shall be measured at Monitoring Locations EFF-001 and EFF-006 combined, and Monitoring Locations EFF-002, EFF-003, and EFF-004 combined, as described in the MRP.

V. RECEIVING WATER LIMITATIONS

A. The discharge shall not cause the following conditions to exist in receiving waters at any place:

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

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;

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

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

5. Alteration of temperature beyond present natural background levels;

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;

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

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

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.

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

1.	Dissolved Oxygen (DO)	7.0 mg/L, minimum The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.
2.	Dissolved Sulfide	Natural background levels
3.	pH	The pH shall not be depressed below 6.5 or raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.
4.	Nutrients	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

C. The discharge shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (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.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all "Standard Provisions" in Attachment D.

2. The Discharger shall comply with all applicable provisions of Attachment G (*Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits*), as modified below. Specifically, Attachment G, sections III.A.3.b.i, ii, and iii are replaced by the following:

   i. **Average Monthly Effluent Limitation Exceedance.** If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter (or if the required sampling frequency is once per month or less and the monthly sample exceeds the average monthly effluent limitation), the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling show that the parameter complies with the average monthly effluent limitation. This requirement does not apply to exceedances of the average monthly effluent limitations for chromium (III), chromium (VI), copper, lead, nickel, selenium, zinc, or cyanide listed in Tables 4 and 5 of this Order.

   ii. **Maximum Daily or Instantaneous Effluent Limitation Exceedance.** If a sample result exceeds a maximum daily effluent limitation, or an instantaneous maximum or minimum effluent limitation, 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 show compliance with the maximum daily or instantaneous effluent limitation. This requirement does not apply to exceedances of the instantaneous maximum and minimum limitations for pH, or the maximum daily effluent limitations for settleable matter, chromium (III), chromium (VI), copper, lead, nickel, selenium, zinc, or cyanide listed in Tables 4 and 5 of this Order.

   iii. **Acute Toxicity.** If final or intermediate results of an acute bioassay indicate a violation or threatened violation (e.g., the percentage of surviving test organisms of any single acute bioassay is less than 70 percent), the Discharger shall investigate the cause of the mortalities and report its findings in the next self-monitoring report.

3. The Discharger shall comply with all applicable provisions of Attachment S (*Stormwater Provisions, Monitoring, and Reporting Requirements*).

B. Monitoring and Reporting

The Discharger shall comply with the MRP (Attachment E), and future revisions thereto, and applicable sampling and reporting requirements in Attachments D and G.

C. Special Provisions

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:

a. 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.

b. If new or revised water quality objectives or total maximum daily loads (TMDLs) come into effect for San Francisco Bay and 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 and wasteload allocations in the TMDLs. 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.

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

d. If State Water Board precedential decisions, new policies, new laws, or new regulations are adopted.

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

f. Or as otherwise authorized by law.

The Discharger may request a permit modification based on any of the circumstances above. With any such request, the Discharger shall include antidegradation and anti-backsliding analyses.

2. Effluent Characterization Study and Report

a. Study Elements. The Discharger shall characterize and evaluate the discharges from Discharge Points 001, 002, 003, 004, and 006 as required by the MRP to verify that the reasonable potential analysis conclusions of this Order remain valid and to inform the next permit reissuance.

The Discharger shall evaluate annually if concentrations of any of the priority pollutants listed in Attachment G, Table B, significantly increase over past performance. The Discharger shall investigate the cause of any such increase. The investigation may include, but need not be limited to, an increase in monitoring frequency, monitoring of process streams, and monitoring of influent sources. The Discharger shall establish remedial measures addressing any increase resulting in reasonable potential to cause or contribute to an excursion above applicable water quality criteria. This requirement may be satisfied by including the constituent in the Discharger's Pollutant Minimization Program, described in Provision VI.C.3.

b. Reporting Requirements

i. Routine Reporting. The Discharger shall report the identity of pollutants detected at or above applicable water quality criteria (see Fact Sheet Tables F-5 and F-6 for the

criteria) in the transmittal letter for the self-monitoring report associated with the month in which samples were collected.

ii. Annual Reporting. The Discharger shall summarize the data evaluation and source investigation in the annual self-monitoring report.

3. Pollutant Minimization Program

a. The Discharger shall develop and conduct a Pollutant Minimization Program as further described below when there is evidence that a priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as detected but not quantified [DNQ] when the effluent limitation is less than the method detection limit [MDL], sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, or results of benthic or aquatic organism tissue sampling) and either:

i. A sample result is reported as DNQ and the effluent limitation is less than the Reporting Level (RL); or

ii. A sample result is reported as not detected (ND) and the effluent limitation is less than the MDL using definitions in Attachment A and reporting protocols described in the MRP.

b. If triggered by the reasons set forth in Provision VI.C.3.a, above, the Discharger's Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals:

i. Annual review and semi-annual monitoring of potential sources of the reportable priority pollutants, which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures when source monitoring is unlikely to produce useful analytical data;

ii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation; and

iii. Implementation of appropriate cost-effective control measures for the reportable priority pollutants, consistent with the control strategy.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, the 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)
The 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)
The 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, 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
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 the constituent discharged over the calendar day (12:00 am through 11:59 pm) 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 the constituent over the 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 result 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 by conducting a mixing zone study or modeling the discharge and receiving water.

Effluent Concentration Allowance (ECA)
Value derived from the water quality criterion/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 Bay
Indentation along the coast that encloses an area of oceanic water within a 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 the substance below the ML value 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 are 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 include, 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 do not include 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 set of data. The median of a set of data 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 in 40 C.F.R. part 136, Appendix B.

Minimum Level (ML)
Concentration at which the entire analytical system gives 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 the 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 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 that is 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 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. 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 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 having a municipal or domestic supply (MUN) beneficial use.

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

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

where:

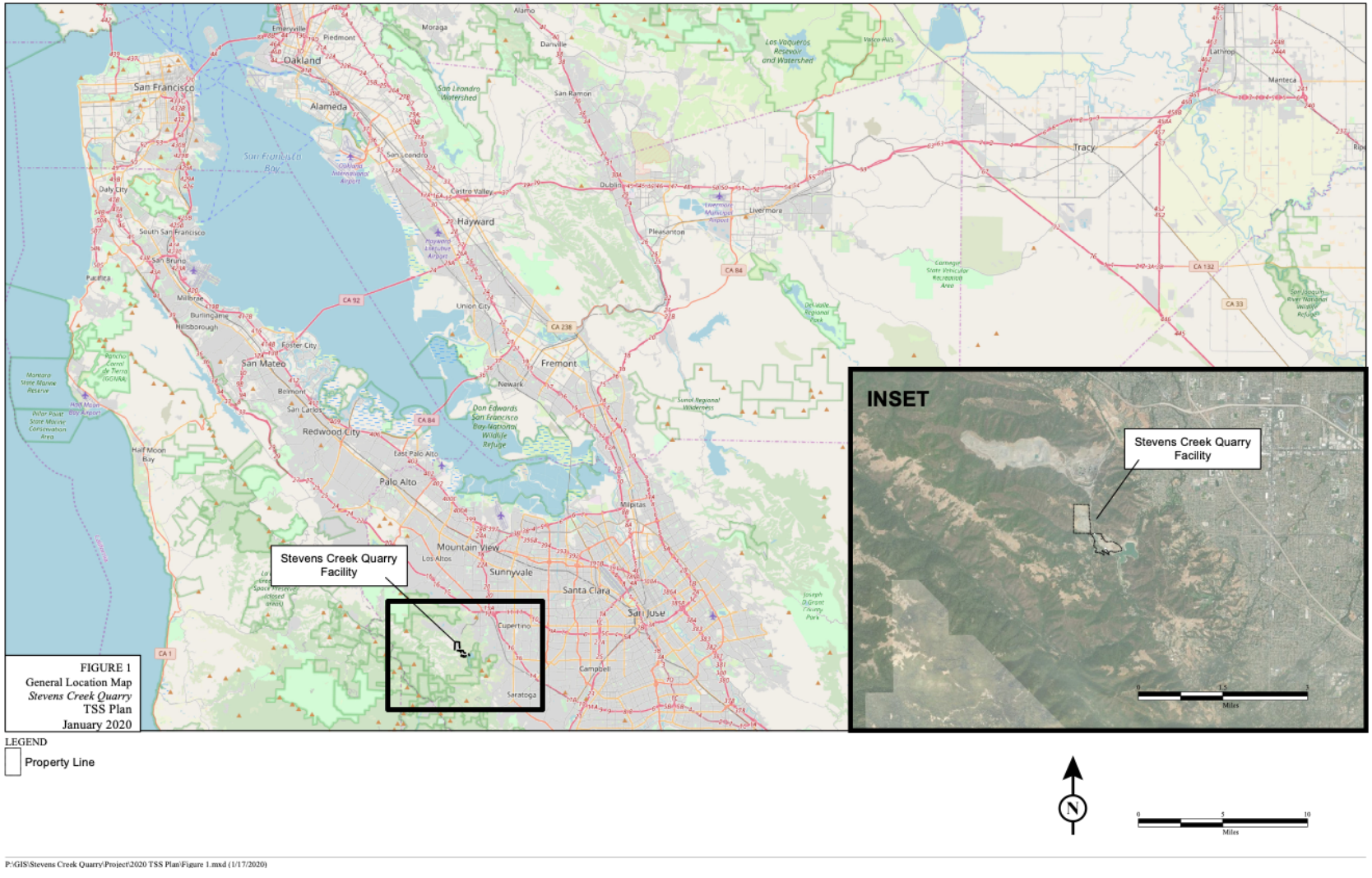
x is the observed value;

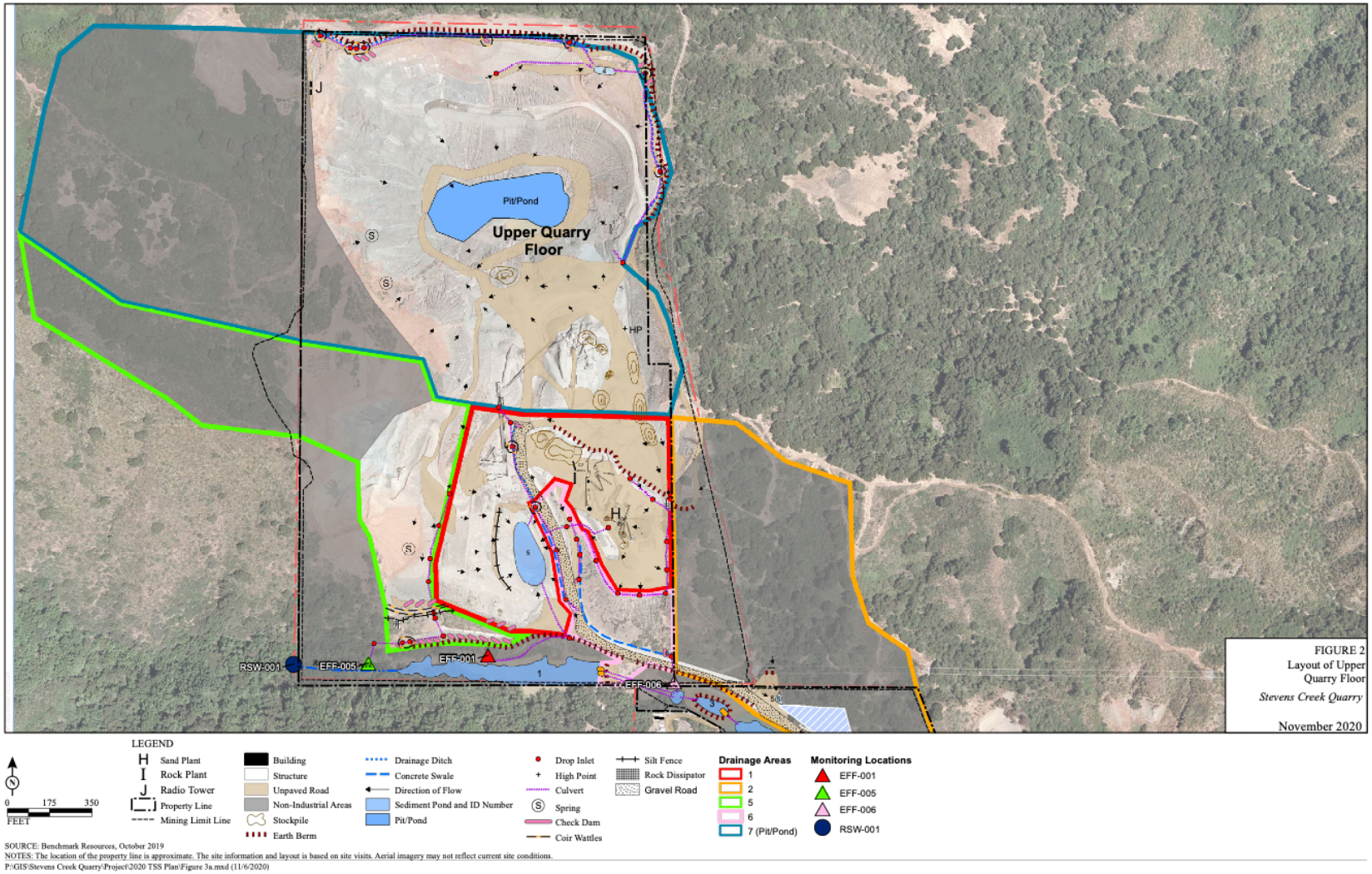
μ is the arithmetic mean of the observed values; and

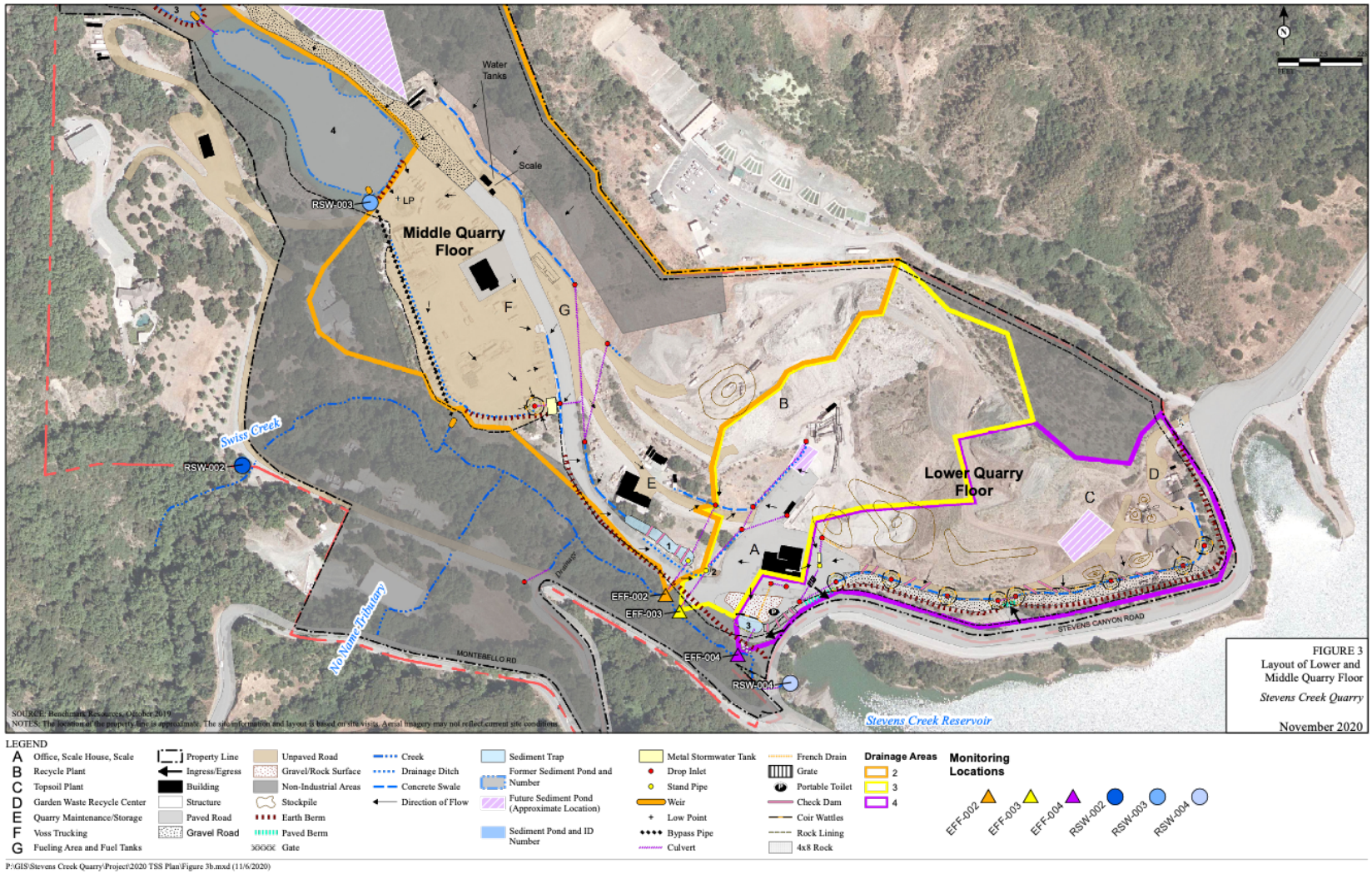
n is the number of samples.

Toxicity Reduction Evaluation (TRE)
Study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. A TIE is a set of procedures to identify the specific chemicals responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

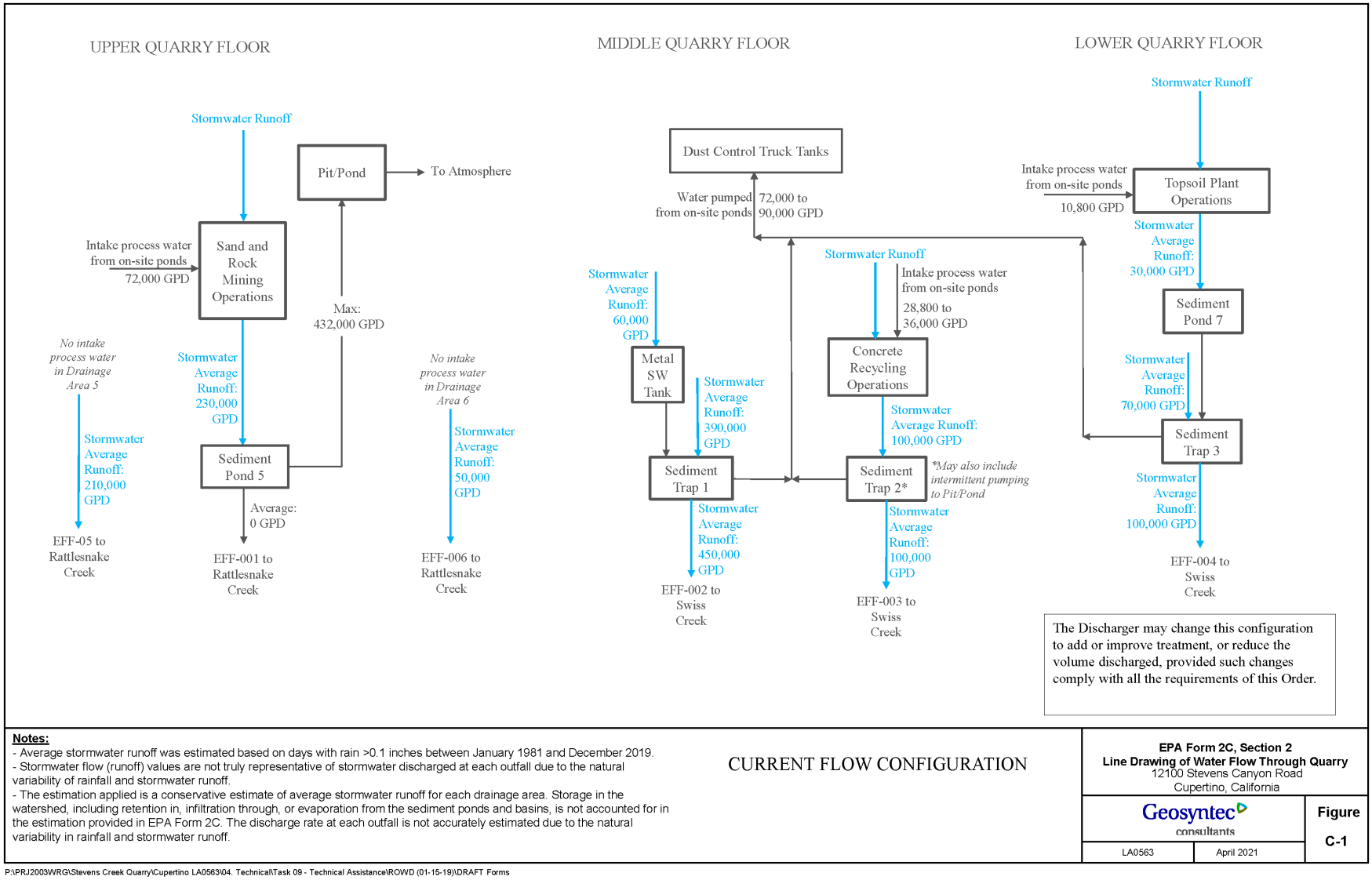
ATTACHMENT B – FACILITY MAPS




Pit/Pond
Upper Quarry Floor
HP
RSW-001
EFF-005
EFF-001
EFF-006
FIGURE 2
Layout of Upper Quarry Floor
Stevens Creek Quarry
November 2020
LEGEND
Sand Plant
Rock Plant
Radio Tower
Property Line
Mining Limit Line
Building
Structure
Unpaved Road
Non-Industrial Areas
Stockpile
Earth Berm
Drainage Ditch
Concrete Swale
Direction of Flow
Sediment Pond and ID Number
Pit/Pond
Drop Inlet
High Point
Culvert
Spring
Check Dam
Coir Wattles
Silt Fence
Rock Dissipator
Gravel Road
Drainage Areas
1
2
5
6
7 (Pit/Pond)
Monitoring Locations
EFF-001
EFF-005
EFF-006
RSW-001
0 175 350
FEET
SOURCE: Benchmark Resources, October 2019
NOTES: The location of the property line is approximate. The site information and layout is based on site visits. Aerial imagery may not reflect current site conditions.
P:\GIS\Stevens Creek Quarry\Project\2020 TSS Plan\Figure 3a.mxd (11/6/2020)


Water Tanks
Scale
LP
RSW-003
Middle Quarry Floor
F
G
B
Lower Quarry Floor
C
D
E
A
Swiss Creek
RSW-002
No Name Tributary
Drainage
EFF-002
EFF-003
EFF-004
RSW-004
MONTEBELLO RD
STEVENS CANYON ROAD
Stevens Creek Reservoir
SOURCE: Benchmark Resources, October 2019
NOTES: The location of the property line is approximate. The site information and layout is based on site visits. Aerial imagery may not reflect current site conditions.
FIGURE 3
Layout of Lower and Middle Quarry Floor
Stevens Creek Quarry
November 2020
LEGEND
A Office, Scale House, Scale
B Recycle Plant
C Topsoil Plant
D Garden Waste Recycle Center
E Quarry Maintenance/Storage
F Voss Trucking
G Fueling Area and Fuel Tanks
Property Line
Ingress/Egress
Building
Structure
Paved Road
Gravel Road
Unpaved Road
Gravel/Rock Surface
Non-Industrial Areas
Stockpile
Earth Berm
Paved Berm
Gate
Creek
Drainage Ditch
Concrete Swale
Direction of Flow
Sediment Trap
Former Sediment Pond and Number
Future Sediment Pond (Approximate Location)
Sediment Pond and ID Number
Metal Stormwater Tank
Drop Inlet
Stand Pipe
Weir
Low Point
Bypass Pipe
Culvert
French Drain
Grate
Portable Toilet
Check Dam
Coir Wattles
Rock Lining
4x8 Rock
Drainage Areas
2
3
4
Monitoring Locations
EFF-002
EFF-003
EFF-004
RSW-002
RSW-003
RSW-004
P:\GIS\Stevens Creek Quarry\Project\2020 TSS Plan\Figure 3b.mxd (11/6/2020)

ATTACHMENT C – PROCESS FLOW DIAGRAM



Notes:
- Average stormwater runoff was estimated based on days with rain >0.1 inches between January 1981 and December 2019.
- Stormwater flow (runoff) values are not truly representative of stormwater discharged at each outfall due to the natural variability of rainfall and stormwater runoff.
- The estimation applied is a conservative estimate of average stormwater runoff for each drainage area. Storage in the watershed, including retention in, infiltration through, or evaporation from the sediment ponds and basins, is not accounted for in the estimation provided in EPA Form 2C. The discharge rate at each outfall is not accurately estimated due to the natural variability in rainfall and stormwater runoff.

CURRENT FLOW CONFIGURATION

EPA Form 2C, Section 2
Line Drawing of Water Flow Through Quarry
12100 Stevens Canyon Road
Cupertino, California

Geosyntec consultants

LA0563 | April 2021

Figure C-1

P:\PRJ2003WRG\Stevens Creek Quarry\Cupertino LA0563\04. Technical\Task 09 - Technical Assistance\ROWD (01-15-19)\DRAFT Forms

ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS—PERMIT COMPLIANCE

A. Duty to Comply

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; for permit termination, revocation and reissuance, or modification; or 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.)

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).)

B. 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).)

C. 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).)

D. 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) which 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).)

E. Property Rights

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

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).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, 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. 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);

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);

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

4. Sample or monitor, at reasonable times, for the purposes of assuring 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.)

G. Bypass

1. Definitions

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

b. "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).)

2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

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)):

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

b. 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

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

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 I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. 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 V.J 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).)

b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E 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 V.J 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).)

H. 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. 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 I.H.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).)

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)):

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

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

c. The Discharger submitted notice of the upset as required in Standard Provisions—Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions—Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

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).)

II. STANDARD PROVISIONS—PERMIT ACTION

A. 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).)

B. 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).)

C. 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 this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

III. STANDARD PROVISIONS—MONITORING

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

B. 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 required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either (a) the method ML is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter, or (b) the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in a facility's discharge is

high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

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).)

IV. STANDARD PROVISIONS—RECORDS

A. 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).)

B. Records of monitoring information shall include the following:

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

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

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

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

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

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

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

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

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

V. STANDARD PROVISIONS—REPORTING

A. 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 which 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.)

B. Signatory and Certification Requirements

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 V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 C.F.R. § 122.41(k).)

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: (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which 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 assure 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 municipality, 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 (i) the chief executive officer of the agency, or (ii) 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).).

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 V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions—Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. 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

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

4. If an authorization under Standard Provisions – Reporting V.B.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 V.B.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. Any person signing a document under Standard Provisions—Reporting V.B.2 or V.B.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).)

6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, 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).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order. (40 C.F.R. § 122.22(l)(4).)

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. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J 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).)

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 reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

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

D. 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).)

E. Twenty-Four Hour Reporting

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.

For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

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

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

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

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

F. 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)):

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

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. (Alternatively, for 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 VII.A.1).) (40 C.F.R. § 122.41(l)(1)(ii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State 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).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions—Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provisions—Reporting V.E above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

I. 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).)

J. 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).)

VI. STANDARD PROVISIONS—ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this Order under several provisions of the Water Code, including, but not limited to, sections 13268, 13350, 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS—NOTIFICATION LEVELS

A. 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)):

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)):

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

   b. 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));

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

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

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)):

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

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

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

   d. 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).)

B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. 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)); and

2. 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).)

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 (MRP)

Contents

Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Clean Water Act section 308 and 40 C.F.R. sections 122.41(h), 122.41(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 federal and State laws and regulations.

I. GENERAL MONITORING PROVISIONS

A. The Discharger shall comply with this MRP. The Executive Officer may amend this MRP to require more frequent monitoring or reporting pursuant to 40 C.F.R. section 122.63. If any discrepancies exist between this MRP and the *Regional Standard Provisions, and Monitoring and Reporting Requirements (Supplement to Attachment D) for NPDES Wastewater Discharge Permits* (Attachment G) or *Stormwater Provisions, Monitoring, and Reporting Requirements* (Attachment S), this MRP shall prevail.

B. The Discharger shall conduct all monitoring in accordance with Attachment D, section III, as supplemented by Attachment G. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit.

C. The Discharger shall ensure that results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento, CA 95814

D. The Discharger shall implement a Quality Assurance-Quality Control Program for any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, conductivity, disinfectant residual) analyzed by a noncertified laboratory. The Discharger shall keep a manual onsite containing the steps followed in this program and must 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.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table E-1. Monitoring Locations

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
Effluent	EFF-001	A point in the outfall from Discharge Point 001, following treatment and prior to Rattlesnake Creek, at which all waste tributary to the outfall is present.
Effluent	EFF-002	A point in the outfall from Discharge Point 002, following treatment and prior to Swiss Creek, at which all waste tributary to the outfall is present.

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description [1]
Effluent	EFF-003	A point in the outfall from Discharge Point 003, following treatment and prior to Swiss Creek, at which all waste tributary to the outfall is present.
Effluent	EFF-004	A point in the outfall from Discharge Point 004, following treatment and prior to Swiss Creek, at which all waste tributary to the outfall is present.
Effluent	EFF-005	A point in the outfall from Discharge Point 005, prior to Rattlesnake Creek, where all runoff from Drainage Area 5 tributary to the outfall is present.
Effluent	EFF-006	A point in the outfall from Discharge Point 006, following treatment and prior to Rattlesnake Creek, at which all waste tributary to the outfall is present.
Receiving Water	RSW-001 (formerly BG-01)	A point in Rattlesnake Creek about 250 feet upstream of Discharge Point 005.
Receiving Water	RSW-002 (formerly BG-02)	A point in Swiss Creek approximately 950 feet upstream of Discharge Point 002.
Receiving Water	RSW-003 (formerly RW-01)	A point in Rattlesnake Creek approximately 600 feet downstream of Discharge Point 006.
Receiving Water	RSW-004 (formerly RW-02)	A point in Stevens Creek Reservoir at the outfall from Swiss Creek, about 100 feet downstream of Discharge Point 004.

III. EFFLUENT MONITORING REQUIREMENTS

A. The Discharger shall monitor effluent at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, and EFF-006 as follows:

Table E-2. Effluent Monitoring — Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, and EFF-006

Parameter	Units	Sample Type [1]	Minimum Sampling Frequency
Flow [2]	gpd	Continuous	1/Month [3]
Oil and Grease	mg/L	Grab	2/Year
pH [4]	standard units	Grab	1/Month
Settleable Matter	mL/L-hr	Grab	2/Year
Temperature	°C	Grab	2/Year
Total Suspended Solids (TSS)	mg/L	Grab	1/Month
Ammonia (as Nitrogen [N])	mg/L	Grab	1/5 Years
Chromium (III)	µg/L	Grab	1/Year or 1/Month [5]
Chromium (VI)	µg/L	Grab	1/Year or 1/Month [5]
Copper	µg/L	Grab	1/Year or 1/Month [5]
Lead	µg/L	Grab	1/Year or 1/Month [5]
Nickel	µg/L	Grab	1/Year or 1/Month [5]
Selenium	µg/L	Grab	1/Year or 1/Month [5]
Zinc	µg/L	Grab	1/Year or 1/Month [5]
Cyanide	µg/L	Grab	1/Quarter

Parameter	Units	Sample Type [1]	Minimum Sampling Frequency
Acute Toxicity [6]	% Survival	Grab	1/Year or 1/Month [5]
Turbidity [7]	NTU	Grab	1/Month
Dissolved Metals [8]	µg/L	Grab	1/5 Years
Priority Pollutants [9]	µg/L	Grab	1/5 Years
Visual Observations [10]	—	—	1/Month and each day when sampling above parameters (except flow)

Unit Abbreviations:

ºC = degrees Celsius
gpd = gallons per day
µg/L = micrograms per liter
mg/L = milligrams per liter
mL/L-hr = milliliters per liter-hour
NTU = nephelometric turbidity units
% Survival = percent survival

Sample Type:

Continuous = measured continuously
Grab = grab sample

Footnotes:

[1] Grab samples shall be collected during daylight hours.

[2] The monthly cumulative rainfall shall be measured, and the total volume discharged for each month shall be calculated based on the drainage area served by each discharge point. The monthly rainfall amount (inches) and the monthly discharge volume (MG) for each discharge point shall be reported on a monthly basis.

[3] The Discharger shall visually monitor each effluent monitoring location for the presence of flow at least monthly. In addition, the Discharger shall commence daily visual monitoring of each effluent monitoring location for flow at the start of each rain event; the Discharger shall continue daily visual monitoring until discharge ceases. The Discharger shall report the days of flow at each monitoring location in the appropriate SMR.

[4] pH shall be monitored at least once in each calendar month in which a discharge occurs during Facility operating hours at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, and EFF-006.

[5] Frequency shall be once per year (1/Year) until July 31, 2024, and once per month (1/Month) beginning August 1, 2024. Frequency shall revert to 1/Year on October 3, 2025, if a complete Report of Waste Discharge is timely submitted (see Table 3 of this Order).

[6] Acute bioassay tests shall be performed in accordance with MRP section V. One of either Monitoring Location EFF-001 or EFF-006, and one of Monitoring Location EFF-002, EFF-003, or EFF-004, shall be monitored on a rotating basis. If no discharge flow is present, monitoring shall take place at the next monitoring location in the rotation.

[7] Effluent and receiving water turbidity, both upstream and downstream, shall be monitored during the same sampling event.

[8] The Discharger shall monitor for dissolved chromium (III), chromium (VI), copper, lead, nickel, selenium, and zinc at the frequency indicated.

[9] The Discharger shall monitor for the pollutants listed in Attachment G, Table B.

[10] Observations shall include Monthly Visual Observations and Sampling Event Visual Observations as described in Attachment S, section II.A.

B. The Discharger shall monitor Facility discharges at Monitoring Location EFF-005 as follows:

Table E-3. Effluent Monitoring — Monitoring Location EFF-005

Parameter	Units	Sample Type [1]	Minimum Sampling Frequency
Conductivity	µmhos/cm	Grab	2/Year
Flow [2]	gpd	Continuous	1/Month [3]
Oil and Grease	mg/L	Grab	2/Year
pH	standard units	Grab	2/Year
TSS	mg/L	Grab	2/Year

Parameter	Units	Sample Type [1]	Minimum Sampling Frequency
Visual Observations [4]	—	—	1/Month and each day when sampling above parameters (except flow)

Unit Abbreviations:

gpd = gallons per day
µmhos/cm = micromhos per centimeter
mg/L = milligrams per liter

Sample Type:

Continuous = measured continuously
Grab = grab sample

Footnotes:

[1] Grab samples shall be collected during daylight hours.
[2] The monthly cumulative rainfall shall be measured, and the total volume of discharged for each month shall be calculated based on the drainage area served by each discharge point. The monthly rainfall amount (inches) and the monthly discharge volume (MG) for each discharge point shall be reported on a monthly basis.
[3] The Discharger shall visually monitor Monitoring Location EFF-005 for the presence of flow at least monthly. In addition, the Discharger shall commence daily visual monitoring of Monitoring Location EFF-005 for flow at the start of each rain event; the Discharger shall continue daily visual monitoring until discharge ceases. The Discharger shall report the days of discharge in the appropriate SMR.
[4] Observations shall include Monthly Visual Observations and Sampling Event Visual Observations as described in Attachment S, section II.A.

IV. RECEIVING WATER MONITORING REQUIREMENTS

The Discharger shall monitor receiving waters at Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004 according to the following requirements. The Discharger shall sample all receiving water monitoring locations on the same day, unless impractical for safety reasons, or due to limited hours of daylight.

A. Each wet season (November 1 through April 30), the Discharger shall monitor at Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004 for the parameters listed in Table E-4 after the first storm that causes a "significant discharge," defined as (1) a continuous Facility discharge for a minimum of one hour or (2) an intermittent Facility discharge for a minimum of three hours during a 12-hour period.

B. When discharge is occurring from the Facility, the Discharger shall monitor at Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004 as indicated below:

Table E-4. Receiving Water Monitoring — Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004

Parameter	Units	Sample Type	Minimum Sampling Frequency [1]
Dissolved Oxygen	mg/L and % Saturation	Grab	2/Year
Flow	cfs	Monthly	1/Month [2]
Total Hardness as Calcium Carbonate ($CaCO_3$) [3]	mg/L	Grab	1/Year
Oil and Grease	mg/L	Grab	2/Year
pH	standard units	Grab	2/Year
Sulfate	mg/L	Grab	2/Year
Temperature	°C	Grab	2/Year
TSS	mg/L	Grab	1/Month

Parameter	Units	Sample Type	Minimum Sampling Frequency [1]
Chromium (III)	µg/L	Grab	2/Year
Chromium (VI)	µg/L	Grab	2/Year
Copper	µg/L	Grab	2/Year
Lead	µg/L	Grab	2/Year
Nickel	µg/L	Grab	2/Year
Selenium	µg/L	Grab	2/Year
Zinc	µg/L	Grab	2/Year
Turbidity [4]	NTU	Grab	1/Month
Dissolved Metals [5]	µg/L	Grab	1/5 Years
Priority Pollutants [6]	µg/L	Grab	1/5 Years
Standard Observations [7]	—	—	1/Month and each day when sampling above parameters (except flow)

Unit Abbreviations:

cfs = cubic feet per second
ºC = degrees Celsius
µg/L = micrograms per liter
mg/L = milligrams per liter
% Saturation = percent saturation

Footnotes:

[1] Samples shall be collected while the Facility is discharging from any discharge point or points.

[2] Flow may be measured or estimated.

[3] Hardness shall be monitored at Monitoring Locations RSW-001 and RSW-002. Hardness monitoring is not required at Monitoring Locations RSW-003 and RSW-004.

[4] Effluent and receiving water turbidity, both upstream and downstream, shall be monitored during the same sampling event.

[5] The Discharger shall monitor for dissolved chromium (III), chromium (VI), copper, lead, nickel, selenium, and zinc at the frequency indicated.

[6] The Discharger shall monitor for the pollutants listed in Attachment G, Table B.

[7] The Discharger shall monitor for the parameters listed in Attachment G, section III.B.1.

V. TOXICITY TESTING REQUIREMENTS

The Discharger shall monitor Facility discharges for acute toxicity at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, and EFF-006 at the frequency specified in Table E-2.

A. Compliance with the acute toxicity effluent limitations shall be evaluated by measuring survival of test organisms exposed to 96-hour static renewal bioassays.

B. Test organisms shall be rainbow trout (*Oncorhynchus mykiss*) and fathead minnow (*Pimephales promelas*) tested concurrently. If after 3 years, the Discharger can document that one of the two species is more sensitive than the other, the Executive Officer may allow monitoring with only the more sensitive species. Likewise, if the Discharger can document that neither species is sensitive to the discharge, the Executive Officer may allow monitoring with only one species.

C. 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).

D. 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 to minimize ammonia toxicity interference.

E. Bioassay water monitoring shall include, on a daily basis, residual chlorine, pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If a violation of an acute toxicity limit occurs, the bioassay test shall be repeated with new fish as soon as practical and shall be repeated until a test fish survival rate of 90 percent or greater is observed. If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

VI. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all standard provisions (Attachments D, G, and S) related to monitoring, reporting, and recordkeeping.

B. Self-Monitoring Reports (SMRs)

1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Website (http://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 for electronic submittal.

2. **SMR Due Dates and Contents.** The Discharger shall submit SMRs by the due dates, and with the contents, specified below:

   a. **Monthly SMRs —** Monthly SMRs shall be due 30 days after the end of each calendar month, covering that calendar month. The monthly SMR shall contain the applicable items described in sections V.B and V.C of both Attachments D and G to this Order. See Provision VI.C.2 (Effluent Characterization Study and Report) of this Order for information that must also be reported with monthly SMRs.

      Monthly SMRs shall include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the Discharger shall include the results of such monitoring in the calculations and reporting for the SMR.

   b. **Annual SMR —** Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the items described in sections V.C.1.f of Attachment G. See also Provision VI.C.2 (Effluent Characterization Study and Report) of

this Order and Attachment S to this Order for requirements to submit reports with the annual SMR.

c. Specifications for Submitting SMRs to CIWQS — The Discharger shall submit analytical results and other information using one of the following methods:

Table E-5. CIWQS Reporting

Parameter	Method of Reporting: EDF/CDF data upload or manual entry	Method of Reporting: Attached File
All parameters identified in influent, effluent, and receiving water monitoring tables	Required for all results	—
Cyanide Arsenic Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Zinc Dioxins and Furans (by U.S. EPA Method 1613)	Required for all results [2]	—
Antimony Beryllium Thallium Other Pollutants (by U.S. EPA Methods 601, 602, 608, 610, 614, 624, and 625)	Not required (unless identified in influent, effluent, or receiving water monitoring tables), but encouraged [1]	Discharger may use this method and submit results with application for permit reissuance, unless data are submitted by CDF/EDF upload
Analytical Method	Not required (Discharger may select "data unavailable") [1]	—
Collection Time Analysis Time	Not required (Discharger may select "0:00") [1]	—

Footnotes:

[1] The Discharger shall continue to monitor at the minimum frequency specified in this MRP, keep records of the measurements, and make the records available upon request.

[2] These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this MRP or other provisions of this Order (except for biosolids, sludge, or ash provisions).

The Discharger shall arrange all reported data in a tabular format and summarize data to clearly illustrate whether the Facility is operating in compliance with effluent limitations. The Discharger is not required to duplicate the submittal of data entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format, the Discharger shall electronically submit the data in a tabular format as an attachment.

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

Table E-6. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
Continuous	Permit effective date	All times
1/Day	Permit effective date	Midnight through 11:59 p.m. or any 24-hour period that reasonably represents a calendar day for purposes of sampling
1/Month	First day of calendar month following or on Order effective date	First day of calendar month through last day of calendar month
1/Year	Closest January 1 before or after Order effective date [1]	January 1 through December 31
2/Year	Closest January 1 or July 1 before or after Order effective date [1]	January 1 through June 30 July 1 through December 31
1/5 Years	Permit effective date	Once during the permit term within 12 months prior to applying for permit reissuance

Footnote:

[1] Monitoring performed during coverage under the State Water Board Order 2014-0057-DWQ (*Waste Discharge Requirements for Discharges of Storm Water Associated with Activities Excluding Construction Activities*, NPDES Permit No. CAS000001), as amended by Order 2015-0122-DWQ previous order term may be used to satisfy monitoring required by this Order.

4. **RL and MDL Reporting.** The Discharger shall report with each sample result the Reporting Level (RL) and Method Detection Limit (MDL) as determined by the procedure in 40 C.F.R. part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. 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).

   b. 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 laboratory shall 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.

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

   d. 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.

5. **Compliance Determination.** Compliance with effluent limitations shall be determined using sample reporting protocols defined above and in the Fact Sheet and Attachments A, D, and G. 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 greater than or equal to the reporting level (RL).

C. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using the Electronic Self-Monitoring Reports module eSMR 2.5 or the latest upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at:

http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring.

ATTACHMENT F - FACT SHEET

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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 II.B of this Order, the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) incorporates this Fact Sheet as findings supporting the issuance of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility:

Table F-1. Facility Information

WDID	2 43I006687
CIWQS Place ID	863643
Discharger	Stevens Creek Quarry, Inc.
Facility Name	Cupertino Quarry
Facility Address	12100 Stevens Canyon Road Cupertino, CA, 95014 Santa Clara County
Facility Contact, Title, Phone	Jason Voss, Operations Manager, Stevens Creek Quarry, Inc., 408-253-2512
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	Same as Facility Address
Billing Address	Same as Facility Address
Facility Type	Industrial, SIC Codes 1429 (Crushed and Broken Stone, Not Elsewhere Classified), 1442 (Construction Sand and Gravel), 4212 (Local Trucking Without Storage)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	A
Pretreatment Program	None
Reclamation Requirements	Not Applicable
Permitted Flow	Not Applicable
Design Flow [1]	Discharge Point 001: 0.23 million gallons per day (MGD) Discharge Point 002: 0.45 MGD Discharge Point 003: 0.10 MGD Discharge Point 004: 0.10 MGD Discharge Point 005: N/A (stormwater only) Discharge Point 006: 0.050 MGD
Watershed	Santa Clara Basin
Receiving Waters	Rattlesnake Creek, Swiss Creek
Receiving Water Type	Inland Surface Water (Fresh)

Footnote:

[1] "Design flows are estimates of the average Facility discharges on days with at least 0.1 inches of rain from 1981-2019.

A. Stevens Creek Quarry, Inc. (Discharger) owns and operates the Cupertino Quarry (Facility), a rock and sand quarry and processing facility that also recycles used concrete and asphalt, produces topsoil from imported soil, and hosts the City of Cupertino's Garden Waste Recycling Center. Operations at the Facility consist of activities required to:

- mine rock and sand,
- produce construction aggregate and construction sand (at the Rock Plant and Sand Plant),
- recycle broken concrete and asphalt (at the Recycling Plant),
- produce topsoil from imported soil (at the Topsoil Plant),
- store compost (at the Garden Waste Recycling Center), and
- provide those products to customers and the public.

The Facility is located at 12100 Stevens Canyon Road in Cupertino, California. Site operations commenced in the 1940s.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

B. The Facility discharges industrial stormwater commingled with process wastewater through five outfalls to Rattlesnake Creek and Swiss Creek, and stormwater that does not contain process wastewater through one outfall to Rattlesnake Creek. Rattlesnake Creek is tributary to Swiss Creek. Swiss Creek is tributary to Stevens Creek Reservoir, located about 200 feet southwest of the Facility entrance. Both creeks and the reservoir are waters of the State and United States within the Santa Clara Basin watershed. Attachment B provides a vicinity map and site maps of the upper, and middle and lower, segments of the Facility. Attachment C provides a flow and treatment process schematic for the Facility.

Facility discharges have been subject to the State Water Board's *General Permit for Stormwater Discharges Associated with Industrial Activities* (Industrial General Permit), National Pollutant Discharge Elimination System (NPDES) Permit CAS000001, issued through State Water Resources Control Board (State Water Board) Order 2014-0057-DWQ (previous order), pursuant to a May 1992 Authorization to Discharge. The Regional Water Board determined, based on discharge data collected and inspections performed under the Industrial General Permit, and additional technical information collected under Water Code section 13267, that the Facility is ineligible for coverage under the Industrial General Permit. (See Fact Sheet § II.E, Compliance Summary, for discussion of inspections and effluent data.) The Discharger submitted a Report of Waste Discharge (ROWD) and application for an individual NPDES permit to the Regional Water Board on January 15, 2020. The Facility's coverage under the Industrial General Permit is terminated upon the effective date of this Order.

The Discharger is authorized to discharge subject to the WDRs in this Order at the discharge locations described in Table 2 of this Order. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the effective period for the discharge authorization. Pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES regulation requirements for continuation of expired permits.

C. When applicable, State law requires dischargers to file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights, and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate

jurisdictional authority to enforce such requirements under Water Code section 1211. This is not an NPDES permit requirement.

II. FACILITY DESCRIPTION

The Discharger mines and processes rock and sand at the Facility to produce various construction aggregate products. The Discharger also recycles broken concrete and asphalt and produces topsoil at the Facility. In addition, the Discharger operates a small trucking business (Voss Trucking) to transport the Facility's products to local clients. This Order addresses all process wastewater and industrial stormwater associated with Facility operations. The Facility uses portable toilets for sanitation and does not have a sewer system. The sanitary wastewater associated with these portable toilets is transported offsite for disposal, so this Order does not address that wastewater.

The Facility covers approximately 160 acres, most of which are unpaved. The Discharger's activities, including mining, currently occur on 111 acres. The Facility consists of three distinct physical areas: the Upper Quarry Floor, Middle Quarry Floor, and Lower Quarry Floor.

- Upper Quarry Floor includes the Upper Quarry Floor Pit/Pond (Quarry Pit/Pond), Rock Plant, and Sand Plant.

- Middle Quarry Floor includes the Quarry Truck Shop (Voss Trucking) and the Fueling Area.

- Lower Quarry Floor includes the Quarry Maintenance and Storage area, Recycle Plant, Topsoil Plant, and Garden Waste Recycling Center (operated by the City of Cupertino).

The Facility is further subdivided into seven drainage areas. Each drainage area is described further below. Drainage area acreages can change in response to normal Facility operations (e.g., regrading), so the acreages given are approximate.

- **Drainage Area 1.** Drainage Area 1 is located in the Upper Quarry Floor and consists of 16 acres that include the Rock Plant and Sand Plant areas (see Attachment B, Site Maps, page B-2). The Discharger crushes, screens, and sorts excavated rock and sand at the Rock Plant to produce base rock, road base, fill material, and construction sand. The Discharger also dewaters residual material from rock and sand processing in a filter press to produce a clay cake that it sells as a levee fill product. The Discharger stockpiles unprocessed rock and sand, and finished products, in Drainage Area 1.

  The Discharger uses water from the Quarry Pit/Pond, Former Sediment Pond 4, Sediment Trap 3, and other small ponds to process rock and sand at the Rock Plant and Sand Plant. The Discharger also uses water from Former Sediment Pond 4 and Sediment Pond 5 for dust control in the Rock Plant and Sand Plant areas.

- **Drainage Area 2.** Drainage Area 2 is about 44 acres, with approximately 18 acres associated with an active industrial area. Drainage Area 2 receives runoff from the Middle Quarry Floor, which includes the Quarry Truck Shop, Fueling Area, and fuel storage tanks (i.e., Voss Trucking) (see Attachment B, page B-3). Drainage Area 2 also receives runoff from broken concrete and asphalt stockpiled for the Recycle Plant (see Drainage Area 3, below). Drainage Area 2 is generally flat with some areas sloped to the southwest. The Discharger cleans vehicle exteriors by high-pressure washing in Drainage Area 2 about twice a month during summer and

once a month during winter. (The Discharger does not degrease or wash vehicle underbodies in this area.) The Discharger minimizes vehicle wash water runoff through best management practices (BMPs), including through infiltration to the ground surface, consistent with the *California Stormwater BMPs Handbook* section NS-8 and Fact Sheet SC-21 (California Stormwater Quality Association, January 2003).

- **Drainage Area 3.** Drainage Area 3 is located in the Lower Quarry and is about 9.1 acres; it includes office buildings, a scale house and scale, the Recycle Plant, and the Quarry Maintenance/Storage building (see Attachment B, page B-3). The Drainage Area slopes southwest toward Swiss Creek. The Discharger crushes and screens broken concrete and asphalt at the Recycle Plant to produce road base, drain rock, and manufactured sand. The Discharger also stockpiles broken concrete and asphalt, and finished recycled products, for loading into customer's trucks.

  The Discharger uses water from the Quarry Pit/Pond, Sediment Pond 5, and Former Sediment Pond 4 to process recycled concrete and asphalt, and for dust control. The Discharger applies dust control water via water trucks such that it is absorbed and does not generate surface runoff.

- **Drainage Area 4.** Drainage Area 4 is about 10 acres and includes the Topsoil Plant, the City of Cupertino Garden Waste Recycle Center, and the eastern portion of the Lower Quarry Floor (see Attachment B, page B-3). The Discharger processes soil from an adjacent hillslope, primarily comprised of non-native material excavated during construction of California State Route 85 in the 1960s and 1970s, at the Topsoil Plant. The City of Cupertino stores and distributes compost at the Garden Waste Recycle Center during the dry season, typically from March 20 to October 15. The Garden Waste Recycle Center is closed during the rainy season. The Garden Waste Recycle Center includes a small office trailer, a shed, and one three-sided concrete bunker. The shed and bunker are used to store compost imported by the City of Cupertino until sold and loaded into vehicles.

  The Discharger uses water from the Quarry Pit/Pond, and sediment ponds and traps, at the Topsoil Plant for dust control and to moisten final product. The Discharger applies water such that it is absorbed by the product and does not generate runoff.

- **Drainage Area 5.** Drainage Area 5 is about 21 acres and is primarily comprised of vegetated slopes (see Attachment B, page B-2). Currently, the Discharger does not mine or conduct other industrial activities in Drainage Area 5.

- **Drainage Area 6.** Drainage Area 6 is about 4.6 acres and includes the roads of the Upper Quarry Floor and to and from a small portion of the Sand Plant (see Attachment B, page B-2). The roads are unpaved, and the Discharger applies water from Sediment Pond 5 and Former Sediment Pond 4 via water truck for dust control.

- **Drainage Area 7.** Drainage Area 7 is about 78 acres and includes access roads, excavated hillsides, a radio tower, the Quarry Pit/Pond, and a vegetated area west of the actively excavated areas (see Attachment B, page B-2). The excavated areas are steeply sloped toward the Quarry Pit/Pond, although slopes change frequently depending on the Discharger's operations. The Facility retains stormwater runoff from Drainage Area 7 in the approximately 300-acre-foot (98 million-gallon [MG]) Quarry Pit/Pond. The Quarry Pit/Pond has no outlet to any surface water. Water in the Quarry Pit/Pond is used for dust control in Drainage Area 7.

Most runoff from Drainage Area 7 sheet-flows directly to the Quarry Pit/Pond, as does flow from two springs southwest of the Quarry Pit/Pond. Runoff from quarry access roads, the Radio Tower, and north hillside access roads either flows to a drainage ditch and then to the Quarry Pit/Pond or flows through drop inlets and culverts to Sediment Trap 4. Sediment Trap 4 flows to a culvert, which flows to an open area north of the Quarry Pit/Pond; water then flows down excavated slopes to the Quarry Pit/Pond.

The Discharger manages process wastewater and industrial stormwater from the Drainage Areas with a system of berms, ditches, culverts, pipes, swales, and sediment traps and ponds. The Discharger typically retains process wastewater in sediment traps and ponds, the Quarry Pit/Pond, and storage tanks for reuse; but discharges it, commingled with stormwater, during periods of heavy rain when the Facility ponds overflow.

A. Discharge Points and Receiving Waters

The Facility discharges commingled stormwater and process wastewater, and industrial stormwater, to two freshwater streams: Rattlesnake Creek and Swiss Creek. The Facility discharges at six shallow outfalls, corresponding to Drainage Areas 1 through 6 (see Table F-2, below):

Table F-2. Discharge Point Locations and Drainage Areas

Discharge Point	Latitude (North)	Longitude (West)	Drainage Area	Quarry Floor	Receiving Water
001 (formerly OF-1)	37.30094°	-122.08442°	Drainage Area 1	Upper	Rattlesnake Creek
002 (formerly OF-2)	37.29625°	-122.09219°	Drainage Area 2	Middle/Lower	Swiss Creek
003 (formerly OF-3)	37.29614°	-122.08525°	Drainage Area 3	Lower	Swiss Creek
004 (formerly OF-4)	37.29578°	-122.08517°	Drainage Area 4	Lower	Swiss Creek
005 (formerly OF-5)	37.30094°	-122.09461°	Drainage Area 5	Upper	Rattlesnake Creek
006 (formerly OF-6)	37.30067°	-122.09042°	Drainage Area 6	Upper	Rattlesnake Creek
N/A	N/A	N/A	Drainage Area 7	Upper	Quarry Pit/Pond [1]

Footnote:

[1] The Quarry Pit/Pond is not a water of the State or United States. Water in the Quarry Pit/Pond is used onsite.

B. Existing Wastewater and Stormwater Treatment and Controls

1. Discharge Point 001

The Facility discharges commingled stormwater runoff and process wastewater from Drainage Area 1 to Rattlesnake Creek at Discharge Point 001, located near an in-stream pond (Former Sediment Pond 1, see Attachment B, pages B-2 and B-3). During dry weather, the Discharger sends process wastewater to Sediment Pond 5 through drainage ditches, a concrete swale, and culverts, then pumps it to the Quarry Pit/Pond (see Attachment C). During significant rain, Sediment Pond 5 may overflow through a riser pipe and culvert to Discharge Point 001.

Sediment Pond 5 has a capacity of about 1.9 MG and a floating 300-gallon-per-minute (gpm) pump to transfer water to the Quarry Pit/Pond prior to discharge at Discharge Point 001. The pump allows the Discharger to reduce stormwater discharge at Discharge Point 001 and manage the water level in Sediment Pond 5 between storms. The Discharger did not discharge at Discharge Point 001 during water years 2018-2019 and 2019-2020.

2. Discharge Point 002

The Facility discharges commingled industrial stormwater and materials stockpile runoff from Drainage Area 2 to Swiss Creek at Discharge Point 002 (see Attachment B, page B-3). During dry weather, the Discharger pumps water from Sediment Trap 1, which has a capacity of about 170,000 gallons, to storage tanks for dust control. During rain, the Discharger conveys stormwater through drainage ditches, concrete swales, and culverts, and by sheet flow to Sediment Trap 1 or to an 11,000-gallon metal stormwater storage tank that discharges to Sediment Trap 1 when full (see Attachment C). The Discharger conveys stormwater runoff from the Quarry Truck Shop area to Sediment Trap 1 by way of a concrete-lined swale and a culvert. Sediment Trap 1 overflows through a culvert to Discharge Point 002 (see Attachment B, page B-3).

3. Discharge Point 003

The Facility discharges commingled stormwater runoff and process wastewater from Drainage Area 3 to Swiss Creek at Discharge Point 003 (see Attachment B, page B-3). During dry weather, the Discharger directs process wastewater to Sediment Trap 2 via concrete swales, a drainage ditch, and culverts, then pumps it either to storage tanks for dust control or to the Quarry Pit/Pond. Sediment Trap 2 has a capacity of about 15,000 gallons. During significant rain, Sediment Trap 2 overflows through a culvert to Discharge Point 003 (see Attachment C).

The Discharger reduces potential pollutants from discharges from Drainage Area 3 by removing metal, such as reinforcing bars, from broken concrete, and segregating it from stormwater in a trailer. The trailer is emptied about twice per week when the Recycle Plant is operating (typically Monday through Friday, depending on demand). The Discharger also monitors incoming broken concrete and asphalt to ensure that hazardous wastes are not accepted.

4. Discharge Point 004

The Facility discharges commingled stormwater runoff and process wastewater from Drainage Area 4 to Swiss Creek at Discharge Point 004 (see Attachment B, page B-3). During dry weather, the Discharger transfers process water from Sediment Trap 3, which has a capacity of about 71,000 gallons, to storage tanks for dust control. During rain, runoff from the Garden Waste Recycle Center and most of the Topsoil Plant flows to Sediment Pond 7, which was installed in September 2019 and has a capacity of about 85,000 gallons. Sediment Pond 7 overflows to Sediment Trap 3. Sediment Trap 3 also collects runoff from the remainder of Discharge Area 4 with a system of drainage ditches, swales, French drains, culverts, drop inlets, an underground storage tank, and a concrete drainage box with check dams. Sediment Trap 3 overflows through a culvert to Discharge Point 004 (see Attachment C).

Between rain events, the Discharger transfers water collected in Sediment Trap 3 to the Sand Plant or Quarry Pit/Pond, or to storage tanks for dust control. Sediment Trap 3 has never discharged absent a rain event.

5. Discharge Point 005

The Facility discharges stormwater runoff from Drainage Area 5, including some runoff flowing to the Drainage Area from offsite, to Rattlesnake Creek at Discharge Point 005 (see Attachment B, pages B-2 and B-3). In 2018, the Discharger regraded small portions of Discharge Area 5 to direct some runoff to the Quarry Pit/Pond.

6. Discharge Point 006

The Facility discharges industrial stormwater runoff from Drainage Area 6 to Rattlesnake Creek at Discharge Point 006. Runoff, including from a small portion of the Sand Plant, commingled with process water, flows via drainage ditches, swales, drop inlets, and culverts to Sediment Trap 6. Overflow from Sediment Trap 6 is then discharged through Discharge Point 006 (at in-stream Former Sediment Pond 2) (see Attachment B, pages B-2 and B-3).

C. Future Wastewater Treatment and Controls

The Discharger plans to install additional sediment ponds in Drainage Areas 2 and 3, and a French drain in Drainage Area 3. The Discharger is also planning a pilot study of advanced controls.

1. **Drainage Area 2 Sediment Pond.** The Discharger plans to install a 1.4 MG (4.4 acre-foot) sediment pond in Drainage Area 2 northeast of Sediment Pond 4. This basin will detain stormwater runoff from portions of the Upper and Middle Quarry Floors (see Attachment B, page B-3). Based on a design report by Bay Area Geotechnical Group (BAGG), this sediment basin would have sufficient capacity to treat runoff from about 50 acres, including Drainage Areas 1 and 6, and a portion of the upgradient haul road and non-industrial vegetated slopes in Drainage Area 2, produced by an 85th percentile 24-hour storm.

2. **Drainage Area 3 Sediment Pond.** The Discharger plans to install a new, approximately 80,000 gallon (0.25 acre-feet) sediment pond south (i.e., downgradient of) the recycled concrete stockpiles and upstream of Sediment Trap 2. This sediment pond would add sufficient capacity to Sediment Trap 2 to treat the runoff from most of the Recycle Plant and its stockpiles that would be produced by an 85th percentile 24-hour storm.

3. **Drainage Area 3 French Drain.** The Discharger plans to install a French drain and complete additional drainage infrastructure improvements in Drainage Area 3. The French drain would divert flows from the concrete and asphalt stockpile locations, and direct them to the new Drainage Area 3 sediment pond (discussed above), thus reducing sheet flow through the Recycle Plant. The Discharger also plans to regrade the Recycle Plant to direct stormwater runoff away from concrete and asphalt recycling operations.

4. **Pilot Study of Advanced Controls.** The Discharger plans pilot studies of two advanced treatment systems: a 300-gallon-per-minute (gpm) passive filtration system with a polishing step, and a 500-gpm sand filtration, carbon filtration, and ion exchange system. The pilot studies will evaluate the two systems as treatment options for runoff from an approximately

20-acre area comprised of Drainage Areas 3 and 4 (see Attachment B, Figure 3c). The pilot tests will include a siting analysis for the full-scale systems.

D. Summary of Existing Requirements and Monitoring Data

The table below presents the previous order's Numeric Action Levels (NALs) and representative monitoring data from the previous order term. NALs are pollutant concentration levels used to evaluate the effectiveness of stormwater BMPs. NALs are not effluent limitations, and exceedances alone are not necessarily violations; however, exceedances do trigger requirements to improve BMPs.

There were no discharges from Discharge Point 001 over the period evaluated for this Order. The table below includes data for parameters that had NALs under the previous order, were monitored under the Regional Water Board's November 8, 2018, order pursuant to California Water Code section 13267, or have technology-based or water quality-based effluent limits in this Order.

Table F-3. Historic NALs and Monitoring Data

Parameter	Units	Annual Average NAL	Instantaneous Minimum NAL	Instantaneous Maximum NAL	Highest Daily Discharge (12/18–01/20)
Discharge Point 001					
Oil and Grease	mg/L	15	—	25	NA
pH	s.u.	—	6.0	9.0	NA
Total Suspended Solids (TSS)	mg/L	100	—	400	NA
Arsenic	µg/L	—	—	—	NA
Chromium (III)	µg/L	—	—	—	NA
Chromium (VI)	µg/L	—	—	—	NA
Copper	µg/L	—	—	—	NA
Lead	µg/L	—	—	—	NA
Mercury	µg/L	—	—	—	NA
Nickel	µg/L	—	—	—	NA
Selenium	µg/L	—	—	—	NA
Zinc	µg/L	—	—	—	NA
Cyanide	µg/L	—	—	—	NA
Iron	mg/L	1.0	—	—	NA
Nitrate and Nitrite Nitrogen (NO_3 + NO_2 [as N])	mg/L	0.68	—	—	NA
Chronic Toxicity	TUc	—	—	—	NA
Discharge Point 002					
Oil and Grease	mg/L	15	—	25	4.9
pH	s.u.	—	6.0	9.0	7.2 – 9.0
TSS	mg/L	100	—	400	350
Arsenic	µg/L	—	—	—	3.4
Chromium (III)	µg/L	—	—	—	75
Chromium (VI)	µg/L	—	—	—	5.6
Copper	µg/L	—	—	—	25
Lead	µg/L	—	—	—	4.2
Mercury	µg/L	—	—	—	0.046

Parameter	Units	Annual Average NAL	Instantaneous Minimum NAL	Instantaneous Maximum NAL	Highest Daily Discharge (12/18–01/20)
Nickel	µg/L	—	—	—	62
Selenium	µg/L	—	—	—	3.2
Zinc	µg/L	—	—	—	49
Cyanide	µg/L	—	—	—	—
Chronic Toxicity	TUc	—	—	—	NS
$NO_3 + NO_2$ (as N)	mg/L	0.68	—	—	8.0
Iron	mg/L	1.0	—	—	38
Discharge Point 003					
Oil and Grease	mg/L	15	—	25	8.9
pH	s.u.	—	6.0	9.0	7.8 – 10
TSS	mg/L	100	—	400	594
Arsenic	µg/L	—	—	—	6.7
Chromium (III)	µg/L	—	—	—	244
Chromium (VI)	µg/L	—	—	—	94
Copper	µg/L	—	—	—	80
Lead	µg/L	—	—	—	29
Mercury	µg/L	—	—	—	0.18
Nickel	µg/L	—	—	—	182
Selenium	µg/L	—	—	—	6.8
Zinc	µg/L	—	—	—	176
Cyanide	µg/L	—	—	—	19
Chronic Toxicity	TUc	—	—	—	Yes [1]
$NO_3 + NO_2$ (as N)	mg/L	0.68	—	—	19
Iron	mg/L	1.0	—	—	65
Discharge Point 004					
Oil and Grease	mg/L	15	—	25	6.4
pH	s.u.	—	6.0	9.0	7.0 – 9.3
TSS	mg/L	100	—	400	1,200
Arsenic	µg/L	—	—	—	11
Chromium	µg/L	—	—	—	232
Chromium (VI)	µg/L	—	—	—	45
Copper	µg/L	—	—	—	102
Lead	µg/L	—	—	—	28
Mercury	µg/L	—	—	—	0.44
Nickel	µg/L	—	—	—	215
Selenium	µg/L	—	—	—	6.9
Zinc	µg/L	—	—	—	185
Cyanide	µg/L	—	—	—	4.3
Chronic Toxicity	TUc	—	—	—	Yes [2]
$NO_3 + NO_2$ (as N)	mg/L	0.68	—	—	15
Iron	mg/L	1.0	—	—	93
Discharge Point 005					
Oil and Grease	mg/L	15	—	25	4.0
pH	s.u.	—	6.0	9.0	8.2 – 8.6
TSS	mg/L	100	—	400	72

Parameter	Units	Annual Average NAL	Instantaneous Minimum NAL	Instantaneous Maximum NAL	Highest Daily Discharge (12/18–01/20)
Arsenic	µg/L	—	—	—	2.2
Chromium	µg/L	—	—	—	23
Chromium (VI)	µg/L	—	—	—	1.4
Copper	µg/L	—	—	—	13
Lead	µg/L	—	—	—	0.87
Mercury	µg/L	—	—	—	ND < 0.030
Nickel	µg/L	—	—	—	17
Selenium	µg/L	—	—	—	1.8
Zinc	µg/L	—	—	—	17
Cyanide	µg/L	—	—	—	—
Chronic Toxicity	TUc	—	—	—	NS
$NO_3 + NO_2$ (as N)	mg/L	0.68	—	—	1.7
Iron	mg/L	1.0	—	—	9.1
Discharge Point 006					
Oil and Grease	mg/L	15	—	25	4.6
pH	s.u.	—	6.0	9.0	7.4 – 8.9
TSS	mg/L	100	—	400	11,900
Arsenic	µg/L	—	—	—	60
Chromium	µg/L	—	—	—	3,500
Chromium (VI)	µg/L	—	—	—	11
Copper	µg/L	—	—	—	895
Lead	µg/L	—	—	—	118
Mercury	µg/L	—	—	—	0.46
Nickel	µg/L	—	—	—	4,580
Selenium	µg/L	—	—	—	37
Zinc	µg/L	—	—	—	2,010
Cyanide	µg/L	—	—	—	—
Chronic Toxicity	TUc	—	—	—	NS
$NO_3 + NO_2$ (as N)	mg/L	0.68	—	—	3.3
Iron	mg/L	1.0	—	—	508

Unit Abbreviations:

TUc = chronic toxicity units
mg/L = milligrams per liter
µg/L = micrograms per liter
mL/L-hr = milliliters per liter–hour
NTU = nephelometric turbidity units
ND = not detected
NA = not applicable (e.g., no discharge)
NS = not sampled
% Survival = percent survival
s.u. = standard units

Footnotes:

[1] Statistically significant effects at 95% confidence ($p < 0.050$) (sample adjusted to pH 7):
Water flea (*Ceriodaphnia dubia*)
Reproduction: 5.9 neonates/female vs. control of 40.1 neonates/female
Fathead minnow (*Pimephales Promelas*)
Mean biomass: 0.66 mg vs. control of 1.05 mg.

[2] Statistically significant effects at 95% confidence ($p < 0.050$):
Fathead minnow (*Pimephales Promelas*)
Mean biomass: 0.77 mg vs. control of 0.93 mg

E. Compliance Summary

From 1992 to the adoption of this Order, the Regional Water Board regulated the Facility's discharges under the previous order, namely the Industrial General Permit. Based on the results of Facility inspections and effluent monitoring from 2016 through 2019, the Regional Water Board determined that the previous order was not effectively protecting the receiving waters with respect to the discharges covered by this Order. Regional Water Board inspections found violations of the previous order's Best Management Practices (BMPs) requirements and required the Discharger to correct them; however, despite improved BMPs, monitoring data showed the Facility's discharges continued to exceed the previous order's NALs and some applicable water quality standards. (The NALs are described in Fact Sheet section II.E.2, below).

1. **Inspections.** The previous order required the Discharger to implement stormwater BMPs "to reduce or prevent discharges of pollutants in stormwater in a manner that reflects best industry practice considering technological availability and economic practicability and achievability." Water Board staff consistently observed inadequate BMPs during Facility inspections during the 2016-17, 2017-18, and 2018-19 wet seasons.

   a. **2016-17 Inspection.** The Regional Water Board inspected the Facility on November 4, 2016. The inspectors noted that the Discharger was using Rattlesnake Creek adjacent to the Facility as a series of sedimentation basins to treat stormwater. This practice apparently predated the Clean Water Act. The inspectors also found that, as part of that treatment, the Discharger was discharging flocculant chemicals to Rattlesnake Creek (i.e., to a water of the State and United States). In addition, the inspectors found that the Discharger had not implemented sufficient erosion and sediment control BMPs, nor adequately maintained those it had implemented. On May 30, 2017, the Regional Water Board issued a *Notice of Violation (NOV) and Requirement for Technical Report* (May 2017 NOV), requiring the Facility to correct those violations and submit technical reports. The technical reports were to include the following:

      - jurisdictional delineation of all waters of the State and United States on the Stevens Creek Quarry property (to confirm that Rattlesnake Creek was a water of the State and United States);
      - report documenting all corrective actions the Discharger took to correct the violations identified in the inspection;
      - analysis of the Facility's potential sources of pollution, and the processes resulting in pollutant generation and discharge;
      - list of all businesses operating at the Facility;
      - updated Stormwater Pollution Prevention Plan (SWPPP) for the Facility; and
      - comprehensive plan to remove pollutants from stormwater using measures located outside of waters of the State and United States (i.e., without using Rattlesnake Creek as a series of sedimentation basins).

b. 2017-2018 Inspection. The Regional Water Board inspected the Facility on September 8, 2017. The inspectors found that the Discharger had not corrected all the violations documented in the May 2017 NOV. Furthermore, the Discharger had not submitted all the reports required by the May 2017 NOV. On December 12, 2017, the Regional Water Board issued a letter documenting the Facility's failure to meet the requirements of the May 2017 NOV and listing past due reports. On April 2, 2018, the Regional Water Board issued an *NOV and Requirement for Technical Report* that documented the Discharger's continued need to implement and improve erosion and sediment control BMPs. It also required the Discharger to correct the remaining violations from the May 2017 NOV and submit a plan to stabilize Facility earthwork around the road along Rattlesnake Creek.

c. 2018-2019 Inspection. On November 8, 2018, the Regional Water Board issued a *Technical Report Requirement* that required the Discharger to collect and report additional monitoring information during the 2018-19 wet season. The Regional Water Board required the additional information to evaluate potential impacts to Rattlesnake Creek, Swiss Creek, and downstream waters, and to determine how best to regulate the Facility. The Discharger submitted the additional monitoring information on May 15, 2019.

The Regional Water Board inspected the Facility on December 7, 2018, and observed inadequate housekeeping, material handling and waste management, and erosion and sediment control BMPs. On March 15, 2019, the Regional Water Board issued an *Inspection Report and NOV* that documented the violations observed during that inspection and required the Discharger to correct them. The March 15, 2019, NOV also clarified the May 2017 NOV's unfulfilled requirement to submit a comprehensive plan for removing total suspended solids (TSS) and related pollutants using measures located outside of waters of the State and United States (i.e., without using Rattlesnake Creek as a series of sedimentation basins).

d. 2019-20 Inspection. On October 11, 2019, the Regional Water Board issued an *NOV and Requirement to Submit a Report of Waste Discharge* that compiled the ongoing violations, reported the status of the Discharger's submittals, and required the Discharger to apply for an individual NPDES permit. The Discharger submitted an NPDES permit application on January 15, 2020 (see Fact Sheet section I.B).

The Regional Water Board inspected the Facility again on January 29, 2020, and again observed inadequate housekeeping, material handling and waste management, and erosion and sediment control BMPs. On February 21, 2020, the Regional Water Board issued an inspection report (*Inspection and Required Corrective Actions*) that documented the violations, required the Discharger to complete certain corrective actions, and submit proof to the Regional Water Board.

2. NAL Exceedances. The previous order required the Discharger to evaluate its pollutant sources and BMPs when its discharge exceeded an NAL, and take corrective action to bring pollutant concentrations below the NALs. The previous order also required the Discharger to report its corrective actions, including any SWPPP revisions and any additional BMPs it implemented or improved.

The Facility was subject to the NALs for oil and grease, pH, TSS, iron, and nitrate and nitrite (as N) shown in Table F-3. The Discharger exceeded the instantaneous maximum NALs for pH and TSS as shown in that table. The Facility also exceeded the annual average NALs for TSS, iron, and nitrate and nitrite (as N) as follows:

Table F-4. Annual Average NAL Exceedances, Rain Years 2017-18 through 2019-20

Parameter	Annual Average NAL, mg/L	Reporting Year (i.e., Rain Year)	Facility Annual Average, mg/L
Iron	1.0	2017-18	11
		2018-19	53
		2019-20	12
$NO_3 + NO_2$ (as N)	0.68	2017-18	2.1
		2018-19	5.2
		2019-20	3.1
TSS	100	2017-18	118
		2018-19	809
		2019-20	106

3. **Corrective Actions.** The Discharger changed its operations and improved its BMPs in response to Regional Water Board inspections, as discussed in the following paragraphs in this section. However, the improved BMPs did not reduce iron, nitrate and nitrite (as N), or TSS concentrations to below the NALs. Continuing NAL exceedances indicate that BMPs are insufficient to address the pollutant concentrations in Facility discharges. This Order is prepared to ensure that Facility discharges are sufficiently controlled to maintain water quality standards in the receiving waters.

   In 2017, the Discharger stopped using flocculant chemicals in response to the May 2017 NOV. It also added coconut jute netting to slopes above drainage inlets and increased the capacity of Sediment Pond 5 to its current 1.9 MG (see Fact Sheet § II.B.1).

   In 2018, the Discharger installed the floating 300 gpm pump in Sediment Pond 5, which has helped prevent discharges at Discharge Point 001 (see Fact Sheet § II.B.1). The Discharger also installed large-diameter straw wattles around all stockpile locations on the Lower Quarry Floor, and special tarp-securing devices to allow stockpiles to be covered with extra-large tarps during rain events. In addition, the Discharger contracted with BAGG to design the sediment pond planned for Drainage Area 2 (see Fact Sheet § II.C.1).

   In 2019, the Discharger purchased a vacuum truck to enhance sediment removal from drop inlets and other underground drainage infrastructure. The Discharger increased the frequency of street sweeping to prevent build-up of solids that would be entrained by stormwater runoff and reduced the speed of street sweeping vehicles to reduce the potential for tracking sediment around and off the Facility. The Discharger constructed Sediment Pond 7 in Drainage Area 4 and re-graded the surrounding area to contain stormwater runoff (see Fact Sheet § II.B.4).

   In 2020, the Discharger installed a new roof in the maintenance and storage area of Drainage Area 2 to prevent rain and subsequent runoff from contacting stored metal equipment and parts. The Discharger regraded Drainage Area 1, reducing its size by approximately 5 acres, which further reduced the potential for discharge from Discharge Point 001. The Discharger

installed Sediment Trap 6 directly upstream of Discharge Point 006 (see Fact Sheet § II.B.4); Sediment Trap 6 is expected to significantly reduce discharge from Discharge Point 006.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

A. Legal Authorities. This Order serves as WDRs pursuant to Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to 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). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge locations described in Table 2 subject to the WDRs in this Order.

B. 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 (CEQA), Public Resources Code division 13, chapter 3 (commencing with § 21100).

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plan.** The San Francisco Bay Regional Water Board (Regional Water Board) adopted *The Water Quality Control Plan for the San Francisco Bay Basin* (hereinafter Basin Plan) that 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, State Water Board Resolution 88-63 established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Neither Swiss Creek nor Rattlesnake Creek meet any of the exceptions under State Water Board Resolution 88-63. Therefore, the municipal or domestic supply beneficial use applies. Beneficial uses applicable to Swiss Creek and Rattlesnake Creek are as follows:

Table F-5. Beneficial Uses

Discharge Points	Receiving Water	Beneficial Uses
001 002 003 004 005 006	Swiss Creek and Rattlesnake Creek (tributary to Swiss Creek)	Cold freshwater habitat (COLD) Freshwater replenishment (FRSH) Municipal and domestic water supply (MUN) Contact water recreation (REC-1) Non-contact water recreation (REC-2) Warm freshwater habitat (WARM) Wildlife habitat (WILD)

Swiss Creek is tributary to Stevens Creek Reservoir, which flows to Stevens Creek. In addition to the beneficial uses listed above (except FRSH), the commercial and sport fishing (COMM), groundwater recharge (GWR), fish migration (MIGR), and fish spawning (SPWN) beneficial uses apply to Stevens Creek Reservoir. The GWR, MIGR, preservation of rare and endangered species (RARE), and SPWN beneficial uses apply to Stevens Creek. While these beneficial uses do not apply directly to Swiss or Rattlesnake creeks, they could potentially be impacted by upstream discharges, including those authorized by this Order.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About

40 criteria in the NTR apply in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and incorporated the previously adopted NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001. These rules contain water quality criteria for priority pollutants.

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 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 in 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. The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

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. Section III.D.3 of The Mercury Provisions supersedes Basin Plan Table 3-4's freshwater mercury water quality objectives. Requirements of this Order implement the Mercury Provisions.

5. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 requires 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, which is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 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. (See Fact Sheet § IV.D.2 Antidegradation.)

6. **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. (See Fact Sheet § IV.D.1 Anti-Backsliding.)

7. **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 complies with that policy by requiring discharges to meet maximum contaminant levels (MCLs) designed to protect human health and ensure that water is safe for domestic use.

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 the 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 beneficial uses, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

D. Impaired Waters on CWA 303(d) List. On April 6, 2018, U.S. EPA approved a revised list of impaired waters prepared 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 necessary, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for waters on the 303(d) list to establish wasteload allocations for point sources and load allocations for nonpoint sources and thus achieve the water quality standards. Neither Rattlesnake Creek nor Swiss Creek are 303(d) listed for any pollutants.

Stevens Creek Reservoir, just downstream of the Facility's discharges, is 303(d) listed for Chlordane, Dieldrin, mercury, and PCBs. Stevens Creek, downstream of Stevens Creek Reservoir, is 303(d) listed for toxicity, Diazinon, trash, and water temperature. Available data suggests the Facility's discharges are not a source of pesticides, pesticide-related toxicity, PCBs, trash, or high temperature to receiving waters. There is no reasonable potential for the short-term, intermittent discharges authorized through this Order to exceed mercury water quality objectives, or thereby to contribute to mercury impairment.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The Clean Water Act 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.

A. Discharge Prohibitions

1. Prohibitions in this Order

a. Discharge Prohibition III.A (No discharge other than as described in this Order): This prohibition is based on 40 C.F.R. section 122.21(a), duty to apply, and Water Code section 13260, which requires filing an application and Report of Waste Discharge before discharges can occur. Discharges not described in the permit application and Report of Waste Discharge, and subsequently in this Order, are prohibited.

b. Discharge Prohibition III.B (No discharge other than that caused by precipitation): This prohibition minimizes discharges to Rattlesnake and Swiss creeks by restricting

discharges to when flows due to ongoing or recent precipitation cause discharge through the discharge points authorized by this Order (see Table 2). This prohibition is based on 40 C.F.R. sections 122.41(d) and (e), which, respectively, require the Discharger to take all reasonable steps to minimize or prevent discharge in violation of this permit and to properly operate and maintain its facilities at all times. It is reasonable to require the Discharger to do so, and it is within the Discharger's means to comply if it properly operates and maintains its facilities.

The Discharger's permit application indicates that the Facility contains process water on site during dry weather but cannot contain commingled process and stormwater during wet weather. Commingled process and stormwater are discharged when they overflow from sediment ponds and traps via standpipes and culverts through Discharge Points 001, 002, 003, 004, and 006, as described in Fact Sheet sections II.B.1 through II.B.6. The Discharger's permit application indicates that Discharge Point 005 discharges only stormwater runoff.

2. Exception to Shallow Water Discharge Prohibition

Basin Plan Table 4-1, Discharge Prohibition 1, prohibits discharges not receiving a minimum of 10:1 initial dilution. Basin Plan section 4.2 provides for exceptions under certain 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:

> It should be noted that the Regional Water Board will consider all discharges of treated sewage and other discharges where the treatment process is subject to upset to contain particular characteristics of concern unless the discharger can demonstrate that the discharge of inadequately treated waste will be reliably prevented.

This Order grants an exception to Basin Plan Discharge Prohibition 1 for discharges to Rattlesnake and Swiss creeks because Basin Plan Discharge Prohibition 1 does not apply to discharges from the Facility. The 10:1 dilution requirement was intended to provide a buffer against the effects of abnormal discharges of wastewater with "particular characteristics of concern" caused by temporary treatment plant upsets or malfunctions. However, discharges from the Facility are not subject to upset.

B. Technology-Based Effluent Limitations

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 discharges this Order authorizes must meet minimum federal technology-based requirements based on U.S. EPA-promulgated Effluent Limitations Guidelines for the Mining Point Source Category at 40 C.F.R. section 436. Regulations at 40 C.F.R. section 436 subparts B (Crushed Stone Subcategory) and C (Construction Sand and Gravel Subcategory) apply because these discharges contain wastewater associated with mining and processing crushed stone and sand. Discharges from Discharge Points 001, 002, 003, 004, and 006 are subject to these Effluent Limit Guidelines, which require that pH be maintained between 6.0 and 9.0. Basin Plan Table 4-2 contains additional requirements for pH, settleable matter, and oil and grease. Basin Plan Table 4-2 also contains requirements for biochemical oxygen demand and TSS that this Order does not implement because they apply to discharges from sewage treatment facilities. The MRP requires TSS monitoring so that appropriate technology-based limits may be developed for a future permit reissuance.

2. Effluent Limitations

a. Discharge Points 001, 002, 003, 004, and 006

i. Oil and Grease. The oil and grease effluent limitations are based on Basin Plan Table 4-2.

ii. pH. The pH effluent limitations are based on Basin Plan Table 4-2, which is more stringent than the ELGs.

iii. Settleable Matter. The settleable matter effluent limitations are based on Basin Plan Table 4-2 (footnote "e") for discharges from sedimentation basins and similar cases.

b. Discharge Point 005

Discharges from Discharge Point 005 are not subject to the ELGs discussed above because Drainage Area 5 is not used for active mining or materials storage. Stormwater discharged at Discharge Point 005 is not commingled with process water, runoff from process areas, or runoff from storage areas for materials (raw, intermediate, ancillary, or waste) or finished product. Discharges from Discharge Point 005 are subject to the provisions of Attachment S, which constitute narrative technology-based effluent limits that are at least as stringent as those in the previous order. Consistent with the previous order, those requirements reflect the best available technology economically achievable and best conventional pollutant control technology as CWA section 301(b) requires.

C. Water Quality-Based Effluent Limitations

1. Scope and Authority

This Order contains water quality-based effluent limitations (WQBELs) that protect beneficial uses. CWA section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than federal technology-based requirements where necessary to achieve applicable 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, 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 (40 C.F.R. § 122.44[d][1][vi]). The process for determining reasonable potential and calculating WQBELs is intended to achieve applicable water quality objectives and criteria and protect designated uses of receiving waters as specified in the Basin Plan.

2. Beneficial Uses and Water Quality Criteria and Objectives

Discharge Points 001, 005, and 006 discharge to Rattlesnake Creek; Discharge Points 002, 003, and 004 discharge to Swiss Creek. Fact Sheet section III.C.1, above, identifies the beneficial uses of Rattlesnake and Swiss creeks. Water quality criteria and objectives to protect these beneficial uses are described below:

a. Basin Plan Objectives. The Basin Plan specifies numerous water quality objectives, such as numeric objectives for 10 priority pollutants, narrative objectives for toxicity, and both numeric and narrative objectives for temperature. Because Rattlesnake Creek and Swiss Creek have the MUN beneficial use (see Fact Sheet § III.C.1), Basin Plan section 3.3.22 also specifies drinking water standards (i.e., MCLs) as water quality objectives (see Fact Sheet § IV.C.2.a.iii, below).

i. Toxicity. The narrative toxicity objective (Basin Plan section 3.3.18) states, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms."

ii. Temperature. Rattlesnake Creek and Swiss Creek support warm water and cold water habitat beneficial uses; therefore, the temperature water quality objectives in Basin Plan section 3.3.17 apply:

- The natural receiving water temperature of inland surface waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
- The temperature of any cold or warm freshwater habitat shall not be increased by more than 5 degrees Fahrenheit (2.8 degrees Celsius) above natural receiving water temperature.

iii. Drinking Water MCLs. Basin Plan section 3.3.22 states that surface waters with the MUN beneficial use shall not contain concentrations of constituents in excess of primary or secondary MCLs. (MCLs are divided into primary MCLs for pollutants with a potential human health impact and secondary MCLs for pollutants with a potential aesthetic impact, e.g., on the taste, odor, and appearance of drinking water.) Basin Plan section 3.3.22 incorporates the following MCLs from CCR Title 22 by reference:

- Section 64431, Table 64431-A (Inorganic Chemicals);
- Section 64433.2, Table 64433.2-A (Fluoride);

- Section 64444, Table 64444-A (Organic Chemicals); and
- Section 64449, Tables 64449-A (Secondary MCLs-Consumer Acceptance Limits) and 64449-B (Secondary MCLs-Ranges).

This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.

b. Mercury Provisions Objectives. The Mercury Provisions specify water column translations of the fish tissue objectives for mercury depending on water body type and beneficial uses. Rattlesnake and Swiss creeks are flowing waters that support cold freshwater habitat, warm freshwater habitat, and wildlife habitat beneficial uses. Mercury Provisions section IV.D.2.b, Table 1, establishes an annual average total mercury value of 0.012 µg/L to implement the fish tissue objectives for flowing waters.

c. California Toxics Rule 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." The CTR criteria applicable to "water and organisms" apply to Rattlesnake Creek and Swiss Creek because they are considered potential sources of drinking water, as described in Fact Sheet section III.C.1, above.

d. National Toxics Rule 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. The NTR criteria apply to Rattlesnake Creek and Swiss Creek.

e. Receiving Water Salinity. Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater versus 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 waters with salinities 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 objectives (the latter calculated based on ambient hardness) for each substance.

Rattlesnake and Swiss creeks are inland freshwater streams as confirmed by electrical conductivity data collected at Monitoring Locations RSW-001 and RSW-002 as defined in the Monitoring and Reporting Program (Attachment E, Table E-1). Electrical conductivity data from January through March 2019 were converted to salinity by the following formula:[1]

$$S, ppt = (EC, uS/cm \text{ ^ } 1.0878) * 0.4665$$

[1] Williams, W.D., Conductivity and salinity of Australian salt lakes, *Australian Journal of Marine and Freshwater Research* 37(2) 177-182, 1986.

Where:

S, ppt = salinity in parts per thousand at 25 degrees celsius
EC, uS/cm = electrical conductivity, microsiemens per centimeter

No salinity greater than 1 ppt was detected in any sample. Rattlesnake and Swiss creeks are therefore classified as freshwater, and the reasonable potential analyses and WQBELs are based on freshwater water quality criteria and objectives.

f. Receiving Water Hardness. Ambient hardness data are used to calculate freshwater water quality objectives that are hardness dependent. The water quality objectives for this Order are based on a hardness of 260 mg/L as $CaCO_3$, which is the geometric mean of observed hardness at Monitoring Location RSW-002 as defined in the Monitoring and Reporting Program (Attachment E Table E-1). This Swiss Creek location was the most conservative of the background hardness values for Rattlesnake and Swiss creeks. (The geometric mean of observed hardness at Monitoring Location RSW-001 in Rattlesnake Creek is 270 mg/L as $CaCO_3$.)

3. Need for Water Quality-Based Effluent Limitations (Reasonable Potential Analysis)

Assessing whether a pollutant has reasonable potential to cause or contribute to exceedances of a water quality objective is the fundamental step in determining whether a WQBEL is required. The reasonable potential analyses presented below apply to Discharge Points 001, 002, 003, 004, and 006.

Stormwater discharges from Discharge Point 005 are subject to the narrative technology-based requirements discussed in Fact Sheet section IV.B.2. These are essentially the same requirements as in the previous order. In issuing the previous order, the State Water Board found that discharges in compliance with that order would not result in the lowering of water quality to a level that does not achieve water quality objectives and protect beneficial uses.

a. Methodology. State Implementation Policy section 1.3 sets forth the methodology used for this Order for assessing whether a priority pollutant has reasonable potential to exceed a water quality objective. 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). State Implementation Policy 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:

i. Trigger 1 is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective (MEC $\geq$ water quality objective).

ii. Trigger 2 is activated if the ambient background concentration observed in the receiving water is greater than the water quality objective (B > water quality objective) *and* the pollutant is detected in any effluent sample.

iii. Trigger 3 is activated if a review of other information indicates that a WQBEL is needed to protect beneficial uses.

Discharge Prohibition III.B of this Order prohibits discharge except when caused by increased flow due to ongoing or recent precipitation. Therefore, Facility discharges are expected to be short-term and intermittent, and there is no reasonable potential for these discharges to cause exceedances of water quality criteria and objectives established to prevent impacts over periods greater than a few days. The analysis below therefore does not include human health objectives, including the drinking water standards and mercury, because those criteria and objectives are intended to protect against longer-term impacts. The Regional Water Board may revisit this approach when considering reissuance of this permit, particularly if the frequency or duration of reported discharges is found to be greater than expected.

b. Effluent Data. The reasonable potential analyses for this Order are based on effluent data from Discharge Points 002, 003, 004, and 006 that the Discharger collected from December 2018 through January 2020.

i. Discharge Points 001 and 006. The results of the reasonable potential analysis for Discharge Point 006 are applied to Discharge Point 001. Although there were no discharges from Discharge Point 001 over the period analyzed, the characteristics of Drainage Area 1 are similar to Drainage Area 6.

ii. Discharge Points 002, 003, and 004. The reasonable potential analysis for Discharge Points 002, 003, and 004 uses the combined data from those discharge points. These data are broadly similar. Copper, aluminum, and iron data collected from Discharge Point 004 after Sedimentation Basin 7 was installed (September 2019) show substantially reduced concentrations; however, because no other data have been collected for most pollutants since that time, the reasonable potential analysis uses all data collected at Discharge Point 004. This approach is conservative in that the results do not reflect the improved pollutant removal.

c. Ambient Background Data. This Order's reasonable potential analysis is based on background data collected from January through March 2019 at Monitoring Locations RSW-001 and RSW-002, as applicable, unless no data were available at those locations, in which case Monitoring Location RSW-004, in Stevens Creek Reservoir at the mouth of Swiss Creek, was used.

d. Reasonable Potential Analyses. The maximum effluent concentrations, most stringent applicable water quality criteria and objectives, and ambient background concentrations used in the analyses are presented in the following tables, along with the reasonable potential analysis results (yes or no) for each pollutant.

i. Discharge Points 001 and 006

(a) Pollutants Analyzed by SIP Procedure. The pollutants that exhibit reasonable potential at these discharge points are chromium (III), copper, lead, nickel, selenium, and zinc.

Table F-6. Reasonable Potential Analysis for Discharge Points 001 and 006

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL [1][2] (µg/L)	B or Minimum DL [1][2] (µg/L)	Result [3]
1	Antimony	14	Unavailable	Unavailable	U
2	Arsenic	150	60	2.6	No
3	Beryllium	No Criteria	Unavailable	Unavailable	U
4	Cadmium	2.4	2.1	0.52	No
5a	**Chromium (III)**	**453**	**3,520**	**177**	**Yes**
5b	Chromium (VI)	11	11	—	No
6	**Copper**	**21**	**895**	**102**	**Yes**
7	**Lead**	**11**	**118**	**12**	**Yes**
8	Mercury	—	—	—	[4]
9	**Nickel**	**117**	**4,580**	**202**	**Yes**
10	**Selenium**	**5.0**	**37**	**5.6**	**Yes**
11	Silver	21	Unavailable	Unavailable	U
12	Thallium	1.7	Unavailable	Unavailable	U
13	**Zinc**	**269**	**2,010**	**131**	**Yes**
14	Cyanide	5.2	Unavailable	Unavailable	U
15	Asbestos	7,000,000	Unavailable	Unavailable	U
16	2,3,7,8-TCDD (Dioxin)	1.30E-08	Unavailable	Unavailable	U
17	Acrolein	320	Unavailable	Unavailable	U
18	Acrylonitrile	0.059	Unavailable	Unavailable	U
19	Benzene	1.0	Unavailable	Unavailable	U
20	Bromoform	4.3	Unavailable	Unavailable	U
21	Carbon Tetrachloride	0.25	Unavailable	Unavailable	U
22	Chlorobenzene	70	Unavailable	Unavailable	U
23	Chlorodibromomethane	0.40	Unavailable	Unavailable	U
24	Chloroethane	No Criteria	Unavailable	Unavailable	U
25	2-Chloroethylvinyl Ether	No Criteria	Unavailable	Unavailable	U
26	Chloroform	No Criteria	Unavailable	Unavailable	U
27	Dichlorobromomethane	0.56	Unavailable	Unavailable	U
28	1,1-Dichloroethane	5.0	Unavailable	Unavailable	U
29	1,2-Dichloroethane	0.38	Unavailable	Unavailable	U
30	1,1-Dichloroethylene	0.057	Unavailable	Unavailable	U
31	1,2-Dichloropropane	0.52	Unavailable	Unavailable	U
32	1,3-Dichloropropylene	0.50	Unavailable	Unavailable	U
33	Ethylbenzene	300	Unavailable	Unavailable	U
34	Methyl Bromide	48	Unavailable	Unavailable	U
35	Methyl Chloride	No Criteria	Unavailable	Unavailable	U
36	Methylene Chloride	4.7	Unavailable	Unavailable	U
37	1,1,2,2-Tetrachloroethane	0.17	Unavailable	Unavailable	U
38	Tetrachloroethylene	0.80	Unavailable	Unavailable	U
39	Toluene	150	Unavailable	Unavailable	U
40	1,2-Trans-Dichloroethylene	10	Unavailable	Unavailable	U
41	1,1,1-Trichloroethane	200	Unavailable	Unavailable	U
42	1,1,2-Trichloroethane	0.60	Unavailable	Unavailable	U
43	Trichloroethylene	2.7	Unavailable	Unavailable	U

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL [1][2] (µg/L)	B or Minimum DL [1][2] (µg/L)	Result [3]
44	Vinyl Chloride	0.50	Unavailable	Unavailable	U
45	Chlorophenol	120	Unavailable	Unavailable	U
46	2,4-Dichlorophenol	93	Unavailable	Unavailable	U
47	2,4-Dimethylphenol	540	Unavailable	Unavailable	U
48	2-Methyl-4,6-Dinitrophenol	13	Unavailable	Unavailable	U
49	2,4-Dinitrophenol	70	Unavailable	Unavailable	U
50	2-Nitrophenol	No Criteria	Unavailable	Unavailable	U
51	4-Nitrophenol	No Criteria	Unavailable	Unavailable	U
52	3-Methyl-4-Chlorophenol	No Criteria	Unavailable	Unavailable	U
53	Pentachlorophenol	< 0.28	Unavailable	Unavailable	U
54	Phenol	21,000	Unavailable	Unavailable	U
55	2,4,6-Trichlorophenol	2.1	Unavailable	Unavailable	U
56	Acenaphthene	1,200	Unavailable	Unavailable	U
57	Acenaphthylene	No Criteria	Unavailable	Unavailable	U
58	Anthracene	9,600	Unavailable	Unavailable	U
59	Benzidine	< 0.00012	Unavailable	Unavailable	U
60	Benzo(a)Anthracene	< 0.0044	Unavailable	Unavailable	U
61	Benzo(a)Pyrene	< 0.0044	Unavailable	Unavailable	U
62	Benzo(b)Fluoranthene	< 0.0044	Unavailable	Unavailable	U
63	Benzo(ghi)Perylene	No Criteria	Unavailable	Unavailable	U
64	Benzo(k)Fluoranthene	< 0.0044	Unavailable	Unavailable	U
65	Bis(2-Chloroethoxy)Methane	No Criteria	Unavailable	Unavailable	U
66	Bis(2-Chloroethyl)Ether	< 0.031	Unavailable	Unavailable	U
67	Bis(2-Chloroisopropyl)Ether	1,400	Unavailable	Unavailable	U
68	Bis(2-Ethylhexyl)Phthalate	1.8	Unavailable	Unavailable	U
69	4-Bromophenyl Phenyl Ether	No Criteria	Unavailable	Unavailable	U
70	Butylbenzyl Phthalate	3,000	Unavailable	Unavailable	U
71	2-Chloronaphthalene	1,700	Unavailable	Unavailable	U
72	4-Chlorophenyl Phenyl Ether	No Criteria	Unavailable	Unavailable	U
73	Chrysene	< 0.0044	Unavailable	Unavailable	U
74	Dibenzo(a,h)Anthracene	< 0.0044	Unavailable	Unavailable	U
75	1,2-Dichlorobenzene	600	Unavailable	Unavailable	U
76	1,3-Dichlorobenzene	400	Unavailable	Unavailable	U
77	1,4-Dichlorobenzene	5.0	Unavailable	Unavailable	U
78	3,3-Dichlorobenzidine	< 0.040	Unavailable	Unavailable	U
79	Diethyl Phthalate	23,000	Unavailable	Unavailable	U
80	Dimethyl Phthalate	313,000	Unavailable	Unavailable	U
81	Di-n-Butyl Phthalate	2,700	Unavailable	Unavailable	U
82	2,4-Dinitrotoluene	< 0.11	Unavailable	Unavailable	U
83	2,6-Dinitrotoluene	No Criteria	Unavailable	Unavailable	U
84	Di-n-Octyl Phthalate	No Criteria	Unavailable	Unavailable	U
85	1,2-Diphenylhydrazine	< 0.040	Unavailable	Unavailable	U
86	Fluoranthene	300	Unavailable	Unavailable	U
87	Fluorene	1,300	Unavailable	Unavailable	U
88	Hexachlorobenzene	< 0.00075	Unavailable	Unavailable	U

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL [1][2] (µg/L)	B or Minimum DL [1][2] (µg/L)	Result [3]
89	Hexachlorobutadiene	< 0.44	Unavailable	Unavailable	U
90	Hexachlorocyclopentadiene	50	Unavailable	Unavailable	U
91	Hexachloroethane	1.9	Unavailable	Unavailable	U
92	Indeno(1,2,3-cd) Pyrene	< 0.0044	Unavailable	Unavailable	U
93	Isophorone	8.4	Unavailable	Unavailable	U
94	Naphthalene	No Criteria	Unavailable	Unavailable	U
95	Nitrobenzene	17	Unavailable	Unavailable	U
96	N-Nitrosodimethylamine	< 0.00069	Unavailable	Unavailable	U
97	N-Nitrosodi-n-Propylamine	< 0.0050	Unavailable	Unavailable	U
98	N-Nitrosodiphenylamine	5.0	Unavailable	Unavailable	U
99	Phenanthrene	No Criteria	Unavailable	Unavailable	U
100	Pyrene	960	Unavailable	Unavailable	U
101	1,2,4-Trichlorobenzene	5.0	Unavailable	Unavailable	U
102	Aldrin	< 0.00013	Unavailable	Unavailable	U
103	alpha-BHC	< 0.0039	Unavailable	Unavailable	U
104	beta-BHC	< 0.014	Unavailable	Unavailable	U
105	gamma-BHC	< 0.019	Unavailable	Unavailable	U
106	delta-BHC	No Criteria	Unavailable	Unavailable	U
107	Chlordane	< 0.00057	Unavailable	Unavailable	U
108	4,4-DDT	< 0.00059	Unavailable	Unavailable	U
109	4,4-DDE	< 0.00059	Unavailable	Unavailable	U
110	4,4-DDD	< 0.00083	Unavailable	Unavailable	U
111	Dieldrin	< 0.00014	Unavailable	Unavailable	U
112	alpha-Endosulfan	< 0.056	Unavailable	Unavailable	U
113	beta-Endosulfan	< 0.056	Unavailable	Unavailable	U
114	Endosulfan Sulfate	110	Unavailable	Unavailable	U
115	Endrin	< 0.036	Unavailable	Unavailable	U
116	Endrin Aldehyde	< 0.76	Unavailable	Unavailable	U
117	Heptachlor	< 0.00021	Unavailable	Unavailable	U
118	Heptachlor Epoxide	< 0.00010	Unavailable	Unavailable	U
119-125	PCBs sum	< 0.00017	Unavailable	Unavailable	U
126	Toxaphene	< 0.00020	Unavailable	Unavailable	U

Footnotes:

[1] The maximum effluent concentration 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 (DL).

[2] The maximum effluent concentration 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
= Undetermined (U), if no criteria have been promulgated or data are insufficient.

[4] The Mercury Provisions supersede Basin Plan Table 3-4 (see Fact Sheet § III.C.4). The implementation of the mercury water quality objectives is to be based on annual averages; therefore, there is no reasonable potential for the short-term, intermittent discharges authorized through this Order to exceed the objectives.

(b) 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.

(c) Chronic Toxicity. There is no reasonable potential for the discharge to cause or contribute to exceedances of the chronic toxicity water quality objective because the discharges are episodic and short term.

(d) Temperature. Rattlesnake Creek supports warm and cold water habitat beneficial uses; the Basin Plan temperature objectives therefore apply. Temperature data from background Monitoring Location RSW-001, effluent Monitoring Location EFF-006, and downstream Monitoring Location RSW-003 indicate that Facility discharges do not affect receiving water temperature.

ii. Discharge Points 002, 003, and 004

(a) Pollutants Analyzed by SIP Procedure. The pollutants that exhibit reasonable potential at these discharge points are chromium (VI), copper, lead, nickel, selenium, and cyanide.

Table F-7. Reasonable Potential Analysis: Discharge Points 002, 003, and 004

CTR #	Pollutant	C or Governing Criterion or Objective (mg/L)	MEC or Minimum DL [1][2] (mg/L)	B or Minimum DL [1][2] (mg/L)	Result [3]
1	Antimony	14	0.81	0.22	No
2	Arsenic	150	11	1.7	No
3	Beryllium	No Criteria	0.62	< 0.20	No
4	Cadmium	2.4	0.51	0.72	No
5a	Chromium (III)	453	240	12	No
5b	**Chromium (VI)**	**11**	**94**	**< 40**	**Yes**
6	**Copper**	**21**	**102**	**30**	**Yes**
7	**Lead**	**11**	**29**	**15**	**Yes**
8	Mercury	—	—	—	[4]
9	**Nickel**	**117**	**215**	**20**	**Yes**
10	**Selenium**	**5.0**	**6.9**	**4.1**	**Yes**
11	Silver	21	< 0.20	< 0.20	No
12	Thallium	1.7	< 0.20	< 0.20	No
13	Zinc	269	185	74	No
14	**Cyanide**	**5.2**	**19**	**9.1**	**Yes**
15	Asbestos	7,000,000	840	210	No
16	2,3,7,8-TCDD (Dioxin)	1.30E-08	< 4.8E-09	< 2.3E-09	No
17	Acrolein	320	< 6.1	< 6.1	No
18	Acrylonitrile	0.059	< 2.1	< 2.1	No
19	Benzene	1.0	< 0.31	< 0.31	No
20	Bromoform	4.3	< 0.41	< 0.41	No
21	Carbon Tetrachloride	0.25	< 0.36	< 0.36	No
22	Chlorobenzene	70	< 0.20	< 0.20	No
23	Chlorodibromomethane	0.40	< 0.28	< 0.28	No
24	Chloroethane	No Criteria	< 0.67	< 0.67	No

CTR #	Pollutant	C or Governing Criterion or Objective (mg/L)	MEC or Minimum DL [1][2] (mg/L)	B or Minimum DL [1][2] (mg/L)	Result [3]
25	2-Chloroethylvinyl Ether	No Criteria	< 0.21	< 0.21	No
26	Chloroform	No Criteria	< 0.30	< 0.30	No
27	Dichlorobromomethane	0.56	< 0.24	< 0.28	No
28	1,1-Dichloroethane	5.0	< 0.34	< 0.34	No
29	1,2-Dichloroethane	0.38	< 0.31	< 0.31	No
30	1,1-Dichloroethylene	0.057	< 0.32	< 0.32	No
31	1,2-Dichloropropane	0.52	< 0.43	< 0.43	No
32	1,3-Dichloropropylene	0.50	< 0.50	< 0.29	No
33	Ethylbenzene	300	< 0.36	< 0.36	No
34	Methyl Bromide	48	< 0.59	< 0.59	No
35	Methyl Chloride	No Criteria	< 0.50	< 0.50	No
36	Methylene Chloride	4.7	< 2.0	< 2.0	No
37	1,1,2,2-Tetrachloroethane	0.17	< 0.30	< 0.28	No
38	Tetrachloroethylene	0.80	< 0.22	< 0.22	No
39	Toluene	150	< 0.30	< 0.30	No
40	1,2-Trans-Dichloroethylene	10	< 0.22	< 0.22	No
41	1,1,1-Trichloroethane	200	< 0.25	< 0.25	No
42	1,1,2-Trichloroethane	0.60	< 0.47	< 0.47	No
43	Trichloroethylene	2.7	< 0.35	< 0.35	No
44	Vinyl Chloride	0.50	< 0.41	< 0.41	No
45	Chlorophenol	120	< 0.60	< 0.60	No
46	2,4-Dichlorophenol	93	< 0.80	< 0.81	No
47	2,4-Dimethylphenol	540	< 0.72	< 0.72	No
48	2-Methyl-4,6-Dinitrophenol	13	Unavailable	Unavailable	U
49	2,4-Dinitrophenol	70	< 4.8	< 0.48	No
50	2-Nitrophenol	No Criteria	< 0.81	< 0.81	No
51	4-Nitrophenol	No Criteria	< 4.8	< 0.48	No
52	3-Methyl-4-Chlorophenol	No Criteria	< 0.56	< 0.56	No
53	Pentachlorophenol	< 0.28	< 0.48	< 0.48	No
54	Phenol	21,000	< 4.8	< 0.48	No
55	2,4,6-Trichlorophenol	2.1	< 0.72	< 0.72	No
56	Acenaphthene	1,200	< 0.33	< 0.33	No
57	Acenaphthylene	No Criteria	< 0.33	< 0.31	No
58	Anthracene	9,600	< 0.21	< 0.76	No
59	Benzidine	< 0.00012	< 4.8	< 0.48	No
60	Benzo(a)Anthracene	< 0.0044	< 0.33	< 0.72	No
61	Benzo(a)Pyrene	< 0.0044	< 0.33	< 0.75	No
62	Benzo(b)Fluoranthene	< 0.0044	< 0.33	< 0.74	No
63	Benzo(ghi)Perylene	No Criteria	< 0.33	< 0.78	No
64	Benzo(k)Fluoranthene	< 0.0044	< 0.33	< 0.82	No
65	Bis(2-Chloroethoxy)Methane	No Criteria	< 0.77	< 0.79	No
66	Bis(2-Chloroethyl)Ether	< 0.031	< 0.70	< 0.70	No
67	Bis(2-Chloroisopropyl)Ether	1,400	Unavailable	Unavailable	U
68	Bis(2-Ethylhexyl)Phthalate	1.8	< 0.95	< 0.95	No
69	4-Bromophenyl Phenyl Ether	No Criteria	< 0.81	< 0.81	No

CTR #	Pollutant	C or Governing Criterion or Objective (mg/L)	MEC or Minimum DL [1][2] (mg/L)	B or Minimum DL [1][2] (mg/L)	Result [3]
70	Butylbenzyl Phthalate	3,000	< 0.95	< 0.95	No
71	2-Chloronaphthalene	1,700	< 0.48	< 0.48	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	< 0.51	< 0.51	No
73	Chrysene	< 0.0044	< 0.033	< 0.032	No
74	Dibenzo(a,h)Anthracene	< 0.0044	< 0.033	< 0.032	No
75	1,2-Dichlorobenzene	600	< 0.32	< 0.32	No
76	1,3-Dichlorobenzene	400	< 0.22	< 0.22	No
77	1,4-Dichlorobenzene	5.0	< 0.26	< 0.26	No
78	3,3-Dichlorobenzidine	< 0.040	< 0.61	< 0.61	No
79	Diethyl Phthalate	23,000	< 0.95	< 0.95	No
80	Dimethyl Phthalate	313,000	< 0.95	< 0.95	No
81	Di-n-Butyl Phthalate	2,700	< 0.95	< 0.95	No
82	2,4-Dinitrotoluene	< 0.11	< 0.77	< 0.77	No
83	2,6-Dinitrotoluene	No Criteria	< 0.68	< 0.68	No
84	Di-n-Octyl Phthalate	No Criteria	< 0.95	< 0.95	No
85	1,2-Diphenylhydrazine	< 0.040	< 0.72	< 0.72	No
86	Fluoranthene	300	< 0.21	< 0.21	No
87	Fluorene	1,300	< 0.21	< 0.21	No
88	Hexachlorobenzene	< 0.00075	< 0.66	< 0.66	No
89	Hexachlorobutadiene	< 0.44	< 0.48	< 0.30	No
90	Hexachlorocyclopentadiene	50	< 1.7	< 1.7	No
91	Hexachloroethane	1.9	< 1.6	< 1.6	No
92	Indeno(1,2,3-cd) Pyrene	< 0.0044	< 0.033	< 0.68	No
93	Isophorone	8.4	< 0.74	< 0.74	No
94	Naphthalene	No Criteria	< 0.33	< 0.48	No
95	Nitrobenzene	17	< 0.89	< 0.89	No
96	N-Nitrosodimethylamine	< 0.00069	< 0.48	< 0.48	No
97	N-Nitrosodi-n-Propylamine	< 0.0050	< 0.49	< 0.64	No
98	N-Nitrosodiphenylamine	5.0	< 0.77	< 0.77	No
99	Phenanthrene	No Criteria	< 0.21	< 0.82	No
100	Pyrene	960	< 0.21	< 0.065	No
101	1,2,4-Trichlorobenzene	5.0	< 0.32	< 0.50	No
102	Aldrin	< 0.00013	< 0.011	< 0.011	No
103	alpha-BHC	< 0.0039	< 0.0091	< 0.0087	No
104	beta-BHC	< 0.014	< 0.087	< 0.011	No
105	gamma-BHC	< 0.019	< 0.0089	< 0.0099	No
106	delta-BHC	No Criteria	< 0.0092	< 0.0095	No
107	Chlordane	< 0.00057	< 0.0091	< 0.15	No
108	4,4-DDT	< 0.00059	< 0.011	< 0.020	No
109	4,4-DDE	< 0.00059	< 0.010	< 0.020	No
110	4,4-DDD	< 0.00083	< 0.0092	< 0.020	No
111	Dieldrin	< 0.00014	< 0.0095	< 0.0095	No
112	alpha-Endosulfan	< 0.056	< 0.0064	< 0.0063	No
113	beta-Endosulfan	< 0.056	< 0.0060	< 0.0062	No
114	Endosulfan Sulfate	110	< 0.0063	< 0.011	No

CTR #	Pollutant	C or Governing Criterion or Objective (mg/L)	MEC or Minimum DL [1][2] (mg/L)	B or Minimum DL [1][2] (mg/L)	Result [3]
115	Endrin	< 0.036	< 0.0084	< 0.0084	No
116	Endrin Aldehyde	< 0.76	< 0.011	< 0.011	No
117	Heptachlor	< 0.00021	< 0.010	< 0.011	No
118	Heptachlor Epoxide	< 0.00010	< 0.0081	< 0.0081	No
119-125	PCBs sum	< 0.00017	< 0.00020	< 0.00020	No
126	Toxaphene	< 0.00020	< 0.86	< 0.86	No

Footnotes:

[1] The maximum effluent concentration 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 (DL).

[2] The maximum effluent concentration 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
= Undetermined (U), if no criteria have been promulgated or data are insufficient.

[4] The Mercury Provisions supersede Basin Plan Table 3-4 (see Fact Sheet § III.C.4). The implementation of the mercury water quality objectives is to be based on annual averages; therefore, there is no reasonable potential for the short-term, intermittent discharges authorized through this Order to exceed the objectives.

(b) 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.

(c) Chronic Toxicity. There is no reasonable potential for chronic toxicity because the discharges are episodic and short term.

(d) Temperature. Swiss Creek supports warm and cold water habitat beneficial uses; the Basin Plan temperature objectives therefore apply. Temperature data from background Monitoring Location RSW-002; effluent Monitoring Locations EFF-002, EFF-003, and EFF-004; and downstream Monitoring Location RSW-004 indicate that Facility discharges do not affect receiving water temperature.

4. Water Quality-Based Effluent Limitation Calculations

Numeric WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives at Discharge Points 001 and 006, and Discharge Points 002, 003, and 004. Except for acute toxicity, these WQBELs are based on the procedures specified in SIP section 1.4. The acute toxicity effluent limitations are based on Basin Plan Table 4-3.

a. Dilution Credits. SIP section 1.4.2 allows dilution credits under certain circumstances. Because the outfalls at Discharge Points 001, 002, 003, 004, and 006 are not submerged, have no diffusers, and achieve no initial dilution, no dilution credit is used in the calculation of the WQBELs.

b. Calculations. The following table shows the WQBEL calculations for Discharge Points 001 and 006:

Table F-8. WQBEL Calculations, Discharge Points 001 and 006

PRIORITY POLLUTANTS	Chromium (III)	Copper	Lead	Nickel	Selenium	Zinc
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Basis and Criteria type	CTR Aquatic Life	CTR & BP Aquatic Life	CTR & BP Aquatic Life	CTR & BP Aquatic Life	CTR Aquatic Life	CTR & BP Aquatic Life
Criteria -Acute	3,798	34	276	1,053	20	269
Criteria -Chronic	453	21	11	117	5.0	269
SSO Criteria -Acute	—	—	—	—	—	—
SSO Criteria -Chronic	—	—	—	—	—	—
Water Effects ratio (WER)	1	1	1	1	1	1
Lowest WQO	453	21	11	117	5.0	269
Site Specific Translator - MDEL	—	—	—	—	—	—
Site Specific Translator - AMEL	—	—	—	—	—	—
Dilution Factor (D) (if applicable)	0	0	0	0	0	0
No. of samples per month	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y
HH criteria analysis required? (Y/N)	N	Y	N	Y	N	N
Applicable Acute WQO	3,798	34	276	1,053	20	269
Applicable Chronic WQO	453	21	11	117	5.0	269
HH criteria	—	1,300	—	610	—	—
Background (Maximum Conc for Aquatic Life calc)	177	102	12	202	5.6	131
Background (Average Conc for Human Health calc)	—	33	—	202	—	—
Is the pollutant on the 303d list (Y/N)?	N	N	N	N	N	N
ECA acute	3,798	34	276	1,053	20	269
ECA chronic	453	21	11	117	5.0	269
ECA HH	—	1,300	—	610	—	—
No. of data points <10 or at least 80% of data ND? (Y/N)	Y	Y	Y	Y	Y	Y
Avg of effluent data points	1,328	189	41	1,651	8.1	758
Std Dev of effluent data points	1,912	351	67	2,543	14	1,091
CV calculated	N/A	N/A	N/A	N/A	N/A	N/A
CV (Selected) - Final	0.60	0.60	0.60	0.60	0.60	0.60

PRIORITY POLLUTANTS	Chromium (III)	Copper	Lead	Nickel	Selenium	Zinc
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
ECA acute mult99	0.32	0.32	0.32	0.32	0.32	0.32
ECA chronic mult99	0.53	0.53	0.53	0.53	0.53	0.53
LTA acute	1,219	11	88	338	6.4	86
LTA chronic	239	11	5.7	62	2.6	142
minimum of LTAs	239	11	5.7	62	2.6	86
AMEL mult95	1.6	1.6	1.6	1.6	1.6	1.6
MDEL mult99	3.1	3.1	3.1	3.1	3.1	3.1
AMEL (aq life)	371	17	8.8	96	4.1	134
MDEL (aq life)	744	34	18	192	8.2	269
MDEL/AMEL Multiplier	2.0	2.0	2.0	2.0	2.0	2.0
AMEL (human hlth)	—	1,300	—	610	—	—
MDEL (human hlth)	—	2,608	—	1,224	—	—
minimum of AMEL for Aq. life vs HH	371	17	8.8	96	4.1	134
minimum of MDEL for Aq. Life vs HH	744	34	18	192	8.2	269
Final limit - AMEL	370	17	8.8	96	4.1	130
Final limit - MDEL	740	34	18	190	8.2	270

c. Calculations. The following tables shows the WQBEL calculations for Discharge Points 002, 003, and 004:

Table F-9. WQBEL Calculations, Discharge Points 002, 003, and 004

PRIORITY POLLUTANTS	Chromium (VI)	Copper	Lead	Nickel	Selenium	Cyanide
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Basis and Criteria type	CTR & BP Aquatic Life	CTR & BP Aquatic Life	CTR & BP Aquatic Life	CTR & BP Aquatic Life	CTR Aquatic Life	CTR & BP Aquatic Life
Criteria -Acute	16	34	276	1,053	20	22
Criteria -Chronic	11	21	11	117	5.0	5.2
SSO Criteria -Acute	—	—	—	—	—	—
SSO Criteria -Chronic	—	—	—	—	—	—
Water Effects ratio (WER)	1	1	1	1	1	1
Lowest WQO	11	21	11	117	5.0	5.2
Site Specific Translator - MDEL	—	—	—	—	—	—

PRIORITY POLLUTANTS	Chromium (VI)	Copper	Lead	Nickel	Selenium	Cyanide
Units	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
Site Specific Translator - AMEL	—	—	—	—	—	—
Dilution Factor (D) (if applicable)	0	0	0	0	0	0
No. of samples per month	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y
HH criteria analysis required? (Y/N)	N	Y	N	Y	N	Y
Applicable Acute WQO	16	34	276	1,053	20	22
Applicable Chronic WQO	11	21	11	117	5.0	5.2
HH criteria		1,300		610		700
Background (Maximum Conc for Aquatic Life calc)	40	30	15	53	4.1	9.1
Background (Average Conc for Human Health calc)	—	13	—	20	—	9.1
Is the pollutant on the 303d list (Y/N)?	N	N	N	N	N	N
ECA acute	16	34	276	1,053	20	22
ECA chronic	11	21	11	117	5.0	5.2
ECA HH	—	1,300	—	610	—	700
No. of data points <10 or at least 80% of data ND? (Y/N)	N	N	N	N	N	Y
Avg of effluent data points	21	31	12	102	3.2	12
Std Dev of effluent data points	33	27	10	71	2.1	10
CV calculated	1.5	0.87	0.85	0.70	0.65	N/A
CV (Selected) - Final	1.5	0.87	0.85	0.70	0.65	0.60
ECA acute mult99	0.14	0.23	0.24	0.28	0.30	0.32
ECA chronic mult99	0.26	0.41	0.42	0.48	0.51	0.53
LTA acute	2.3	7.9	65	295	6.0	7.1
LTA chronic	2.9	8.7	4.5	56	2.5	2.7
minimum of LTAs	2.3	7.9	4.5	56	2.5	2.7
AMEL mult95	2.4	1.8	1.8	1.7	1.6	1.6
MDEL mult99	7.1	4.3	4.2	3.6	3.3	3.1
AMEL (aq life)	5.6	14	8.1	93	4.0	4.3
MDEL (aq life)	16	34	19	200	8.4	8.5
MDEL/AMEL Multiplier	2.9	2.4	2.4	2.2	2.1	2.0

PRIORITY POLLUTANTS	Chromium (VI)	Copper	Lead	Nickel	Selenium	Cyanide
Units	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
AMEL (human hlth)	—	1,300	—	610	—	700
MDEL (human hlth)	—	3,095	—	1,316	—	1,404
minimum of AMEL for Aq. life vs HH	5.6	14	8.1	93	4.0	4.3
minimum of MDEL for Aq. Life vs HH	16	34	19	200	8.4	8.5
Final limit - AMEL	5.6	14	8.1	93	4.0	4.3
Final limit - MDEL	16	34	19	200	8.4	8.5

d. Acute Toxicity. This Order's acute toxicity effluent limitation is based on Basin Plan Table 4-3. This limit is appropriate because the discharges are intermittent.

D. Discharger Requirement Considerations

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.

2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. Administrative Procedures Update (APU) No. 90-004 provides guidance for implementing the antidegradation policies.

   The discharges covered by this Order have been occurring since the 1940s, well before the adoption of Resolution No. 68-16 in 1968 and the federal antidegradation policy in 1975. According to a State Water Board guidance memorandum (William Attwater, Chief Counsel, October 7, 1987), "…the federal antidegradation policy ordinarily does not apply to consideration of existing discharges, even if exceptions or variances from other applicable water quality objectives or effluent guidelines are required to permit the discharge to continue." According to the memorandum, considerations in determining whether to perform an antidegradation analysis include the following:

   a. whether there are new discharges or an expansion of existing facilities,

   b. whether there would be a reduction in the level of treatment of an existing discharge,

   c. whether an existing outfall has been relocated,

   d. whether there has been a substantial increase in mass emissions, and

   e. whether there has been a change in water quality from a point source or non-point source discharge or water diversion.

None of these conditions apply to this Order.

No antidegradation analysis is required when the Regional Water Board has no reason to believe that baseline water quality will be reduced. APU No. 90-004 defines "baseline" water quality as follows:

> Baseline quality is defined as the best quality of the receiving water that has existed since 1968 when considering Resolution No. 68-16, or since 1975 under the federal policy, unless subsequent lowering was due to regulatory action consistent with State and federal antidegration policies. If poorer water quality was permitted, the most recent water quality resulting from permitted action is the baseline water quality to be considered in any antidegration analysis.

Existing Rattlesnake Creek and Swiss Creek water quality is likely the best that has existed since 1968 because the Facility was already operating in 1968, and no subsequent regulatory action has allowed lowering water quality. Subsequent regulation (e.g., through the Industrial General Permit) likely improved water quality somewhat. Therefore, existing water quality is the appropriate baseline for analysis. This Order 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 a reduced level of treatment or increased volume of discharge, nor does it increase effluent limitations relative to the previous order. Because this Order will improve Rattlesnake Creek and Swiss Creek water quality substantially relative to its existing quality, no degradation will occur, and no findings justifying degradation are necessary.

To the extent that an argument could be made that baseline water quality is the most recent water quality resulting from permitted action (i.e., the water quality that should have existed had the Discharger complied with previous regulatory requirements), this Order still complies with antidegradation policies. This Order allows no additional flow or less stringent effluent limits than those in the Industrial General Permit; therefore, it results in no lowering of water quality compared to the water quality that would have resulted from compliance with those permits.

3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based effluent limits and WQBELs 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 applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

4. **Feasibility of Compliance with Effluent Limits.** The requirements of this Order, as stated above, are at least as stringent as those in the previous order. Based on monitoring data collected under the previous permit, however, the Facility's BMPs were often insufficient to meet all of that order's requirements (see Fact Sheet section II.E).

   The Discharger will likely find it infeasible to meet this Order's effluent limits for pH, settleable matter, chromium (III), chromium (VI), copper, lead, nickel, selenium, zinc, and cyanide immediately, as Facility discharges would have exceeded those limits had they been imposed by the previous order. As discussed in Fact Sheet section II.C, the Discharger intends to maximize transfer of stormwater to the Quarry Pit/Pond (which does not discharge to surface waters), add sedimentation ponds and traps, and pilot-test and install advanced treatment for discharges from sediment ponds and traps, but anticipates that these improvements cannot be completed until March 2026.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in sections V.A and V.B of this Order are based on Basin Plan narrative and numeric water quality objectives. The receiving water limitation in section V.C of this Order requires compliance with water quality standards.

The Discharger will likely find it infeasible to meet this Order's receiving water limits immediately, as Facility discharges contained TSS up to 11,900 mg/L, turbidity up to 2,720 NTU, pH up to 10 standard units, and the metals discussed in Fact Sheet section IV.D.4, above. Furthermore, Facility discharges do not receive significant dilution. As also discussed in Fact Sheet section IV.D.4, the Discharger plans to minimize discharge and install improved treatment but anticipates that the necessary improvements cannot be completed until May 2026.

VI. RATIONALE FOR PROVISIONS

A. 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. The Discharger 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 the permits either expressly or by reference.

Attachment G contains regional standard provisions that supplement the federal standard provisions in Attachment D. In accordance with 40 C.F.R. section 123.25(a)(12), states may omit or modify the federal standard conditions to impose more stringent requirements. This Order omits 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.

Attachment S contains stormwater provisions consistent with the State Water Board's Industrial General Permit (see Fact Sheet section I.B), including requirements for the Discharger to prepare a Stormwater Pollution Prevention Plan, to evaluate BMP performance using Stormwater Action Levels, and to submit an annual stormwater report. These requirements apply to the entire site, not just the area drained by Discharge Point 005, because rain and runoff drive the Facility's discharges, all of which include stormwater. Stormwater management and BMPs are therefore central to reducing and controlling pollutant discharges from the Facility, and to meeting this Order's requirements, even if additional treatment is necessary.

B. Monitoring and Reporting

Pursuant to 40 C.F.R. section 122.48, NPDES permits must specify requirements for recording and reporting monitoring results. Water Code section 13383, and 40 C.F.R. sections 122.41(h) and (j), authorize the Regional Water Board to require technical and monitoring reports. This Order establishes monitoring and reporting requirements, contained in the Monitoring and Reporting Program (Attachment E), that implement federal and State requirements. For more background regarding these requirements, see Fact Sheet section VII.

C. Special Provisions

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.

2. Effluent Characterization Study and Report

This Order does not include effluent limitations for priority pollutants that do not demonstrate reasonable potential, but this provision requires the Discharger to evaluate monitoring data to verify that the reasonable potential analysis conclusions of this Order remain valid. This requirement is authorized pursuant to 40 C.F.R. section 122.41(h) and Water Code section 13328, and is necessary to inform the next permit reissuance and to ensure that the Discharger takes timely steps in response to any unanticipated change in effluent quality during the term of this Order.

3. Pollutant Minimization Program

This provision is based on SIP section 2.4.5.

VII. MONITORING AND REPORTING PROGRAM (MRP)

Attachment E contains the MRP for this Order. It specifies sampling stations, pollutants to be monitored (including all parameters for which effluent limitations are specified), monitoring frequencies, and reporting requirements. The following provides the rationale for the MRP requirements.

A. MRP Requirements Rationale

The MRP's monitoring and reporting requirements are based on California Water Code section 13383 and are necessary to inform the next permit reissuance. The reports required by the MRP are necessary to accomplish the foregoing and to ensure compliance with this Order. The Discharger is subject to these requirements because it owns and operates the Facility, which discharges wastes subject to this Order. The burden, including costs, of the monitoring and reporting, bears a reasonable relationship to the need to ensure permit compliance.

1. **Effluent Monitoring.** Effluent flow monitoring is necessary at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, and EFF-006 to evaluate compliance with Prohibition III.B and to understand Facility operations. Effluent flow monitoring is necessary at Monitoring Location EFF-005 to evaluate the Discharger's management of Facility stormwater.

   Monitoring for the other parameters is necessary at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF-004, EFF-005, and EFF-006 to evaluate compliance with this Order's effluent limitations and to conduct future reasonable potential analyses. Monitoring is also needed at Monitoring Location EFF-005 to evaluate the effectiveness of the Discharger's stormwater BMPs by comparing discharge concentrations with stormwater action levels. Dissolved metals monitoring is necessary to provide data that can be used to calculate site-specific metals translators for consideration when reissuing this permit.

   For certain parameters, the monitoring frequency required at Monitoring Locations EFF-001, EFF-002, EFF-003, EFF 004, and EFF 006 increases on August 1, 2024. As explained in Fact Sheet section II.C, the Discharger plans to complete several Facility improvements and data collected toward the end of this Order's term, when most of the improvements have been completed, is expected to better represent future discharge conditions.

2. **Receiving Water Monitoring.** Receiving water monitoring is necessary to characterize the receiving waters (e.g., to provide background values for future reasonable potential analyses) and the effects of the discharges on the receiving waters (i.e., to determine compliance with the receiving water limitations). Monitoring Locations RSW-001 and RSW-002 represent background water quality for Rattlesnake and Swiss creeks prior to any effect of Facility discharges. Monitoring Locations RSW-003 and RSW-004 represent conditions in Rattlesnake and Swiss creeks downstream of the discharge points. Dissolved metals monitoring is necessary to provide data that can be used to calculate site-specific metals translators for consideration when reissuing this permit. Flow monitoring is necessary to understand receiving water flows and the impact of the discharge on them, and to support development of a toxicity TMDL for Stevens Creek.

3. **Toxicity Testing**. Acute toxicity tests are necessary to evaluate compliance with acute toxicity effluent limitations.

4. **Other Monitoring Requirements.** Pursuant to CWA section 308, U.S. EPA requires major and selected minor dischargers to participate in a Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program. The program annually evaluates the analytical abilities of laboratories that perform or support NPDES permit-required monitoring. The program applies to discharger laboratories and contract laboratories. There are two options to

comply: (1) dischargers can obtain and analyze DMR-QA samples, or (2) pursuant to a waiver U.S. EPA issued to the State Water Board, dischargers can submit results from the most recent Water Pollution Performance Evaluation Study. Dischargers must submit results annually to the State Water Board, which then forwards the results to U.S. EPA.

B. Monitoring Requirements Summary

The table below summarizes routine monitoring requirements. This table is for informational purposes only. The actual requirements are specified in the MRP and elsewhere in this Order.

Table F-10. Monitoring Requirements Summary

Parameter	Effluent EFF-001 through EFF-004 and EFF-006	Effluent EFF-005	Receiving Water RSW-001 through RSW-004
Conductivity	—	2/Year	—
Dissolved Oxygen	—	—	2/Year
Flow	1/Month	1/Month	1/Month
Total Hardness as $CaCO_3$	—	—	1/Year
Oil and Grease	2/Year	2/Year	2/Year
pH	1/Month	2/Year	2/Year
Settleable Matter	2/Year	—	—
Sulfate	—	—	2/Year
Temperature	2/Year	—	2/Year
TSS	1/Month	2/Year	1/Month
Ammonia as Nitrogen (N)	1/5 Years	—	—
Chromium (III)	1/Year or 1/Month [1]	—	2/Year
Chromium (VI)	1/Year or 1/Month [1]	—	2/Year
Copper	1/Year or 1/Month [1]	—	2/Year
Lead	1/Year or 1/Month [1]	—	2/Year
Nickel	1/Year or 1/Month [1]	—	2/Year
Selenium	1/Year or 1/Month [1]	—	2/Year
Zinc	1/Year or 1/Month [1]	—	2/Year
Cyanide	1/Quarter	—	2/Year
Acute Toxicity	1/Year or 1/Month [1]	—	—
Turbidity	1/Month	—	1/Month
Dissolved Metals	1/5 Years	—	1/5 Years
Priority Pollutants	1/5 Years	—	1/5 Years
Standard Observations	—	—	1/Month and during sampling events
Visual Observations	1/Month and during sampling events	Each Occurrence	—

[1] Frequency shall be once per year (1/Year) until July 31, 2024, and once per month (1/Month) beginning August 1, 2024. Frequency shall revert to 1/Year on October 3, 2025, if a complete Report of Waste Discharge is timely submitted (see Table 3 of this Order).

VIII. PUBLIC PARTICIPATION

The Regional Water Board considered the issuance of this Order that will serve as an NPDES permit for the Facility. As a step in the Order adoption process, Regional Water Board staff developed a tentative Order and encouraged public participation in the Order adoption process.

A. Notification of Interested Parties. The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge 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 at http://www.waterboards.ca.gov/sanfranciscobay.

B. Written Comments. Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were to be submitted either in person, by e-mail, or by mail, to the attention of John H Madigan, P.E. Written comments were due at the Regional Water Board office by **5:00 p.m. on April 1, 2021.**

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

Date: May 12, 2021
Time: 9:00 a.m.
Contact: John H. Madigan, (510) 622-2405, John.Madigan@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 discharge, WDRs, and permit. For accuracy of the record, important testimony was requested to be in writing.

Dates and venues change. The Regional Water Board web address is waterboards.ca.gov/sanfranciscobay, where one can access the current agenda for changes.

D. 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, section 2050. The State Water Board must receive the petition at the following address within 30 calendar days of the Regional Water Board action:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml.

E. Information and Copying. The Report of Waste Discharge, related supporting documents, and comments received are on file and may be inspected at the Regional Water Board address above at any time online or by making an appointment with the Regional Water Board's custodian of records. Document copying may be arranged by calling (510) 622-2300.

F. 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 Facility, and provide a name, address, and phone number.

G. Additional Information. Requests for additional information or questions regarding this Order should be directed to John H. Madigan, (510) 622-2405, John.Madigan@waterboards.ca.gov.

ATTACHMENT G

REGIONAL STANDARD PROVISIONS AND MONITORING AND REPORTING REQUIREMENTS (SUPPLEMENT TO ATTACHMENT D)

November 2017

Contents

REGIONAL STANDARD PROVISIONS, AND MONITORING AND REPORTING REQUIREMENTS

APPLICABILITY

This document supplements the requirements of Federal Standard Provisions (Attachment D). For clarity, these provisions are arranged using to the same headings as those used in Attachment D.

I. STANDARD PROVISIONS - PERMIT COMPLIANCE

A. Duty to Comply – Not Supplemented

B. Need to Halt or Reduce Activity Not a Defense – Not Supplemented

C. Duty to Mitigate – Supplement to Attachment D, Provision I.C.

1. Contingency Plan. The Discharger shall maintain a Contingency Plan as prudent in accordance with current facility emergency planning. The Contingency Plan shall describe procedures to ensure that existing facilities remain in, or are rapidly returned to, operation in the event of a process failure or emergency incident, such as employee strike, strike by suppliers of chemicals or maintenance services, power outage, vandalism, earthquake, or fire. The Discharger may combine the Contingency Plan and Spill Prevention Plan (see Provision I.C.2, below) into one document. In accordance with Regional Water Board Resolution 74-10, discharge in violation of the permit where the Discharger has failed to develop and implement a Contingency Plan as described below may be the basis for considering the discharge a willful and negligent violation of the permit pursuant to California Water Code section 13387. The Contingency Plan shall, at a minimum, provide for the following:

a. Sufficient personnel for continued facility operation and maintenance during employee strikes or strikes against contractors providing services;

b. Maintenance of adequate chemicals or other supplies, and spare parts necessary for continued facility operations;

c. Emergency standby power;

d. Protection against vandalism;

e. Expeditious action to repair failures of, or damage to, equipment, including any sewer lines;

f. Reporting of spills and discharges of untreated or inadequately treated wastes, including measures taken to clean up the effects of such discharges; and

g. Maintenance, replacement, and surveillance of physical condition of equipment and facilities, including any sewer lines.

2. Spill Prevention Plan**.** The Discharger shall maintain a Spill Prevention Plan to prevent accidental discharges and to minimize the effects of any such discharges. The Spill Prevention Plan shall do the following:

   a. Identify the possible sources of accidental discharge, untreated or partially-treated waste bypass, and polluted drainage;

   b. State when current facilities and procedures became operational and evaluate their effectiveness; and

   c. Predict the effectiveness of any proposed facilities and procedures and provide an implementation schedule with interim and final dates when the proposed facilities and procedures will be constructed, implemented, or operational.

D. Proper Operation and Maintenance – Supplement to Attachment D, Provision I.D

1. Operation and Maintenance Manual**.** The Discharger shall maintain an Operation and Maintenance Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain a useful and relevant document, the Operation and Maintenance Manual shall be kept updated to reflect significant changes in treatment facility equipment and operational practices. The Operation and Maintenance Manual shall be maintained in usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.

2. Wastewater Facilities Status Report**.** The Discharger shall maintain a Wastewater Facilities Status Report and regularly review, revise, or update it, as necessary. This report shall document how the Discharger operates and maintains its wastewater collection, treatment, and disposal facilities to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.

3. Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs)**.** POTWs shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, section 3680, of the California Code of Regulations.

E. Property Rights – Not Supplemented

F. Inspection and Entry – Not Supplemented

G. Bypass – Not Supplemented

H. Upset – Not Supplemented

I. Other – Addition to Attachment D

1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 1305< 0.

2. Collection, treatment, storage, and disposal systems shall be operated in a manner that precludes public contact with wastewater. If public contact with wastewater could reasonably occur on public property, warning signs shall be posted.

3. If the Discharger submits a timely and complete Report of Waste Discharge for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

II. STANDARD PROVISIONS – PERMIT ACTION – Not Supplemented

III. STANDARD PROVISIONS – MONITORING

A. Sampling and Analyses – Supplement to Attachment D, Provisions III.A and III.B

1. Certified Laboratories. Water and waste analyses shall be performed by a laboratory certified for these analyses in accordance with California Water Code section 13176.

2. Minimum Levels. For the 126 priority pollutants, the Discharger should use the analytical methods listed in Table B unless the Monitoring and Reporting Program (MRP, Attachment E) requires a particular method or minimum level (ML). All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

3. Monitoring Frequency. The MRP specifies the minimum sampling and analysis schedule.

a. Sample Collection Timing

i. The Discharger shall collect influent samples on varying days selected at random and shall not include any plant recirculation or other sidestream wastes, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative influent sampling plan if it is representative of plant influent and complies with all other permit requirements.

ii. The Discharger shall collect effluent samples on days coincident with influent sampling, unless otherwise stipulated by the MRP. If influent sampling is not required, the Discharger shall collect effluent samples on varying days selected at random, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative effluent sampling plan if it is representative of plant discharge and in compliance with all other permit requirements.

iii. The Discharger shall collect effluent grab samples during periods of daytime maximum peak flows (or peak flows through secondary treatment units for facilities that recycle effluent).

iv. Effluent sampling for conventional pollutants shall occur on at least one day of any multiple-day bioassay the MRP requires. During the course of the bioassay, on at least one day, the Discharger shall collect and retain samples of the discharge. In the event that a bioassay result does not comply with effluent limitations, the Discharger shall analyze the retained samples for pollutants that could be toxic to aquatic life and for which it has effluent limitations.

(a) The Discharger shall perform bioassays on final effluent samples; when chlorine is used for disinfection, bioassays shall be performed on effluent after chlorination and dechlorination; and

(b) The Discharger shall analyze for total ammonia nitrogen and calculate the amount of un-ionized ammonia whenever test results fail to meet effluent limitations.

b. Conditions Triggering Accelerated Monitoring

i. Average Monthly Effluent Limitation Exceedance. If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter (or if the required sampling frequency is once per month or less and the monthly sample exceeds the average monthly effluent limitation), the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling show that the parameter complies with the average monthly effluent limitation.

ii. Maximum Daily Effluent Limitation Exceedance. If a sample result exceeds a maximum daily effluent limitation, 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 show compliance with the maximum daily effluent limitation.

iii. Acute Toxicity. If final or intermediate results of an acute bioassay indicate a violation or threatened violation (e.g., the percentage of surviving test organisms of any single acute bioassay is less than 70 percent), the Discharger shall initiate a new test as soon as practical or as described in applicable State Water Board plan provisions that become effective after adoption of these Regional Standard Provisions. The Discharger shall investigate the cause of the mortalities and report its findings in the next self-monitoring report.

iv. Chlorine. The Discharger shall calibrate chlorine residual analyzers against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, the Discharger shall collect grab samples at least every 30 minutes until compliance with the limitation is achieved, unless the Discharger monitors chlorine residual continuously. In such cases, the Discharger shall continue to conduct continuous monitoring.

v. Bypass. Except as indicated below, if a Discharger bypasses any portion of its treatment facility, it shall monitor flows and collect samples at affected discharge points and analyze samples for all constituents with effluent limitations on a daily

basis for the duration of the bypass. The Discharger need not accelerate chronic toxicity monitoring. The Discharger also need not collect and analyze samples for mercury, dioxin-TEQ, and PCBs after the first day of the bypass. The Discharger may satisfy the accelerated acute toxicity monitoring requirement by conducting a flow-through test or static renewal test that captures the duration of the bypass (regardless of the method specified in the MRP). If bypassing disinfection units only, the Discharger shall only monitor bacteria indicators daily.

(a) Bypass for Essential Maintenance. If a Discharger bypasses a treatment unit for essential maintenance pursuant to Attachment D section I.G.2, the Executive Officer may reduce the accelerated monitoring requirements above if the Discharger (i) monitors effluent at affected discharge points on the first day of the bypass for all constituents with effluent limitations, except chronic toxicity; and (ii) identifies and implements measures to ensure that the bypass will continue to comply with effluent limitations.

(b) Approved Wet Weather Bypasses. If a Discharger bypasses a treatment unit or permitted outfall during wet weather with Executive Officer approval pursuant to Attachment D section I.G.4, the Discharger shall monitor flows and collect and retain samples for affected discharge points on a daily basis for the duration of the bypass. The Discharger shall analyze daily for TSS using 24-hour composites (or more frequent increments) and for bacteria indicators with effluent limitations using grab samples. If TSS exceeds 45 mg/L in any composite sample, the Discharger shall also analyze daily the retained samples for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. Additionally, at least once each year, the Discharger shall analyze the retained samples for one approved bypass for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. This monitoring shall be in addition to the minimum monitoring specified in the MRP.

B. Standard Observations – Addition to Attachment D

1. **Receiving Water Observations.** The following requirements only apply when the MRP requires standard observations of receiving waters. Standard observations shall include the following:

   a. **Floating and Suspended Materials** (e.g., oil, grease, algae, and other macroscopic particulate matter) **—** presence or absence, source, and size of affected area.

   b. **Discoloration and Turbidity —** color, source, and size of affected area.

   c. **Odor —** presence or absence, characterization, source, and distance of travel.

   d. **Beneficial Water Use —** estimated number of water-associated waterfowl or wildlife, fisherpeople, and other recreational activities.

   e. **Hydrographic Condition —** time and height of high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the sampling date and time).

f. Weather Conditions — wind direction, air temperature, and total precipitation during five days prior to observation.

2. **Wastewater Effluent Observations.** The following requirements only apply when the MRP requires standard observations of wastewater effluent. Standard observations shall include the following:

   a. Floating and Suspended Material of Wastewater Origin (e.g., oil, grease, algae, and other macroscopic particulate matter) **—** presence or absence.

   b. Odor — presence or absence, characterization, source, distance of travel, and wind direction.

3. **Beach and Shoreline Observations.** The following requirements only apply when the MRP requires standard observations of beaches or shorelines. Standard observations shall include the following:

   a. Material of Wastewater Origin — presence or absence, description of material, estimated size of affected area, and source.

   b. Beneficial Use — estimate of number of people participating in recreational water contact, non-water contact, and fishing activities.

4. **Waste Treatment and/or Disposal Facility Periphery Observations.** The following requirements only apply when the MRP requires standard observations of the periphery of waste treatment or disposal facilities. Standard observations shall include the following:

   a. Odor — presence or absence, characterization, source, and distance of travel.

   b. Weather Conditions — wind direction and estimated velocity.

IV. STANDARD PROVISIONS – RECORDS

A. Records to be Maintained – Supplement to Attachment D, Provision IV.A

The Discharger shall maintain records in a manner and at a location (e.g., the wastewater treatment plant or the Discharger's offices) such that the records are accessible to Regional Water Board staff. The minimum retention period specified in Attachment D, Provision IV, shall be extended during the course of any unresolved litigation regarding permit-related discharges, or when requested by Regional Water Board or U.S. EPA, Region IX, staff.

A copy of the permit shall be maintained at the discharge facility and be available at all times to operating personnel.

B. Records of Monitoring – Supplement to Attachment D, Provision IV.B

Monitoring records shall include the following:

1. **Analytical Information.** Records shall include analytical method detection limits, minimum levels, reporting levels, and related quantification parameters.

2. **Disinfection Process.** For the disinfection process, records shall include the following:
   a. For bacteriological analyses:
      i. Wastewater flow rate at the time of sample collection; and
      ii. Required statistical parameters for cumulative bacterial values (e.g., moving median or geometric mean for the number of samples or sampling period identified in the MRP).
   b. For the chlorination process (when chlorine is used for disinfection), at least daily average values for the following:
      i. Chlorine residual of treated wastewater as it enters the chlorine contact basin (mg/L);
      ii. Chlorine dosage (kg/day); and
      iii. Dechlorination chemical dosage (kg/day).
3. **Wastewater Treatment Process Solids.** For each treatment unit process that involves solids removal from the wastewater stream, records shall include the following:
   a. Total volume or mass of solids removed from each collection unit (e.g., grit, skimmings, undigested biosolids, or combination) for each calendar month or other time period as appropriate, but not to exceed annually; and
   b. Final disposition of such solids (e.g., landfill, other subsequent treatment unit).
4. **Treatment Process Bypasses.** For all treatment process bypasses, including wet weather blending, records shall include the following:
   a. Chronological log of treatment process bypasses;
   b. Identification of treatment processes bypassed;
   c. Beginning and ending dates and times of bypasses;
   d. Bypass durations;
   e. Estimated bypass volumes; and
   f. Description of, or reference to other reports describing, the bypasses, their cause, the corrective actions taken (except for wet weather blending explicitly approved within the permit and in compliance with any related permit conditions), and any additional monitoring conducted.
5. **Treatment Plant Overflows.** The Discharger shall retain a chronological log of overflows at the treatment plant, including the headworks and all units and appurtenances downstream, and records supporting the information provided in accordance with Provision V.E.2, below.

C. Claims of Confidentiality – Not Supplemented

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information – Not Supplemented

B. Signatory and Certification Requirements – Not Supplemented

C. Monitoring Reports – Supplement to Attachment D, Provision V.C

1. **Self-Monitoring Reports.** For each reporting period established in the MRP, the Discharger shall submit a self-monitoring report to the Regional Water Board in accordance with the requirements listed in the MRP and below:

   a. **Transmittal Letter.** Each self-monitoring report shall be submitted with a transmittal letter that includes the following:

      i. Identification of all violations of effluent limitations or other waste discharge requirements found during the reporting period;

      ii. Details regarding the violations, such as parameters, magnitude, test results, frequency, and dates;

      iii. Causes of the violations;

      iv. Corrective actions taken or planned to resolve violations and prevent recurrences, and dates or time schedules for implementation (the Discharger may refer to previously submitted reports that address the corrective actions);

      v. Explanation for any data invalidation. Data should not be submitted in a self-monitoring report if it does not meet quality assurance/quality control standards. However, if the Discharger wishes to invalidate a measurement after submitting it in a self-monitoring report, the Discharger 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. The formal 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 a discussion of the corrective actions taken or planned (with a time schedule for completion) to prevent recurrence of the sampling or measurement problem;

      vi. Description of blending, if any. If the Discharger blends, it shall describe the duration of blending events and certify whether the blending complied with all conditions for blending;

      vii. Description of other bypasses, if any. If the Discharger bypasses any treatment units (other than blending), it shall describe the duration of the bypasses and effluent quality during those times; and

      viii. Signature. The transmittal letter shall be signed in accordance with Attachment D, Provision V.B.

b. Compliance Evaluation Summary. Each self-monitoring report 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.

c. More Frequent Monitoring. If the Discharger monitors any pollutant more frequently than required by the MRP, the Discharger shall include the results of such monitoring in the calculation and reporting of the data submitted in the self-monitoring report.

d. Analysis Results

i. Tabulation. Each self-monitoring report shall include tabulations of all required analyses and observations, including parameters, dates, times, sample stations, 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.

ii. Multiple Samples. Unless the MRP specifies otherwise, when determining compliance with effluent limitations (other than 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:

(a) 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.

(b) 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).

iii. 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 Provision V.C.1.c.ii, above]). For bacteria indicators, the Discharger shall report the geometric mean of the duplicate analyses.

iv. Dioxin-TEQ. The Discharger shall report for each dioxin and furan congener the analytical results of effluent monitoring, including the reporting level, the method detection limit, and the measured concentration. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating dioxin-TEQ, the Discharger shall set congener concentrations below the minimum levels (MLs) to zero. The Discharger shall calculate and report dioxin-TEQ using the following formula, where the MLs, toxicity equivalency factors (TEFs), and bioaccumulation equivalency factors (BEFs) are as provided in Table A:

$$\text{Dioxin-TEQ} = \Sigma\ (C_x \times TEF_x \times BEF_x)$$

where: C_x = measured or estimated concentration of congener *x*
TEF_x = toxicity equivalency factor for congener x
BEFx = bioaccumulation equivalency factor for congener *x*

Table A

Minimum Levels, Toxicity Equivalency Factors,
and Bioaccumulation Equivalency Factors

Dioxin or Furan Congener	Minimum Level (pg/L)	2005 Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-TCDD	10	1.0	1.0
1,2,3,7,8-PeCDD	50	1.0	< 0.9
1,2,3,4,7,8-HxCDD	50	< 0.1	< 0.3
1,2,3,6,7,8-HxCDD	50	< 0.1	< 0.1
1,2,3,7,8,9-HxCDD	50	< 0.1	< 0.1
1,2,3,4,6,7,8-HpCDD	50	< 0.01	< 0.05
OCDD	100	< 0.0003	< 0.01
2,3,7,8-TCDF	10	< 0.1	< 0.8
1,2,3,7,8-PeCDF	50	< 0.03	< 0.2
2,3,4,7,8-PeCDF	50	< 0.3	1.6
1,2,3,4,7,8-HxCDF	50	< 0.1	< 0.08
1,2,3,6,7,8-HxCDF	50	< 0.1	< 0.2
1,2,3,7,8,9-HxCDF	50	< 0.1	< 0.6
2,3,4,6,7,8-HxCDF	50	< 0.1	< 0.7
1,2,3,4,6,7,8-HpCDF	50	< 0.01	< 0.01
1,2,3,4,7,8,9-HpCDF	50	< 0.01	< 0.4
OCDF	100	< 0.0003	< 0.02

e. Results Not Yet Available. The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. Certain analyses may require additional time to complete analytical processes and report results. In these cases, the Discharger shall describe the circumstances in the self-monitoring report and include the data for these parameters and relevant discussions of any violations in the next self-monitoring report due after the results are available.

f. Annual Self-Monitoring Reports. By the date specified in the MRP, the Discharger shall submit an annual self-monitoring report covering the previous calendar year. The report shall contain the following:

i. Comprehensive discussion of treatment plant performance, including documentation of any blending or other bypass events, and compliance with the permit. This discussion shall include any corrective actions taken or planned, such as changes to facility equipment or operation practices that may be needed to achieve compliance, and any other actions taken or planned that are intended to improve the performance and reliability of wastewater collection, treatment, or disposal practices;

ii. List of approved analyses, including the following:

(a) List of analyses for which the Discharger is certified;

(b) List of analyses performed for the Discharger by a separate certified laboratory (copies of reports signed by the laboratory director of that laboratory need not be submitted but shall be retained onsite); and

(c) List of "waived" analyses, as approved;

iii. Plan view drawing or map showing the Discharger's facility, flow routing, and sampling and observation station locations; and

iv. Results of facility report reviews. The Discharger shall regularly review, revise, and update, as necessary, the Operation and Maintenance Manual, Contingency Plan, Spill Prevention Plan, and Wastewater Facilities Status Report so these documents remain useful and relevant to current practices. At a minimum, reviews shall be conducted annually. The Discharger shall describe or summarize its review and evaluation procedures, recommended or planned actions, and estimated time schedule for implementing these actions. The Discharger shall complete changes to these documents to ensure that they remain up-to-date.

D. Compliance Schedules – Not supplemented

E. Twenty-Four Hour Reporting – Supplement to Attachment D, Provision V.E

1. Oil or Other Hazardous Material Spills

a. Within 24 hours of becoming aware of a spill of oil or other hazardous material not contained onsite and completely cleaned up, the Discharger shall report as follows:

i. If the spill exceeds reportable quantities for hazardous materials listed in 40 C.F.R. part 302. The Discharger shall call the California Office of Emergency Services (800-852-7550).

ii. If the spill does not exceed reportable quantities for hazardous materials listed in 40 C.F.R., part 302, the Discharger shall call the Regional Water Board (510-622-2369).

b. The Discharger shall submit a written report to the Regional Water Board within five working days following either of the above telephone notifications unless directed otherwise by Regional Water Board staff. A report submitted electronically is acceptable. The written report shall include the following:

i. Date and time of spill, and duration if known;

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

iii. Nature of material spilled;

iv. Quantity of material spilled;

v. Receiving water body affected, if any;

vi. Cause of spill;

vii. Estimated size of affected area;

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

ix. Corrective actions taken to contain, minimize, or clean up the spill;

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

xi. Persons or agencies notified.

2. Unauthorized Municipal Wastewater Treatment Plant Discharges[1]

a. Two-Hour Notification. For any unauthorized discharge that enters a drainage channel or surface water, the Discharger shall, as soon as possible, but not later than two hours after becoming aware of the discharge, notify the California Office of Emergency Services (800-852-7550) and the local health officer or director of environmental health with jurisdiction over the affected water body. Notification shall include the following:

i. Incident description and cause;

ii. Location of threatened or involved waterways or storm drains;

iii. Date and time that the unauthorized discharge started;

iv. Estimated quantity and duration of the unauthorized discharge (to the extent known), and estimated amount recovered;

v. Level of treatment prior to discharge (e.g., raw wastewater, primary-treated wastewater, or undisinfected secondary-treated wastewater); and

vi. Identity of person reporting the unauthorized discharge.

b. Five-Day Written Report. Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision V.E.2.a, above, the following:

i. Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;

ii. Efforts implemented to minimize public exposure to the unauthorized discharge;

iii. Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;

iv. Corrective measures taken to minimize the impact of the unauthorized discharge;

[1] California Code of Regulations, Title 23, section 2250(b), defines an unauthorized discharge to be a discharge, not regulated by waste discharge requirements, of treated, partially-treated, or untreated wastewater resulting from the intentional or unintentional diversion of wastewater from a collection, treatment, or disposal system.

v. Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;

vi. Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and

vii. Quantity and duration of the unauthorized discharge, and the amount recovered.

F. Planned Changes – Not supplemented

G. Anticipated Noncompliance – Not supplemented

H. Other Noncompliance – Not supplemented

I. Other Information – Not supplemented

VI. STANDARD PROVISION – ENFORCEMENT – Not Supplemented

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – Not Supplemented

VIII. DEFINITIONS – Addition to Attachment D

More definitions can be found in Attachment A of this NPDES Permit.

A. Arithmetic Calculations –

1. **Geometric Mean**. The antilog of the log mean or the back-transformed mean of the logarithmically transformed variables, which is equivalent to the multiplication of the antilogarithms. The geometric mean can be calculated with either of the following equations:

$$\text{Geometric Mean} = Anti\log\left(\frac{1}{N}\sum_{i=1}^{N} Log(C_i)\right)$$

Or

$$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_N)^{1/N}$$

Where "N" is the number of data points for the period analyzed and "C" is the concentration for each of the "N" data points.

2. **Mass Emission Rate.** The rate of discharge expressed in mass. The mass emission rate is obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.345}{N}\sum_{i=1}^{N} Q_i\, C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N}\sum_{i=1}^{N} Q_i C_i$$

In which "N" is the number of samples analyzed in any calendar day and "Q_i" and "C_i" are the flow rate (MGD) and the constituent concentration (mg/L) associated with each of the "N" grab samples that may be taken in any calendar day. If a composite sample is taken, "C_i" is the concentration measured in the composite sample and "Q_i" is the average flow rate occurring during the period over which the samples are composited. The daily concentration of a constituent measured over any calendar day shall be determined from the flow-weighted average of the same constituent in the combined waste streams as follows:

$$C_d = \text{Average daily concentration} = \frac{1}{Q_t}\sum_{i=1}^{N} Q_i C_i$$

In which "N" is the number of component waste streams and "Q" and "C" are the flow rate (MGD) and the constituent concentration (mg/L) associated with each of the "N" waste streams. "Q_t" is the total flow rate of the combined waste streams.

3. **Removal Efficiency.** The ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities (expressed as a percentage). The Discharger shall determine removal efficiencies using monthly averages (by calendar month unless otherwise specified) of pollutant concentration of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

$$\text{Removal Efficiency (\%)} = 100 \times [1\text{-(Effluent Concentration/Influent Concentration)}]$$

B. Blending – the practice of bypassing biological treatment units and recombining the bypass wastewater with biologically-treated wastewater.

C. Composite Sample – a sample composed of individual grab samples collected manually or by an automatic sampling device on the basis of time or flow as specified in the MRP. For flow-based composites, the proportion of each grab sample included in the composite sample shall be within plus or minus five percent (+/-5%) of the representative flow of the waste stream being measured at the time of grab sample collection. Alternatively, equal volume grab samples may be individually analyzed with the flow-weighted average calculated by averaging flow-weighted ratios of each grab sample analytical result. Grab samples comprising time-based composite samples shall be collected at intervals not greater than those specified in the MRP. The quantity of each grab sample comprising a time-based composite sample shall be a set of flow proportional volumes as specified in the MRP. If a particular time-based or flow-based composite sampling protocol is not specified in the MRP, the Discharger shall determine and implement the most representative protocol.

D. Duplicate Sample – a second sample taken from the same source and at the same time as an initial sample (such samples are typically analyzed identically to measure analytical variability).

E. Grab Sample – an individual sample collected during a short period not exceeding 15 minutes. Grab samples represent only the condition that exists at the time the sample is collected.

F. Overflow – the intentional or unintentional spilling or forcing out of untreated or partially-treated waste from a transport system (e.g., through manholes, at pump stations, or at collection points) upstream of the treatment plant headworks or from any part of a treatment plant.

G. Priority Pollutants – those constituents referred to in 40 C.F.R. part 122 as promulgated in the Federal Register, Vol. 65, No. 97, Thursday, May 18, 2000, also known as the California Toxics Rule.

H. Untreated waste – raw wastewater.

Table B

List of Monitoring Parameters, Analytical Methods, and Minimum Levels[1] (µg/L)

CTR No.	Pollutant/Parameter	Analytical Method[2]	GC	GCMS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGFAA	HYD RIDE	CVAA	DCP
1	Antimony	204.2	—	—	—	—	10	5	50	< 0.5	5	< 0.5	—	1,000
2	Arsenic	206.3	—	—	—	20	—	2	10	2	2	1	—	1,000
3	Beryllium		—	—	—	—	20	< 0.5	2	< 0.5	1	—	—	1,000
4	Cadmium	200 or 213	—	—	—	—	10	< 0.5	10	< 0.25	< 0.5	—	—	1,000
5a	Chromium (III)	SM 3500	—	—	—	—	—	—	—	—	—	—	—	—
5b	Chromium (VI)	SM 3500	—	—	—	10	5	—	—	—	—	—	—	1,000
	Chromium (total)[3]	SM 3500	—	—	—	—	50	2	10	< 0.5	1	—	—	1,000
6	Copper	20< 0.9	—	—	—	—	25	5	10	< 0.5	2	—	—	1,000
7	Lead	20< 0.9	—	—	—	—	20	5	5	< 0.5	2	—	—	10,000
8	Mercury	1631 (note)[4]	—	—	—	—	—	—	—	—	—	—	—	—
9	Nickel	249.2	—	—	—	—	50	5	20	1	5	—	—	1,000
10	Selenium	20< 0.8 or SM 3114B or C	—	—	—	—	—	5	10	2	5	1	—	1,000
11	Silver	272.2	—	—	—	—	10	1	10	< 0.25	2	—	—	1,000
12	Thallium	279.2	—	—	—	—	10	2	10	1	5	—	—	1,000
13	Zinc	200 or 289	—	—	—	—	20	—	20	1	10	—	—	—
14	Cyanide	SM 4500 CN^- C or I	—	—	—	5	—	—	—	—	—	—	—	—
15	Asbestos (only required for dischargers to MUN waters)[5]	010< 0.2 [6]	—	—	—	—	—	—	—	—	—	—	—	—
16	2,3,7,8-TCDD and 17 congeners (Dioxin)	1613	—	—	—	—	—	—	—	—	—	—	—	—
17	Acrolein	603	2.0	5	—	—	—	—	—	—	—	—	—	—
18	Acrylonitrile	603	2.0	2	—	—	—	—	—	—	—	—	—	—
19	Benzene	602	< 0.5	2	—	—	—	—	—	—	—	—	—	—
33	Ethylbenzene	602	< 0.5	2	—	—	—	—	—	—	—	—	—	—
39	Toluene	602	< 0.5	2	—	—	—	—	—	—	—	—	—	—
20	Bromoform	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
21	Carbon Tetrachloride	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
22	Chlorobenzene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
23	Chlorodibromomethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
24	Chloroethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
25	2-Chloroethylvinyl Ether	601	1	1	—	—	—	—	—	—	—	—	—	—
26	Chloroform	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
75	1,2-Dichlorobenzene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
76	1,3-Dichlorobenzene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—

[1] Minimum levels are from the *State Implementation Policy*. They are the concentration of the lowest calibration standard for that technique based on a survey of contract laboratories. Laboratory techniques are defined as follows: GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; LC = High Pressure Liquid Chromatography; Color = Colorimetric; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; ICP = Inductively Coupled Plasma; ICPMS = Inductively Coupled Plasma/Mass Spectrometry; SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., U.S. EPA 200.9); Hydride = Gaseous Hydride Atomic Absorption; CVAA = Cold Vapor Atomic Absorption; DCP = Direct Current Plasma.

[2] 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 that method has a level of quantification below the applicable water quality objective. Where no method is suggested, the Discharger has the discretion to use any standard method.

[3] Analysis for total chromium may be substituted for analysis of chromium (III) and chromium (VI) if the concentration measured is below the lowest hexavalent chromium criterion (11 ug/l).

[4] 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] MUN = Municipal and Domestic Supply. This designation, if applicable, is in the Findings of the permit.

[6] Determination of Asbestos Structures over 10 [micrometers] in Length in Drinking Water Using MCE Filters, U.S. EPA 600/R-94-134, June 1994.

CTR No.	Pollutant/Parameter	Analytical Method[2]	GC	GCMS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGFAA	HYD RIDE	CVAA	DCP
77	1,4-Dichlorobenzene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
27	Dichlorobromomethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
28	1,1-Dichloroethane	601	< 0.5	1	—	—	—	—	—	—	—	—	—	—
29	1,2-Dichloroethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
30	1,1-Dichloroethylene or 1,1-Dichloroethene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
31	1,2-Dichloropropane	601	< 0.5	1	—	—	—	—	—	—	—	—	—	—
32	1,3-Dichloropropylene or 1,3-Dichloropropene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
34	Methyl Bromide or Bromomethane	601	1.0	2	—	—	—	—	—	—	—	—	—	—
35	Methyl Chloride or Chloromethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
36	Methylene Chloride or Dichloromethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
37	1,1,2,2-Tetrachloroethane	601	< 0.5	1	—	—	—	—	—	—	—	—	—	—
38	Tetrachloroethylene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
40	1,2-Trans-Dichloroethylene	601	< 0.5	1	—	—	—	—	—	—	—	—	—	—
41	1,1,1-Trichloroethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
42	1,1,2-Trichloroethane	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
43	Trichloroethene	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
44	Vinyl Chloride	601	< 0.5	2	—	—	—	—	—	—	—	—	—	—
45	2-Chlorophenol	604	2	5	—	—	—	—	—	—	—	—	—	—
46	2,4-Dichlorophenol	604	1	5	—	—	—	—	—	—	—	—	—	—
47	2,4-Dimethylphenol	604	1	2	—	—	—	—	—	—	—	—	—	—
48	2-Methyl-4,6-Dinitrophenol or Dinitro-2-methylphenol	604	10	5	—	—	—	—	—	—	—	—	—	—
49	2,4-Dinitrophenol	604	5	5	—	—	—	—	—	—	—	—	—	—
50	2-Nitrophenol	604	—	10	—	—	—	—	—	—	—	—	—	—
51	4-Nitrophenol	604	5	10	—	—	—	—	—	—	—	—	—	—
52	3-Methyl-4-Chlorophenol	604	5	1	—	—	—	—	—	—	—	—	—	—
53	Pentachlorophenol	604	1	5	—	—	—	—	—	—	—	—	—	—
54	Phenol	604	1	1	—	50	—	—	—	—	—	—	—	—
55	2,4,6-Trichlorophenol	604	10	10	—	—	—	—	—	—	—	—	—	—
56	Acenaphthene	610 HPLC	1	1	< 0.5	—	—	—	—	—	—	—	—	—
57	Acenaphthylene	610 HPLC	—	10	< 0.2	—	—	—	—	—	—	—	—	—
58	Anthracene	610 HPLC	—	10	2	—	—	—	—	—	—	—	—	—
60	Benzo(a)Anthracene or 1,2 Benzanthracene	610 HPLC	10	5	—	—	—	—	—	—	—	—	—	—
61	Benzo(a)Pyrene	610 HPLC	—	10	2	—	—	—	—	—	—	—	—	—
62	Benzo(b)Fluoranthene or 3,4 Benzofluoranthene	610 HPLC	—	10	10	—	—	—	—	—	—	—	—	—
63	Benzo(ghi)Perylene	610 HPLC	—	5	< 0.1	—	—	—	—	—	—	—	—	—
64	Benzo(k)Fluoranthene	610 HPLC	—	10	2	—	—	—	—	—	—	—	—	—
74	Dibenzo(a,h)Anthracene	610 HPLC	—	10	< 0.1	—	—	—	—	—	—	—	—	—
86	Fluoranthene	610 HPLC	10	1	< 0.05	—	—	—	—	—	—	—	—	—
87	Fluorene	610 HPLC	—	10	< 0.1	—	—	—	—	—	—	—	—	—
92	Indeno(1,2,3-cd) Pyrene	610 HPLC	—	10	< 0.05	—	—	—	—	—	—	—	—	—
100	Pyrene	610 HPLC	—	10	< 0.05	—	—	—	—	—	—	—	—	—
68	Bis(2-Ethylhexyl)Phthalate	606 or 625	10	5	—	—	—	—	—	—	—	—	—	—
70	Butylbenzyl Phthalate	606 or 625	10	10	—	—	—	—	—	—	—	—	—	—
79	Diethyl Phthalate	606 or 625	10	2	—	—	—	—	—	—	—	—	—	—
80	Dimethyl Phthalate	606 or 625	10	2	—	—	—	—	—	—	—	—	—	—
81	Di-n-Butyl Phthalate	606 or 625	—	10	—	—	—	—	—	—	—	—	—	—
84	Di-n-Octyl Phthalate	606 or 625	—	10	—	—	—	—	—	—	—	—	—	—
59	Benzidine	625	—	5	—	—	—	—	—	—	—	—	—	—

CTR No.	Pollutant/Parameter	Analytical Method[2]	GC	GCMS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGFAA	HYD RIDE	CVAA	DCP
65	Bis(2-Chloroethoxy)Methane	625	—	5	—	—	—	—	—	—	—	—	—	—
66	Bis(2-Chloroethyl)Ether	625	10	1	—	—	—	—	—	—	—	—	—	—
67	Bis(2-Chloroisopropyl)Ether	625	10	2	—	—	—	—	—	—	—	—	—	—
69	4-Bromophenyl Phenyl Ether	625	10	5	—	—	—	—	—	—	—	—	—	—
71	2-Chloronaphthalene	625	—	10	—	—	—	—	—	—	—	—	—	—
72	4-Chlorophenyl Phenyl Ether	625	—	5	—	—	—	—	—	—	—	—	—	—
73	Chrysene	625	—	10	5	—	—	—	—	—	—	—	—	—
78	3,3'-Dichlorobenzidine	625	—	5	—	—	—	—	—	—	—	—	—	—
82	2,4-Dinitrotoluene	625	10	5	—	—	—	—	—	—	—	—	—	—
83	2,6-Dinitrotoluene	625	—	5	—	—	—	—	—	—	—	—	—	—
85	1,2-Diphenylhydrazine (note)[7]	625	—	1	—	—	—	—	—	—	—	—	—	—
88	Hexachlorobenzene	625	5	1	—	—	—	—	—	—	—	—	—	—
89	Hexachlorobutadiene	625	5	1	—	—	—	—	—	—	—	—	—	—
90	Hexachlorocyclopentadiene	625	5	5	—	—	—	—	—	—	—	—	—	—
91	Hexachloroethane	625	5	1	—	—	—	—	—	—	—	—	—	—
93	Isophorone	625	10	1	—	—	—	—	—	—	—	—	—	—
94	Naphthalene	625	10	1	< 0.2	—	—	—	—	—	—	—	—	—
95	Nitrobenzene	625	10	1	—	—	—	—	—	—	—	—	—	—
96	N-Nitrosodimethylamine	625	10	5	—	—	—	—	—	—	—	—	—	—
97	N-Nitrosodi-n-Propylamine	625	10	5	—	—	—	—	—	—	—	—	—	—
98	N-Nitrosodiphenylamine	625	10	1	—	—	—	—	—	—	—	—	—	—
99	Phenanthrene	625	—	5	< 0.05	—	—	—	—	—	—	—	—	—
101	1,2,4-Trichlorobenzene	625	1	5	—	—	—	—	—	—	—	—	—	—
102	Aldrin	608	< 0.005	—	—	—	—	—	—	—	—	—	—	—
103	α-BHC	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
104	β-BHC	608	< 0.005	—	—	—	—	—	—	—	—	—	—	—
105	γ-BHC (Lindane)	608	< 0.02	—	—	—	—	—	—	—	—	—	—	—
106	δ-BHC	608	< 0.005	—	—	—	—	—	—	—	—	—	—	—
107	Chlordane	608	< 0.1	—	—	—	—	—	—	—	—	—	—	—
108	4,4'-DDT	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
109	4,4'-DDE	608	< 0.05	—	—	—	—	—	—	—	—	—	—	—
110	4,4'-DDD	608	< 0.05	—	—	—	—	—	—	—	—	—	—	—
111	Dieldrin	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
112	Endosulfan (alpha)	608	< 0.02	—	—	—	—	—	—	—	—	—	—	—
113	Endosulfan (beta)	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
114	Endosulfan Sulfate	608	< 0.05	—	—	—	—	—	—	—	—	—	—	—
115	Endrin	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
116	Endrin Aldehyde	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
117	Heptachlor	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
118	Heptachlor Epoxide	608	< 0.01	—	—	—	—	—	—	—	—	—	—	—
119-125	PCBs: Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260	608	< 0.5	—	—	—	—	—	—	—	—	—	—	—
126	Toxaphene	608	< 0.5	—	—	—	—	—	—	—	—	—	—	—

[7] Measurement for 1,2-Diphenylhydrazine may use azobenzene as a screen: if azobenzene is measured at >1 ug/l, then the Discharger shall analyze for 1,2-Diphenylhydrazine.

ATTACHMENT S

STORMWATER PROVISIONS, MONITORING, AND REPORTING REQUIREMENTS

November 2017

Contents

STORMWATER PROVISIONS

APPLICABILITY

These stormwater provisions only apply to facilities that do not direct all stormwater flows from process areas to a wastewater treatment plant's headworks or do not enroll in NPDES Permit CAS000001 (General Permit for Stormwater Discharges Associated with Industrial Activities).

I. STANDARD PROVISIONS - PERMIT COMPLIANCE

A. Stormwater Pollution Prevention Plan (SWPPP). The Discharger shall prepare a SWPPP that includes the following elements:

1. Facility name and contact information;

2. Site map;

3. List of industrial materials;

4. Description of potential pollution sources;

5. Assessment of potential pollutant sources;

6. Minimum Best Management Practices (BMPs);

7. Advanced BMPs, if applicable;

8. Monitoring implementation plan;

9. Annual comprehensive facility compliance evaluation; and

10. Date SWPPP initially prepared and dates of each SWPPP amendment.

The SWPPP shall be designed in accordance with good engineering practices to achieve the following objectives:

- Identify and evaluate all pollutant sources that may affect stormwater discharge quality;
- Identify, assign, and implement control measures and management practices to reduce or prevent pollutants in stormwater discharges; and
- Identify and describe conditions or circumstances that may require revisions to the SWPPP.

The SWPPP shall be retained onsite, revised whenever necessary, and made available upon request of any Regional Water Board representative. The SWPPP may be combined with the Spill Prevention Plan (see Attachment G Provision I.C.2).

B. Site Map. The Discharger shall prepare one or more site maps that include notes, legends, a north arrow, and other data as appropriate to ensure the map is clear, legible and understandable, including the following:

1. The facility boundary, stormwater drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas (the maps shall include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and locations of nearby water bodies [e.g., rivers, lakes, wetlands] or municipal storm drain inlets that may receive the facility's industrial stormwater discharges and authorized non-stormwater discharges);

2. Locations of stormwater collection and conveyance systems, associated discharge locations, and direction of flow (the maps shall include sample locations if different than the discharge locations);

3. Locations and descriptions of structural control measures (e.g., catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers) that affect industrial stormwater discharges, authorized non-stormwater discharges, and run-on;

4. Identification of all impervious areas, including paved areas, buildings, covered storage areas, or other roofed structures;

5. Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks have occurred; and

6. Areas of industrial activity (the maps shall identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage and maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources).

C. List of Industrial Materials. The SWPPP shall contain a list of industrial materials handled at the facility and the locations where each material is stored, received, shipped, and handled, as well as the typical quantities and handling frequency.

D. Potential Pollutant Sources. The Discharger shall describe and assess potential stormwater pollutant sources, including the following:

1. **Industrial Processes.** Industrial processes may include manufacturing, cleaning, maintenance, recycling, and disposal. The SWPPP shall describe the type, characteristics, and approximate quantity of industrial materials used and areas protected by containment structures and the corresponding containment capacity.

2. **Material Handling and Storage Areas.** The SWPPP shall describe the type, characteristics, and quantity of industrial materials handled or stored; shipping, receiving, and loading procedures; spill and leak prevention and response procedures; and areas protected by containment structures and the corresponding containment capacity.

3. **Dust and Particulate Generating Activities.** The SWPPP shall describe the discharge locations, source type, and characteristics of the dust or particulate pollutant.

4. **Significant Spills and Leaks.** The Discharger shall evaluate the facility for areas where spills and leaks can occur. The SWPPP shall list any industrial materials spilled or leaked in significant quantities and discharged from the facility's stormwater conveyance system

within the previous five years, including but not limited to any chemicals identified in 40 C.F.R. section 302 as reported on U.S. EPA Form R and any oil and hazardous substances discharged in excess of reportable quantities (40 C.F.R. §§ 110, 117, and 302). The SWPPP shall also list any industrial materials spilled or leaked in significant quantities that had the potential to be discharged from the facility's stormwater conveyance system within the previous five years. For each listed industrial material spill and leak, the SWPPP shall include the location, characteristics, and approximate quantity of the material spilled or leaked; the approximate quantity of the material discharged; the cleanup or remedial actions taken or planned; the approximate quantity of remaining material that could be discharged; and the preventive measures taken to ensure that spills or leaks do not reoccur.

5. **Non-Stormwater Discharges.** The SWPPP shall describe all non-stormwater discharges, including the source, quantity, frequency, characteristics, and associated drainage area, and indicate whether these discharges are authorized or unauthorized.

6. **Erodible Surfaces.** The SWPPP shall describe any facility locations where soil erosion may be caused by industrial activity, contact with stormwater, authorized and unauthorized non-stormwater discharges, or run-on from areas surrounding the facility.

E. Assessment of Potential Pollutant Sources. The SWPPP shall include a narrative assessment of all areas of industrial activity with potential industrial pollutant sources, including, at a minimum, the following:

1. Facility areas with likely sources of pollutants;

2. Pollutants likely to be present in industrial stormwater discharges;

3. Approximate quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each industrial material handled, produced, stored, recycled, or disposed;

4. Degree to which the pollutants associated with such materials may be exposed to, and mobilized by, contact with stormwater;

5. Direct and indirect pathways by which pollutants may be exposed to stormwater;

6. Sampling, visual observation, and inspection records;

7. Effectiveness of existing BMPs to reduce or prevent pollutants in industrial stormwater discharges; and

8. Estimated effectiveness of implementing, to the extent feasible, minimum BMPs to reduce or prevent pollutants in industrial stormwater discharges.

Based upon the assessment, the SWPPP shall identify facility areas where the minimum BMPs described in Provision I.F, below, will not adequately reduce or prevent pollutants in stormwater discharges and any necessary advanced BMPs, as described in Provision I.G, below, for those areas.

F. Minimum Best Management Practices (BMPs). The Discharger shall, to the extent feasible, implement and maintain the following BMPs:

1. **Good Housekeeping.** The Discharger shall do the following:

   a. Observe all outdoor areas associated with industrial activity, including stormwater discharge locations, drainage areas, conveyance systems, waste handling and disposal areas, and perimeter areas affected by off-facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly;

   b. Minimize or prevent material tracking;

   c. Minimize dust generated from industrial materials or activities;

   d. Ensure that all facility areas impacted by rinse or wash waters are cleaned as soon as possible;

   e. Cover all stored industrial materials that can be readily mobilized by contact with stormwater;

   f. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;

   g. Prevent disposal of any rinse or wash waters or industrial materials into the stormwater conveyance system;

   h. Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking areas) that contact industrial areas of the facility; and,

   i. Minimize authorized non-stormwater discharges from non-industrial areas (e.g., potable water, fire hydrant testing) that contact areas of the sanitary or industrial facility.

2. **Preventative Maintenance.** The Discharger shall (1) identify all equipment and systems used outdoors that may spill or leak pollutants, (2) observe the identified equipment and systems to detect leaks or identify conditions that may result in the development of leaks, (3) establish an appropriate schedule for maintenance of identified equipment and systems, and (4) establish procedures for prompt maintenance and repair of equipment and maintenance of systems when conditions exist that may result in the development of spills or leaks.

3. **Spill and Leak Prevention and Response.** The Discharger shall (1) establish procedures and controls to minimize spills and leaks; (2) develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system (spilled or leaked industrial materials shall be cleaned promptly and disposed of properly); (3) identify and describe all necessary and appropriate spill and leak response equipment, locations of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and (4) identify and train appropriate spill and leak response personnel.

4. **Material Handling and Waste Management.** The Discharger shall do the following:
   - **a.** Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm;
   - **b.** Contain all stored non-solid industrial materials or wastes (e.g., particulates, powers, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;
   - **c.** Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
   - **d.** Divert run-on and stormwater generated from within the facility away from all stockpiled materials;
   - **e.** Clean all spills of industrial materials or wastes that occur during handling in accordance with spill response procedures; and,
   - **f.** Observe and clean, as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.
5. **Erosion and Sediment Control.** The Discharger shall (1) implement effective wind erosion controls; (2) provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storms; (3) maintain effective perimeter controls and stabilize site entrances and exits to sufficiently control discharges of erodible materials; and (4) divert run-on and stormwater generated from within the facility away from erodible materials.
6. **Employee Training.** The Discharger shall ensure that all personnel implementing the SWPPP are properly trained with respect to BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. The Discharger shall identify which personnel need to be trained, their responsibilities, and the type of training they are to receive and maintain documentation of completed training and the personnel that received the training with the SWPPP.
7. **Quality Assurance and Record Keeping.** The Discharger shall (1) develop and implement management procedures to ensure that appropriate personnel implement all SWPPP elements; (2) develop methods of tracking and recording BMP implementation; and (3) maintain BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five years.

G. Action Levels and Advanced BMPs. If the Discharger samples total suspended solids (TSS), oil and grease, or pH in excess of an action level in Table A, the Discharger shall review the SWPPP to identify appropriate modifications to existing BMPs or additional BMPs as necessary to reduce pollutant discharge concentrations to levels below the action level. The Discharger shall revise the SWPPP accordingly before the next storm, if possible, or as soon as practical, and in no event later than three months following the exceedance.

Table A

Stormwater Action Levels

Parameter	Unit	Instantaneous Action Level	Annual Action Level
Total Suspended Solids	mg/L	400	100
Oil & Grease	mg/L	25	15
pH	standard units	6.0-9.0 [1]	—

Footnote:
[1] Values below or above this range require action.

If, upon subsequent monitoring, the pollutants measured in Table A continue to exceed their respective action levels, the Discharger shall further evaluate its BMPs and update its SWPPP accordingly to include advanced BMPs in addition to the minimum BMPs described in Provision I.F, above. The Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified pursuant to Provision I.E.8, above, as necessary to reduce or prevent discharges of pollutants in stormwater discharges in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. Advanced BMPs may include one or more of the following:

1. **Exposure Minimization BMPs**. These include storm resistant shelters (either permanent or temporary) that prevent the contact of stormwater with identified industrial materials.

2. **Stormwater Containment and Discharge Reduction BMPs.** These include BMPs that divert, infiltrate, reuse, contain, retain, or reduce the volume of stormwater runoff.

3. **Treatment Control BMPs.** These include mechanical, chemical, biologic, or any other treatment technology that will meet the treatment design standard.

H. BMP Descriptions. The SWPPP shall identify each BMP being implemented at the facility, including the following:

1. The pollutants the BMP is designed to reduce or prevent;

2. The frequency, times of day, or conditions when the BMP is scheduled for implementation;

3. The locations within each area of industrial activity or industrial pollutant source where the BMP shall be implemented;

4. The individual responsible for implementing the BMP;

5. The procedures, including maintenance procedures, and instructions to implement the BMP effectively; and

6. The equipment and tools necessary to implement the BMP effectively.

I. Annual Comprehensive Facility Compliance Evaluation. The Discharger shall conduct one annual facility evaluation for each reporting year (July 1 to June 30). If the Discharger conducts an annual evaluation fewer than 8 months, or more than 16 months, after it conducts the previous annual evaluation, it shall document the justification for doing so. The Discharger shall revise the

SWPPP, as appropriate, and implement the revisions within 90 days of the annual evaluation. At a minimum, the annual evaluations shall consist of the following:

1. A review of all sampling, visual observation, and inspection records conducted during the previous reporting year;

2. An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the stormwater conveyance system;

3. An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials;

4. An inspection of equipment needed to implement the BMPs; and

5. An assessment of any other factors needed to comply with the requirements of the Annual Stormwater Report (see Provision III.A, below).

II. STANDARD PROVISIONS – MONITORING

A. Visual Observations

1. Monthly Visual Observations

a. At least once per month, the Discharger shall visually observe each drainage area for the following:

i. The presence or indication of prior, current, or potential unauthorized non-stormwater discharges and their sources;

ii. Authorized non-stormwater discharges, sources, and associated BMPs; and

iii. Outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential sources of industrial pollutants.

b. The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and on days without precipitation.

c. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted monthly visual observations (see Provision III.A, below).

2. Sampling Event Visual Observations. Sampling event visual observations shall be conducted at the same time sampling occurs at a discharge location. At each discharge location where a sample is obtained, the Discharger shall observe the discharge of stormwater associated with industrial activity.

a. The Discharger shall ensure that visual observations of stormwater discharged from containment sources (e.g., secondary containment or storage ponds) are conducted at the time that the discharge is sampled.

b. If the Discharger employs volume-based or flow-based treatment BMPs, it shall sample any bypass that occurs while the visual observations and sampling of stormwater discharges are conducted.

c. The Discharger shall visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and sources of any discharged pollutants.

d. If a discharge location is not visually observed during the sampling event, the Discharger shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.

e. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted sampling event visual observations (see Provision III.A, below).

3. **Visual Observation Records.** The Discharger shall maintain records of all visual observations. Records shall include the date, approximate time, locations observed, presence and probable source of any observed pollutants, name of persons who conducted the observations, and any response actions and/or additional SWPPP revisions necessary in response to the visual observations.

4. **SWPPP Revisions.** The Discharger shall revise its BMPs as necessary when the visual observations indicate pollutant sources have not been adequately addressed.

B. Sampling and Analysis

1. The Discharger shall collect and analyze stormwater samples as specified in the MRP.

2. Samples shall be (i) representative of stormwater associated with industrial activities and any commingled authorized non-stormwater dischargers; or (ii) associated with the discharge of contained stormwater.

3. On a facility-specific basis, the Discharger shall also analyze additional parameters that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment. These additional parameters may be modified (added or removed) in accordance with any updated SWPPP pollutant source assessment.

III. STANDARD PROVISIONS – REPORTING

A. Annual Stormwater Report. The results of the Discharger's Annual Comprehensive Facility Compliance Evaluation shall be reported in the Annual Stormwater Report to the Regional Water Board no later than July 30. The Discharger shall include in the Annual Stormwater Report the following:

1. A compliance checklist that indicates whether the Discharger has complied with or addressed all applicable requirements of the SWPPP;

2. An explanation for any non-compliance requirements within the reporting year, as indicated in the compliance checklist;

3. An identification, including page numbers and sections, of all revisions made to the SWPPP within the reporting year; and

4. The date(s) of the annual evaluation.

IV. DEFINITIONS

A. **Authorized Non-Stormwater Discharges –** Non-stormwater discharges are authorized if they meet the following conditions:

1. Fire-hydrant and fire prevention or response system flushing;

2. Potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems;

3. Drinking fountain water and atmospheric condensate, including refrigeration, air conditioning, and compressor condensate;

4. Irrigation drainage and landscape watering, provided that all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's labels;

5. Uncontaminated natural springs, groundwater, foundation drainage, footing drainage;

6. Seawater infiltration where the seawater is discharged back into the source; or,

7. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from cooling towers (e.g., "piped" cooling tower blowdown or drains).

B. **Stormwater –** stormwater runoff, snow melt runoff, and surface runoff and drainage, excluding infiltration and runoff from agricultural land.