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

ORDER R2-2024-XXXX
NPDES PERMIT CA0029947

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

Discharger	**Browning-Ferris Industries of California, Inc.**
Name of Facility	**Corinda Los Trancos (Ox Mountain) Landfill**
Facility Address	**12310 San Mateo Road** **Half Moon Bay, CA 94019** **San Mateo County**

Table 1. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North-South)	Discharge Point Longitude (East-West)	Receiving Water
001	Treated Groundwater and Stormwater	37.492778?	-122.411667?	Corinda Los Trancos Creek

This Order was adopted on:	**March 13, 2024**
This Order shall become effective on:	**May 1, 2024**
This Order shall expire on:	**April 30, 2029**
CIWQS regulatory measure number:	**453437**

The Discharger shall file a Report of Waste Discharge as an application for updated WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than **August 3, 2028.** The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) have classified this discharge as "**minor**."

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

Eileen White, Executive Officer

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TABLES

ATTACHMENTS

1. FACILITY INFORMATION

Information describing the Corinda Los Trancos (Ox Mountain) Landfill (Facility) is summarized on the cover page and in Fact Sheet (Attachment F) sections 1 and 2. Fact Sheet section 1 also includes information regarding the permit application.

2. FINDINGS

The Regional Water Board finds the following:

2.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States as described in Table 1 subject to the WDRs in this Order.

2.2. 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 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.

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

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

THEREFORE, IT IS HEREBY ORDERED that Order R2-2018-0048 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Water Code division 7 (commencing with § 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, 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 violations of the previous order.

3. DISCHARGE PROHIBITIONS

3.1. Discharge of treated or partially-treated groundwater at a location or in a manner different from that described in this Order is prohibited.

3.2. Bypass of untreated or partially-treated wastewater to waters of the United States is prohibited, except as provided for in Attachment D section 1.7.

3.3. Discharge of treated groundwater greater than 115,200 gallons per day (gpd) is prohibited, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

4. EFFLUENT LIMITATIONS

4.1. Effluent Limitations. The discharge at Discharge Point 001 shall meet the following effluent limitations, with compliance measured at Monitoring Location EFF-001, as described in the MRP, Attachment E:

Table 2. Effluent Limitations

Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C) (BOD_5)	mg/L	37	140	-	-
Total Suspended Solids (TSS)	mg/L	27	88	-	-
Oil and Grease	mg/L	10	20	-	-
pH [1]	standard units	-	-	6.5	8.5
Arsenic, Total Recoverable	µg/L	19	38	-	-
Barium, Total Recoverable	µg/L	3.0	6.0	-	-
Copper, Total Recoverable	µg/L	19	38	-	-
Selenium, Total Recoverable	µg/L	4.1	8.2	-	-
Cyanide, Total	µg/L	4.3	5.2	-	-
Benzene	µg/L	-	0.50	-	-
Chlorodibromomethane	µg/L	0.40	0.80	-	-
Chloroform	µg/L	0.19	0.38	-	-
Dichlorobromomethane	µg/L	0.56	1.1	-	-
Vinyl Chloride	µg/L	-	0.50	-	-
Ammonia, Total	mg/L as N	13	35	-	-
Chlorine, Total Residual	mg/L	-	-	-	0.0

Footnote:

[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. section 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.

5. RECEIVING WATER LIMITATIONS

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

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

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

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

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

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

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

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

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

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

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

5.2.1. Dissolved Oxygen 5.0 mg/L, minimum

		The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent 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.
5.2.2.	Dissolved Sulfide	Natural background levels
5.2.3.	pH	The pH shall not be depressed below 6.5 nor raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.
5.2.4.	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.

5.3. The discharge shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board or 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.

6. PROVISIONS

6.1. Standard Provisions

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

6.1.2. The Discharger shall comply with all applicable provisions of the “Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits” in Attachment G.

6.1.3. The Discharger shall comply with all applicable provisions of “Stormwater Provisions, Monitoring, and Reporting Requirements” (Attachment S). By August 1, 2024, the Discharger shall submit an updated Stormwater Pollution Prevention Plan that includes all of the elements listed in Attachment S.

6.1.4. If there is any conflict, duplication, or overlap between provisions in this Order, the more stringent provision shall apply.

6.2. Monitoring and Reporting Provisions

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

6.3. Special Provisions

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

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

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

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

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

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

6.3.2. **Effluent Characterization Study and Report**

6.3.2.1. **Study Elements.** The Discharger shall characterize and evaluate the discharge from Discharge Point 001 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. 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 internal 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 exceedance of applicable water quality objectives. This requirement may be satisfied through identification of the constituent as a "pollutant of concern" in the Discharger's Pollutant Minimization Program, described in Provision 6.3.3.

6.3.2.2. **Reporting Requirements**. The Discharger shall summarize the data evaluation and any applicable source investigation in the annual self-monitoring report associated with the year in which samples were collected. The Discharger shall also report the pollutants detected at or above applicable water quality objectives (see Fact Sheet Table F-7 for the objectives) in the report's transmittal letter. This requirement does not apply to pollutants with effluent limitations (see Table 2 of this Order).

6.3.3. **Pollutant Minimization Program**

6.3.3.1. The Discharger shall continue to improve its existing Pollutant Minimization Program to promote minimization of pollutant loadings to the treatment plant and therefore to the receiving waters.

6.3.3.2. The Discharger shall submit an annual report no later than **February 28** of each calendar year. Each annual report shall include at least the following information:

6.3.3.2.1. **Brief description of treatment plant.** The description shall include the service area and treatment plant processes.

6.3.3.2.2. **Discussion of current pollutants of concern.** Periodically, the Discharger shall analyze its circumstances to determine which pollutants are currently a problem and which pollutants may be potential future problems. This discussion shall include the reasons for choosing the pollutants.

6.3.3.2.3. **Identification of sources for pollutants of concern.** This discussion shall include how the Discharger intends to estimate and identify pollutant sources. The Discharger shall include sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.

6.3.3.2.4. **Identification of tasks to reduce the sources of pollutants of concern.** This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement the tasks by itself or participate in group, regional, or national tasks that address its pollutants of concern. The Discharger is strongly encouraged to participate in group, regional, or national tasks that address its

pollutants of concern whenever it is efficient and appropriate to do so. An implementation timeline shall be included for each task.

6.3.3.2.5. **Outreach to employees.** The Discharger shall inform employees about the pollutants of concern, potential sources, and how they might be able to help reduce the discharge of these pollutants of concern into the Facility. The Discharger may provide a forum for employees to provide input.

6.3.3.2.6. **Discussion of criteria used to measure Pollutant Minimization Program and task effectiveness.** The Discharger shall establish criteria to evaluate the effectiveness of its Pollutant Minimization Program. This discussion shall identify the specific criteria used to measure the effectiveness of each task in Provisions 6.3.3.2.3, 6.3.3.2.4, and 6.3.3.2.5.

6.3.3.2.7. **Documentation of efforts and progress.** This discussion shall detail all the Discharger's Pollutant Minimization Program activities during the reporting year.

6.3.3.2.8. **Evaluation of Pollutant Minimization Program and task effectiveness.** The Discharger shall use the criteria established in Provision 6.3.3.2.7 to evaluate the program and task effectiveness.

6.3.3.2.9. **Identification of specific tasks and timelines for future efforts.** Based on the evaluation, the Discharger shall explain how it intends to continue or change its tasks to more effectively reduce the amount of pollutants flowing to the treatment plant, and subsequently in its effluent.

6.3.3.3. The Discharger shall develop and conduct a Pollutant Minimization Program as 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 aquatic toxicity, health advisories for fish consumption, or results of benthic or aquatic organism tissue sampling) and either:

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

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

6.3.3.4. If triggered for a reason set forth in Provision 6.3.3.3, above, the Discharger's Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals:

6.3.3.4.1. An 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;

6.3.3.4.2. Quarterly monitoring for the reportable priority pollutants in the influent to the wastewater treatment system. The Executive Officer may approve alternative measures when influent monitoring is unlikely to produce useful analytical data;

6.3.3.4.3. 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;

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

6.3.3.4.5. Inclusion of the following specific items within the annual report required by Provision 6.3.3.2, above:

6.3.3.4.5.1. All Pollutant Minimization Program monitoring results for the previous year;

6.3.3.4.5.2. List of potential sources of the reportable priority pollutants;

6.3.3.4.5.3. Summary of all actions undertaken pursuant to the control strategy; and

6.3.3.4.5.4. Description of actions to be taken in the following year.

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

Alternative Hypothesis
Statement used to propose a statistically significant relationship in a set of given observations. Under the TST approach, when the Null Hypothesis is rejected, the Alternative Hypothesis is accepted in its place, indicating a relationship between variables and an acceptable level of toxicity.

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

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

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

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

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

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

Calendar Month(s)
Period from the first day of a month through the last day of a month (e.g., January 1 to January 31). For toxicity monitoring, the period is from the first day of a routine monitoring test to the day before the corresponding day of the next month (e.g., from June 15 to July 14), or to the last day of the next month if there is no corresponding day (e.g., January 31 to February 28).

Carcinogenic
Known to cause cancer in living organisms.

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

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

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

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

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

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

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

Effective Concentration (EC)
The EC is a point estimate of the toxicant concentration that would cause an adverse effect on a quantal, "all or nothing," response (such as death, immobilization, or serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as probit, logit, and Spearman-Karber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

Enclosed Bays
Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest

distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

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

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

Inhibition Concentration (IC)
The IC is a point estimate of the toxicant concentration that would cause a given percent reduction in a nonlethal, nonquantal biological measurement, such as growth. For example, an IC25 is the estimated concentration of toxicant that would cause a 25 percent reduction in average young per female or growth. IC values may be calculated using a linear interpolation method such as U.S. EPA's Bootstrap Procedure.

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

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

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

Instream Waste Concentration (IWC)
Concentration of effluent in the receiving water after any dilution credit is applied. The IWC is the inverse of 1 plus the dilution credit, D, or IWC = 1/(1+D), expressed as a percentage (e.g., if D = 9, the IWC is 10 percent). If no dilution credit is granted, the IWC is 100 percent.

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 toxicity, the MDEL is based on the outcome of the TST and the percent effect at the IWC (applied to the results of any single bioassay). 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.

Maximum Daily Effluent Target (MDET)
Target based on a single independent toxicity test using the TST used to determine whether a TRE should be conducted. Not meeting the MDET is not a violation of an effluent limitation. The MDET only applies to discharges with no numeric toxicity limits.

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

Median Monthly Effluent Limitation (MMEL)
Highest allowable median of daily discharges over a calendar month, calculated as the median of all daily discharges measured during a calendar month. For aquatic toxicity, the MMEL is an effluent limitation based on a maximum of three independent toxicity tests analyzed using the TST during a calendar month.

Median Monthly Effluent Target (MMET)
Target based on a maximum of three independent toxicity tests using the TST during a calendar month used to determine whether a TRE should be conducted. Not meeting a MMET is not a violation of an effluent limitation.

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

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

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

MMEL Compliance Test
For chronic toxicity monitoring, one of up to two tests used in addition to a routine monitoring test to determine compliance with the chronic toxicity MMEL and MDEL.

MMET Test
For chronic toxicity monitoring, one of up to two tests used in addition to a routine monitoring test to evaluate if the discharge meets the chronic toxicity MMET and MDET.

No Observed Effect Concentration (NOEC)
The NOEC is the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation. It is determined using hypothesis testing.

No Observed Effect level (NOEL)
For compliance determination, the NOEL is equal to IC25 or EC25. If the IC25 or EC25 cannot be statistically determined, the NOEL shall be equal to the NOEC derived using hypothesis testing.

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

Null Hypothesis
Statement used in statistical testing that has been put forward either because it is believed to be true or because it is to be used as a basis for argument, but has not been proved.

Percent Effect
Value that denotes the difference in response between a test concentration and a control, divided by the mean control response and multiplied by 100.

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

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

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

Regulatory Management Decision (RMD)
Decision that represents the maximum allowable error rates and thresholds for toxicity and non-toxicity that would result in an acceptable risk to aquatic life.

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

Response
Measured biological effect (e.g., on survival, reproduction, growth) of exposure to a stimulus.

Routine Monitoring
Regular chronic toxicity monitoring required during the permit term. Routine monitoring results may trigger MMEL compliance tests or MMET tests. If a violation of the MDEL or MMEL occurs, or if the discharge does not meet the MDET or MMET, routine monitoring also includes one sample collected during the following month (regardless of the regular monitoring frequency), which is used to determine if a TRE is necessary. Routine monitoring does not include surveillance monitoring.

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

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

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

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

Surveillance Monitoring
Chronic toxicity monitoring performed using the most sensitive species at an effluent concentration at least double the IWC. Surveillance monitoring results are not for assessing compliance with the chronic toxicity MMEL or MDEL.

Test of Significant Toxicity (TST)
Statistical approach used to analyze aquatic toxicity test data, as described in section III.B.3 of State Water Board's *State Policy for Water Quality Control: Toxicity Provisions*.

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.

ABBREVIATIONS

°F	degrees Fahrenheit
°C	degrees Celsius
%	Percent
µg/L	Micrograms per liter
µS/cm	Microsiemens per centimeter
1/Blending Event	Once per blending event
1/Discharge	Once per discharge
1/Day	Once per day
1/Month	Once per month
1/Quarter	Once per quarter
1/Week	Once per week
1/Year	Once per year
2/Month	Two times per month
2/Week	Twice per week

2/Year	Twice per year
3/Week	Three times per week
4/Week	Four times per week
5/Week	Five times per week
AMEL	Average monthly effluent limitation
AWEL	Average weekly effluent limitation
B	Background concentration
C	Water quality criterion or objective
C-24	24-hour composite
CFU/100 mL	Colony forming units per 100 milliliters
CIWQS	California Integrated Water Quality System
Continuous	Measured continuously
Continuous/D	Measured continuously, and recorded and reported daily
Continuous/H	Measured continuously, and recorded and reported hourly
CTR	California Toxics Rule
CV	Coefficient of Variation
DMR	Discharge Monitoring Report
DNQ	Detected, but not quantified
DL	Detection level
ECA	Effluent Concentration Allowance
gpd	Gallons per day
Grab	Grab sample
IWC	Instream Waste Concentration
MDEL	Maximum Daily Effluent Limitation
MDET	Maximum Daily Effluent Target
MDL	Method detection limit
MEC	Maximum effluent concentration
MG	Million gallons
mg/L	Milligrams per liter
mg/L as N	Milligrams per liter as nitrogen
MGD	Million gallons per day
ML	Minimum level

MMEL	Median Monthly Effluent Limitation
MMET	Median Monthly Effluent Target
MPN/100 mL	Most probable number per 100 milliliters
MRP	Monitoring and Reporting Program (Attachment E)
ND	Not detected
NTR	National Toxics Rule
NTU	Nephelometric turbidity units
pg/L	Picograms per liter
ppt	Parts per thousand
RL	Reporting level
RPA	Reasonable potential analysis
SIP	*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy)
SMR	Self-Monitoring Report
s.u.	Standard pH units
TIE	Toxicity identification evaluation
TRE	Toxicity reduction evaluation
TST	Test of Significant Toxicity
TUa	Acute toxicity units
TUc	Chronic toxicity units
WDRs	Waste discharge requirements
WQBEL	Water quality-based effluent limitation

ATTACHMENT B – MAPS

Figure B-1. Facility Location

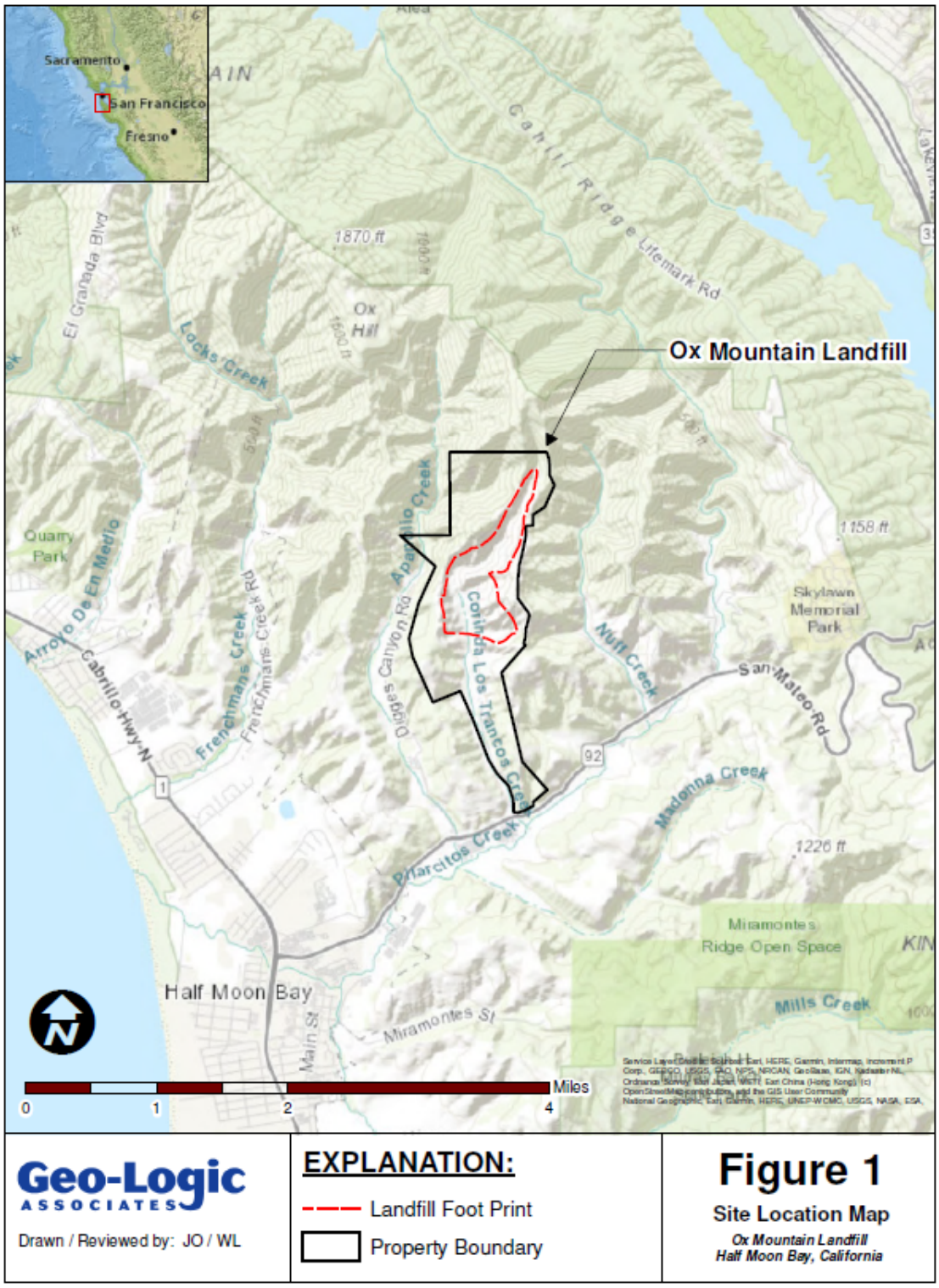
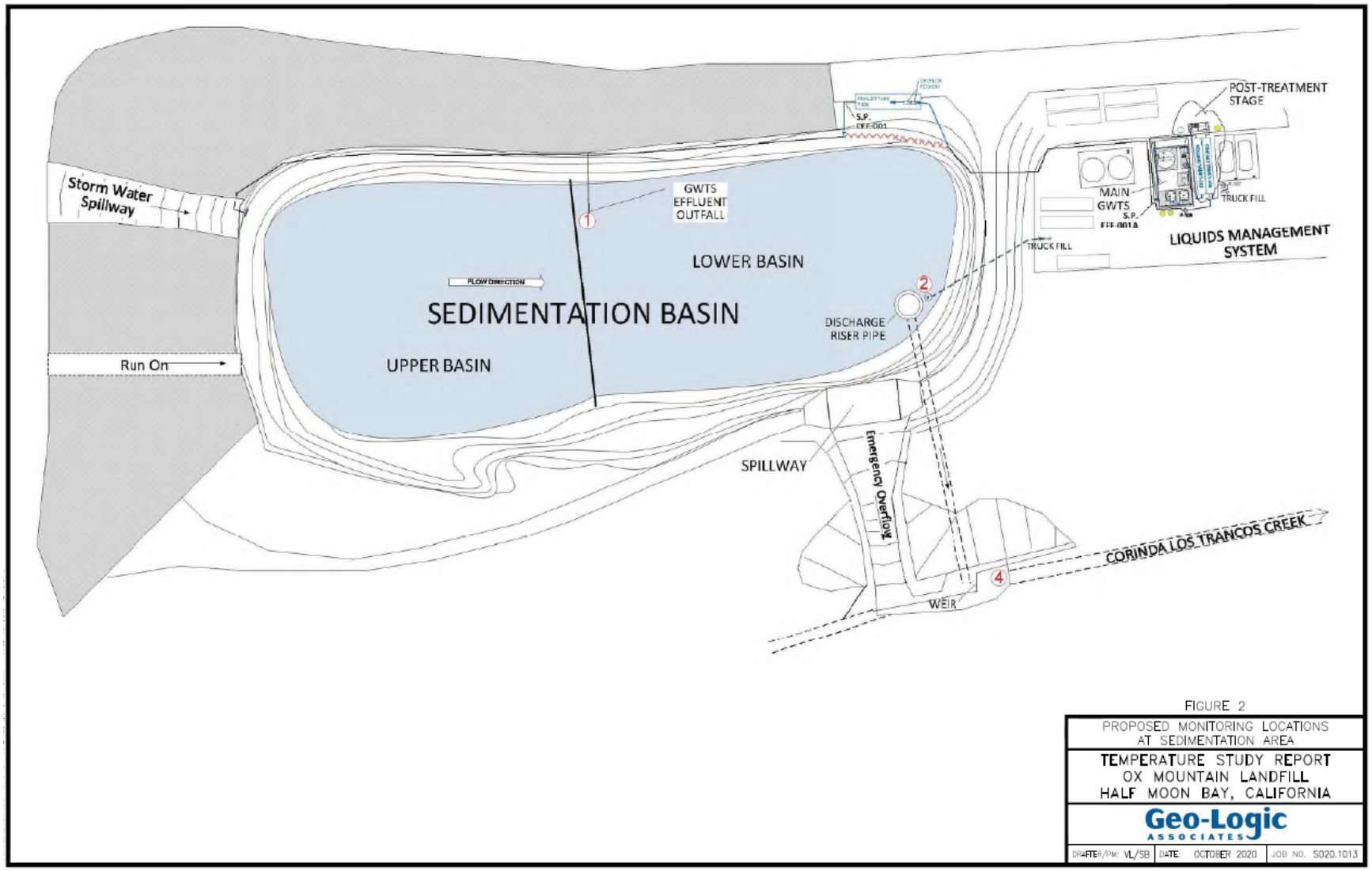
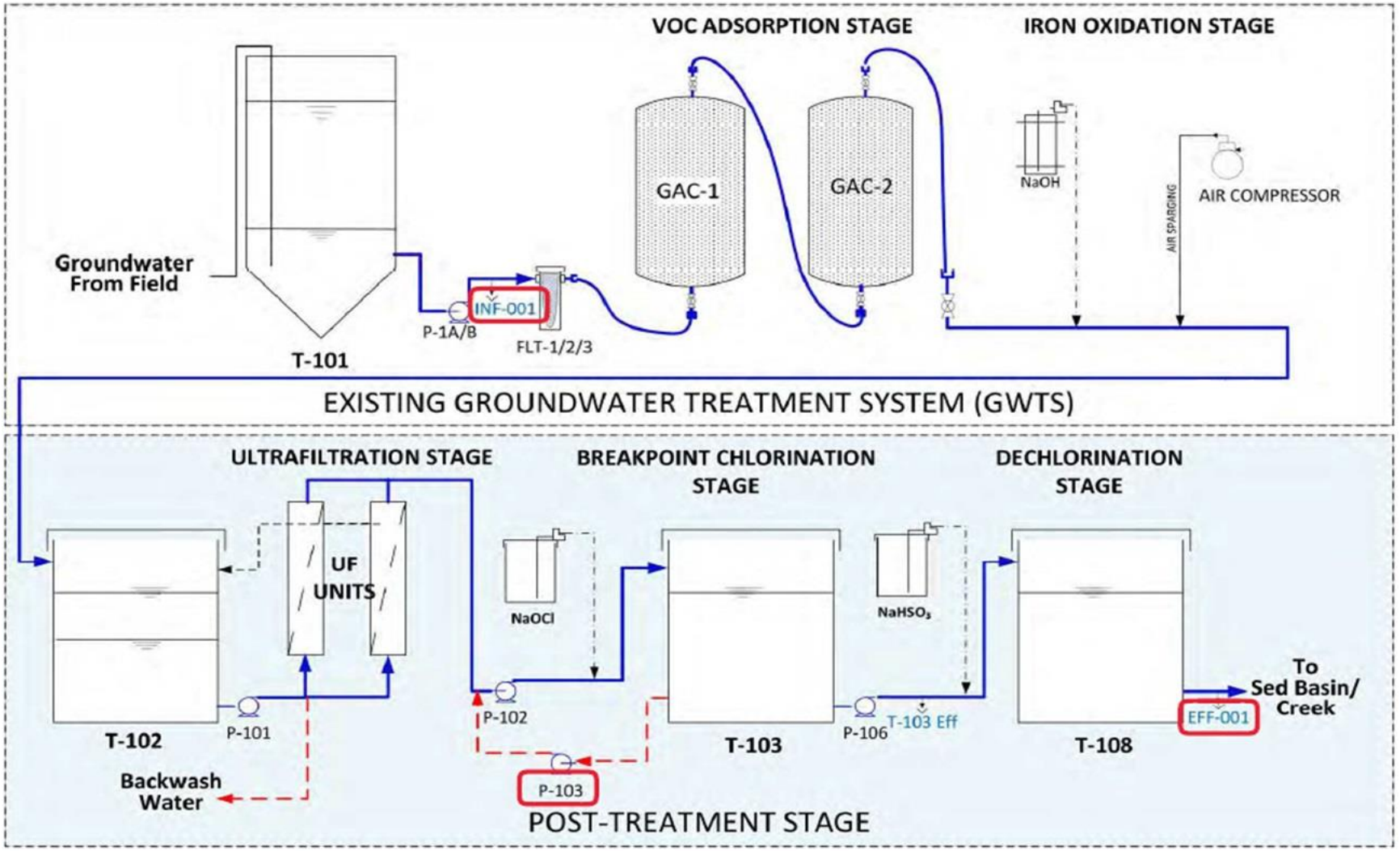


Figure B-2. Facility Plan View



ATTACHMENT C – PROCESS FLOW DIAGRAM

Figure C-1. Process Flow Diagram



ATTACHMENT D – STANDARD PROVISIONS

CONTENTS

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

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

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

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

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

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

1.5. Property Rights

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

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

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

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

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

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

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

1.7. Bypass

1.7.1. **Definitions**

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

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

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

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

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

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

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

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

1.7.5. **Notice**

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

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

1.8. Upset. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error,

improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

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

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

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

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

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

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

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

2. STANDARD PROVISIONS – PERMIT ACTION

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

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

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

3. STANDARD PROVISIONS – MONITORING

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

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

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

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

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

4. STANDARD PROVISIONS – RECORDS

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

4.2. Records of monitoring information shall include:

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

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

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

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

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

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

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

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

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

5. STANDARD PROVISIONS – REPORTING

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

5.2. Signatory and Certification Requirements

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

5.2.2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the

manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

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

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

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

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

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

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

5.2.4. If an authorization under Standard Provisions – Reporting section 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting section 5.2.3 above must be

submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

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

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

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

5.3. Monitoring Reports

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

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

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

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

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

5.5. Twenty-Four Hour Reporting

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

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 section 5.10. 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).)

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

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

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

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

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

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

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

5.7. Anticipated Noncompliance. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

5.8. Other Noncompliance. The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting sections 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting section 5.5 above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting section 5.5 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).)

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

5.10. Initial Recipient for Electronic Reporting Data. The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. § 7.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. § 127.2(c)]. U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

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

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

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

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

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

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

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

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

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

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

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

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

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

7.2 Publicly Owned Treatment Works (POTWs)

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

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

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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

1. GENERAL MONITORING PROVISIONS

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

1.2. The Discharger shall conduct all monitoring in accordance with Attachment D section 3, 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.

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

1.4. The Discharger shall ensure that the 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

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Locations

Monitoring Location Type	Monitoring Location Name	Monitoring Location Description
Influent	INF-001	A point in the groundwater collection system immediately prior to treatment.
Effluent	EFF-001	A point after dechlorination and prior to the sedimentation basin at which all waste tributary to the sedimentation basin is present.
Stormwater	EFF-002	A point in the sedimentation basin at which all waste tributary to Discharge Point 001 is present.
Receiving Water	RSW-001	A point in Corinda Los Trancos Creek or its source upstream of the landfill and prior to its diversion to the sedimentation basin riser pipe. For flow, this location may be after diversion to the sedimentation basin but prior to the sedimentation basin riser pipe.
Receiving Water	RSW-002	A point in Corinda Los Trancos Creek approximately 200 feet downstream from the outlet of the discharge culvert to Corinda Los Trancos Creek (i.e., approximately 400 feet downstream from Discharge Point 001).
Receiving Water	RSW-003	A point in Pilarcitos Creek between 100 feet and 200 feet downstream from the confluence of Corinda Los Trancos Creek and Pilarcitos Creek.

3. INFLUENT MONITORING

The Discharger shall monitor treatment plant influent at Monitoring Location INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Total Suspended Solids (TSS)	mg/L	Grab	2/Year
Oil and Grease	mg/L	Grab	2/Year
pH [1]	standard units	Grab	2/Year
Nitrite	mg/L as N	Grab	2/Year
Nitrate	mg/L as N	Grab	2/Year
Arsenic, Total Recoverable	µg/L	Grab	2/Year
Barium, Total Recoverable	µg/L	Grab	2/Year
Copper, Total Recoverable	µg/L	Grab	2/Year
Selenium, Total Recoverable	µg/L	Grab	Once
Cyanide, Total [2]	µg/L	Grab	2/Year

Chlorodibromomethane	µg/L	Grab	2/Year
Chloroform	µg/L	Grab	2/Year
Dichlorobromomethane	µg/L	Grab	2/Year
Ammonia, Total [3]	mg/L as N	Grab	2/Year
α-Terpineol	mg/L	Grab	2/Year
Benzene	µg/L	Grab	2/Year
Benzoic acid	mg/L	Grab	2/Year
ρ-Cresol	mg/L	Grab	2/Year
Phenol	mg/L	Grab	2/Year
Zinc	µg/L	Grab	2/Year
Vinyl Chloride	µg/L	Grab	2/Year
Priority Pollutants [4]	µg/L	Grab	Once
Municipal Supply Pollutants [5]	µg/L	Grab	Once

Footnotes:

[1] If pH is monitored continuously, the minimum, maximum and average pH for each day shall be reported in the self-monitoring report.

[2] The Discharger may, at its option, analyze for cyanide as weak acid dissociable cyanide using protocols specified in Standard Method Part 4500-CN-I. U.S. EPA Method OI 1677, or an equivalent method in the latest Standard Method edition.

[3] Monitoring for total ammonia shall occur concurrently with temperature and pH to allow for calculation of the un-ionized ammonia fraction. If pH or temperature is monitored continuously, the daily average may be used to calculate the un-ionized ammonia fraction.

[4] The Discharger shall monitor for the pollutants listed in Attachment G, Table B. Municipal supply pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[5] The Discharger shall monitor for the pollutants with Maximum Contaminant Levels (see Fact Sheet section 4.4.2.1), except for radionuclides. Priority pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

4. EFFLUENT MONITORING

The Discharger shall monitor treated effluent from the groundwater treatment system at Monitoring Locations EFF-001, as follows:

Table E-3. Effluent Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency [1]
Flow [2]	gallons or gpd	Continuous/D	1/Day
Biochemical Oxygen Demand, (5-day @ 20°C) (BOD_5)	mg/L	Grab	1/Quarter
Total Suspended Solids (TSS)	mg/L	Grab	1/Quarter
Oil and Grease	mg/L	Grab	1/Quarter
pH [3]	standard units	Grab	1/Quarter
Temperature	ºC	Grab	1/Quarter
Nitrite	mg/L as N	Grab	1/Quarter
Nitrate	mg/L as N	Grab	1/Quarter
Hardness as $CaCO_3$	mg/L	Grab	1/Quarter
Arsenic, Total Recoverable	µg/L	Grab	1/Quarter

Barium, Total Recoverable	µg/L	Grab	1/Quarter
Copper, Total Recoverable	µg/L	Grab	1/Quarter
Selenium, Total Recoverable	µg/L	Grab	Once
Cyanide, Total [4]	µg/L	Grab	1/Quarter
Chlorodibromomethane	µg/L	Grab	1/Quarter
Chloroform	µg/L	Grab	1/Quarter
Dichlorobromomethane	µg/L	Grab	1/Quarter
Ammonia, Total [5]	mg/L as N	Grab	1/Quarter
Chlorine, Total Residual	mg/L	Grab	1/Week [6]
α-Terpineol	mg/L	Grab	1/Year
Benzene	µg/L	Grab	1/Quarter
Benzoic acid	mg/L	Grab	1/Year
ρ-Cresol	mg/L	Grab	1/Year
Phenol	mg/L	Grab	1/Year
Zinc	µg/L	Grab	1/Year
Vinyl Chloride	µg/L	Grab	1/Quarter
Priority Pollutants [7]	µg/L	Grab	Once
Municipal Supply Pollutants [8]	µg/L	Grab	Once

Footnotes:

[1] If monitoring results indicate a violation of any effluent limitation, the Discharger shall comply with the accelerated monitoring requirements in Attachment G, section 3.1.3.2 of this Order.

[2] The following flow information shall be reported in monthly self-monitoring reports:

- Daily average flow rate (gpd)
- Total monthly flow volume (gallons)

[3] If pH is monitored continuously, the minimum, maximum and average pH for each day shall be reported in the self-monitoring report.

[4] The Discharger may, at its option, analyze for cyanide as weak acid dissociable cyanide using protocols specified in Standard Method Part 4500-CN-I. U.S. EPA Method OI 1677, or an equivalent method in the latest Standard Method edition.

[5] Monitoring for total ammonia shall occur concurrently with temperature and pH to allow for calculation of the un-ionized ammonia fraction. If pH or temperature is monitored continuously, the daily average may be used to calculate the un-ionized ammonia fraction.

[6] The Discharger may reduce this frequency to once per month when discharge to Corinda Los Trancos Creek is not occurring.

[7] The Discharger shall monitor for the pollutants listed in Attachment G, Table B. Municipal supply pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[8] The Discharger shall monitor for the pollutants with Maximum Contaminant Levels (see Fact Sheet section 4.4.2.1), except for radionuclides. Priority pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

5. STORMWATER MONITORING

The Discharger shall monitor stormwater discharges at Monitoring Location EFF-002 as follows:

Table E-4. Stormwater Monitoring

Parameter [1]	Unit	Sample Type	Minimum Sampling Frequency
Total Suspended Solids	mg/L	Grab	2/Year
Oil and Grease	mg/L	Grab	2/Year
pH	s.u.	Grab	2/Year
Standard Observations [2]	-	-	1/Month

Footnote:

[1] Monitoring results of these parameters shall be compared to the action levels in Attachment S, Table S-1.

[2] Standard Observations are specified in Attachment S section 2.1.

6. RECEIVING WATER MONITORING

6.1. Monitoring Location RSW-001

The Discharger shall monitor ambient receiving water conditions in Corinda Los Trancos Creek upstream of the Facility at Monitoring Location RSW-001 as follows:

Table E-5. Receiving Water Monitoring – Upstream

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow [1]	MGD	Continuous	Continuous/D
pH	standard units	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
Temperature	?C	Grab	1/Quarter
Hardness as $CaCO_3$	mg/L	Grab	1/Quarter
Ammonia, Total	mg/L as N	Grab	1/Quarter
Priority Pollutants [2]	µg/L	Grab	Once
Municipal Supply Pollutants [3]	µg/L	Grab	Once
Standard Observations [4]	-	-	1/Quarter

Footnotes:

[1] Daily average flow and total monthly flow volume shall be reported in MGD in monthly self-monitoring reports.

[2] The Discharger shall monitor for the pollutants listed in Attachment G. Table B. Municipal supply pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[3] The Discharger shall monitor for the pollutants with Maximum Contaminant Levels (see Fact Sheet section 4.4.2.1), except for radionuclides. Priority pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[4] Standard observations are specified in Attachment G section 3.2.1.

6.2. Monitoring Locations RSW-002 and RSW-003

When discharging to Corinda Los Trancos Creek, the Discharger shall monitor ambient receiving water conditions downstream of Discharge Point 001 at monitoring locations RSW-002 and RSW-003 as follows:

Table E-6. Receiving Water Monitoring – Downstream

Parameter	Unit	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	1/Quarter
Temperature	?C	Grab	1/Quarter
Ammonia, Total	mg/L as N	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Year
Hardness as $CaCO_3$	mg/L	Grab	1/Year
Priority Pollutants [1]	µg/L	Grab	Once
Municipal Supply Pollutants [2]	µg/L	Grab	Once
Standard Observations [3]	-	-	1/Quarter

Footnotes:

[1] The Discharger shall monitor for the pollutants listed in Attachment G, Table B. Municipal supply pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[2] The Discharger shall monitor for the pollutants with Maximum Contaminant Levels (see Fact Sheet section 4.4.2.1), except for radionuclides. Priority pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[3] Standard observations are specified in Attachment G section 3.2.1.

7. REPORTING REQUIREMENTS

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

7.2. Self-Monitoring Reports (SMRs)

7.2.1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (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.

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

7.2.2.1. **Monthly SMRs** — Monthly SMRs shall be due the first day of the second month after the monthly monitoring period. Each SMR shall contain the applicable items described in Provision 6.3.2 (Effluent Characterization Study and Report) of the Order, Attachment D section 5.2, and Attachment G section 5.3. Each SMR 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.

7.2.2.2. **Annual SMR** — Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the applicable

items described in Provisions 6.3.2 (Effluent Characterization Study and Report) of the Order and Attachment G section 5.3.1.6.

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

Table E-7. CIWQS Reporting

Parameter	Method of Reporting: EDF/CDF data upload	Attached File
All parameters identified in influent, effluent, and receiving water monitoring tables (except Dissolved Oxygen and Temperature)	Required for all results	-
Dissolved Oxygen, Temperature	Required for monthly maximum and minimum results only [1]	Discharger may use this method for all results or keep records
Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Cyanide, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, Dioxins & Furans (by U.S. EPA Method 1613), Other Pollutants (by U.S. EPA Methods 601, 602, 608, 610, 614, 624, and 625)	Required for all results [2]	-
Volume and Duration of Blended Discharge [3]	Required for all blended effluent discharges	-
Analytical Method	Not required (Discharger may select “data unavailable”) [1]	-
Collection Time, Analysis Time	Not required	-

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).

[3] The requirement for volume and duration of blended discharge applies only if this Order authorizes the Discharger to discharge blended effluent.

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.

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

Table E-8. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
Continuous,	Order effective date	All times

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
Continuous/D		
1/Day	Order effective date	Any 24-hour period that reasonably represents a calendar day for sampling purposes (e.g., beginning at midnight and continuing through 11:59 p.m.)
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/Quarter	Closest January 1, April 1, July 1, or October 1 before or after Order effective date [1]	January 1 through March 31 July 1 through September 30 April 1 through June 30 October 1 through December 31
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
Once	Order effective date	Once during the permit term within 12 months prior to applying for permit reissuance

Footnote:

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

7.2.5. **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:

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

7.2.5.2. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For purposes of data collection, the Discharger shall require the laboratory to write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers appropriate.

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

7.2.5.4. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential

treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

7.2.6. **Compliance Determination.** Compliance with effluent limitations shall be determined using sample reporting protocols defined above, in the Fact Sheet, and in 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, if applicable, greater than or equal to the RL.

7.3. Discharge Monitoring Reports (DMRs). DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using 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 (waterboards.ca.gov/water_issues/programs/discharge_monitoring).

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

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

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2 417053002
CIWQS Place ID	215718
Discharger	Browning-Ferries Industries
Facility Name	Corinda Los Trancos (Ox Mountain) Landfill
Facility Address	12310 San Mateo Road Half Moon Bay, CA 94019 San Mateo County
Facility Contact, Title, Phone, and Email	Kelly McDonnell, Environmental Manager (650) 713-3632, kmcdonnell@republicservices.com
Authorized Person to Sign and Submit Reports	Kelly McDonnell, Environmental Manager, (650) 713-3632
Mailing Address	12310 San Mateo Road, Half Moon Bay, CA 94019
Billing Address	Same as Mailing Address
Facility Type	Class III Solid Waste Disposal Site
Major or Minor Facility	Minor
Water Quality Threat	1
Complexity	B
Pretreatment Program	None
Reclamation Requirements	None
Facility Permitted Flow	115,200 gpd
Facility Design Flow	115,200 gpd
Watershed	San Mateo Coastal Basin
Receiving Water	Corinda Los Trancos Creek
Receiving Water Type	Freshwater
Date of Last Inspection	May 12, 2022

1.1. Browning-Ferris Industries (Discharger) owns the Corinda Los Trancos (Ox Mountain) Landfill (Facility), which discharges treated groundwater to Corinda Los Trancos Creek, a tributary to Pilarcitos Creek.

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

1.2. The Discharger is regulated pursuant to NPDES Permit CA0029947. The Discharger is authorized to discharge subject to the WDRs in this Order at the discharge locations described in Table 1 of this Order.

1.3. The Discharger was previously subject to Order R2-2018-0048 (previous order).

1.4. The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on April 3, 2023.

1.5. Regulations in 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, this Order limits the effective period for the discharge authorization. Pursuant to 40 C.F.R. section 122.6(d) and 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 requirements for continuation of expired permits.

1.6. 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.

2. FACILITY DESCRIPTION

The facility is a Class III municipal refuse disposal site located in Corinda Los Trancos Canyon, approximately 3 miles east of Half Moon Bay. It has operated since 1976 and covers 2,870 acres, with approximately 191 acres permitted for solid waste disposal. The facility includes two solid waste disposal sections**:** an old section and a new section. Only the new section is active. The old section has no flexible membrane liner because it was constructed prior to the effective date of Resource Conservation and Recovery Act subtitle D and 40 C.F.R. part 258 requirements. The new section includes a flexible membrane liner as required for active municipal solid waste landfills as of October 9, 1993.

Landfills of this type may generate several types of wastewater, including leachate, landfill gas condensate, truck and equipment wash water, stormwater, and polluted groundwater. This Order addresses the discharge of extracted and treated naturally-occurring groundwater polluted by infiltration within the landfill or by exposure to pollutants released from the landfill liner system. This Order also addresses facility-related stormwater discharges. As such, the Discharger may terminate coverage under the *NPDES General Permit for Stormwater Discharges Associated with Industrial Activities* (State Water Board Order 2014-0057-DWQ) for any stormwater discharges covered under this Order as of its effective date.

2.1. Groundwater Treatment System. An underdrain system collects groundwater from beneath the old and new sections of the landfill and directs it through a single influent line to a treatment system. The treatment system has a design capacity of 115,200 gpd and consists of the following:

- a 13,000-gallon holding tank for influent storage and equalization;
- three bag filters in series;
- two 5,000-pound granular activated carbon (GAC) vessels in series;
- a sodium hydroxide injection system to control pH;
- in-pipe air sparging to oxidize and promote separation of dissolved iron;
- ultrafiltration to remove suspended solids;
- breakpoint chlorination to remove ammonia; and
- dechlorination to remove residual chlorine.

Preceding the GAC vessels, the Discharger can divert groundwater from the treatment system to onsite storage tanks for dust control on lined areas of the landfill. When the storage tanks reach capacity, the groundwater is returned to the treatment system. Treatment system effluent flows to a sedimentation basin that discharges to Corinda Los Trancos Creek. In 2020 (the most recent year of groundwater discharge), the treatment system discharged an average of 1,100 gpd with a maximum flow of 16,000 gpd.

2.2. Sedimentation Basin. The sedimentation basin has an operational capacity of approximately 3.0 million gallons, the approximate volume at which the basin begins to discharge. In addition to treated effluent, the sedimentation basin receives stormwater and road-wash water. The sedimentation basin is lined with low-permeability soil and separated into an upper and lower section by a sheet-pile wall to improve solids removal from stormwater; water flows by gravity from the upper to the lower section. In 2017, the Discharger improved its treatment plant by adding ultrafiltration and ceased to rely on the sedimentation basin for removing solids from extracted groundwater. This Order requires extracted groundwater to comply with its effluent limits before it reaches the sedimentation basin. The sedimentation basin continues to provide residence time for treated effluent and to contribute to treatment system reliability, as discussed in Fact Sheet section 4.2.

The sedimentation basin previously received diverted flow of Corinda Los Trancos Creek. In July 2012, the Discharger re-routed the diverted creek flow directly into the sedimentation basin riser pipe, bypassing the sedimentation basin. Thus, the sedimentation basin is entirely separate from Corinda Los Trancos Creek.

2.3. Discharge Point and Receiving Waters. Corinda Los Trancos Creek is a perennial freshwater stream tributary to Pilarcitos Creek fed by a spring above the landfill, which forms Corinda Los Trancos Creek's headwaters. This flow is diverted from its natural course (obstructed by the old landfill section) through a 6-inch high-density polyethylene pipe directly to Discharge Point 001.

Discharge Point 001 is located at the inlet to the perforated riser pipe in the sedimentation basin (effectively a drop inlet); water is discharged through it when the level in the sedimentation basin reaches the riser pipe perforations. This riser pipe extends vertically down and connects at a 90-degree angle to an approximately 72-inch diameter, 200-foot long culvert that terminates in an outlet to the bed of Corinda Los Trancos Creek. Treated wastewater, stormwater, and road-wash water are discharged by gravity through Discharge Point 001 and combine with the waters of Corinda Los Trancos Creek in the culvert; the combined flow is discharged to the bed of Corinda Los Trancos Creek at the culvert outlet.

The creek bed at the culvert outlet includes a built-up concrete drainage structure extending about 150 feet downstream before draining into a more natural watercourse. Upgradient sources of water to Corinda Los Trancos Creek, other than the spring waters and sedimentation basin discharge, are negligible during dry weather.

2.4. Previous Requirements and Monitoring Data. The table below presents the previous order's effluent limitations and representative monitoring data from January 2019 through December 2020 (groundwater discharge has not occurred since 2020):

Table F-2. Previous Effluent Limitations and Monitoring Data

Parameter	Unit	Average Monthly Limit	Maximum Daily Limit	Highest Monthly Average	Highest Daily Value
Biochemical Oxygen Demand (5 day @ 20°C) (BOD_5)	mg/L	37	140	10	10
Total Suspended Solids (TSS)	mg/L	27	88	9.9	9.9
Total Dissolved Solids (TDS)	mg/L	3,000	5,500	3,200	3,200
Oil and Grease	mg/L	10	20	<0.66	<0.66
pH	s.u.	[1]	[1]	[1]	[1]
Copper, Total Recoverable	µg/L	24	48	28 [2]	28
Cyanide, Total	µg/L	4.3	5.2	1.9	1.9
Benzene	µg/L	-	0.50	-	0.46
Phenol	µg/L	-	0.50	-	<0.84
Vinyl Chloride	µg/L	-	0.50	-	0.23
Zinc, Total Recoverable	µg/L	110	200	5.2	5.2
Ammonia, Total	mg/L as N	15	40	12	12
Chlorine, Total Residual	mg/L			<0.1	<0.1

Parameter	Unit	Average Monthly Limit	Maximum Daily Limit	Highest Monthly Average	Highest Daily Value
Acute Toxicity	% Survival	[3]	[3]	[3]	[3]
Chronic Toxicity	TU_c	-	-	-	1.0 [4]

Footnotes:

[1] The limit was expressed as an instantaneous minimum and instantaneous maximum of 6.5 and 8.5. The observed instantaneous minimum and instantaneous maximum ranged from 7.3 to 7.6.

[2] This copper result was a violation as described in Attachment F section 2.5.

[3] The limits were expressed as eleven-sample median of not less than 90 percent survival and an eleven-sample 90th percentile of not less than 70 percent survival. The observed minimum survival for both limits was 100 percent.

[4] At 1.0 TUc, there is no observable toxicity when the indicator organism is exposed to 100 percent effluent.

2.5. Compliance Summary. From January 2019 through December 2020 (the period of groundwater discharge during the previous order term), the Discharger exceeded its average monthly effluent limits for copper and total dissolved solids once. The Discharger identified the fittings of the ultrafiltration unit in the treatment system as the source of the copper, so it replaced them with stainless steel fittings. The source of the total dissolved solids was the excessive application of chlorine in the chlorination process step in the treatment system; thus, the Discharger reduced its chlorine application in the treatment system. The Discharger confirmed the effectiveness of these corrective measures when copper and total dissolved solids effluent concentrations were found to comply with permit requirements on December 21, 2019.

2.6. Planned Changes. The Discharger does not plan significant changes for this Order term.

2.7. Sea Level Rise. Sea level rise does not threaten the Facility, which is located approximately 3 miles upstream of the Pacific Ocean and discharges to Corinda Los Trancos Creek.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. EPA, and Water Code chapter 5.5, division 7 (commencing with § 13370). It serves as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA). 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).

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

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

Table F-3. Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Corinda Los Trancos Creek	Municipal and Domestic Supply (MUN) Cold Freshwater Habitat (COLD) Preservation of Rare and Endangered Species (RARE) Warm Freshwater Habitat (WARM) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2)

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

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

3.3.4. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 require that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

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

3.3.6. **Domestic Water Quality.** In accordance with Water Code section 106.3, it is policy of the State of California 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.

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

3.4. Impaired Water Bodies on CWA section 303(d) List. On May 11, 2022, U.S. EPA approved a revised list of impaired waters pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not done so already, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for nonpoint sources and are established to achieve water quality standards. Corinda Los Trancos Creek is not on the 303(d) list, nor is Pilarcitos Creek to which Corinda Los Trancos Creek is tributary.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

4.1. Discharge Prohibitions

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

4.1.2. **Discharge Prohibition 3.2 (No bypass to waters of the United States):** This prohibition is based on 40 C.F.R. section 122.41(m) (see Attachment D section 1.7).

4.1.3. **Discharge Prohibition 3.3 (No discharge greater than 115,200 gpd):** This Order prohibits flow greater than the Facility's design capacity (i.e., its historical and tested treatment reliability) of 115,200 gpd. Exceeding this flow could result in lower treatment reliability and greater potential to violate water quality requirements.

4.2. Shallow Water Discharge and Basin Plan Discharge Prohibition 1.

Basin Plan Table 4-1, Discharge Prohibition 1, prohibits wastewater discharges with particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1 or into any nontidal water. Discharge from Discharge Point 001 do not receive an initial dilution of at least 10:1. In accordance with Basin Plan section 4.2, which provides for exceptions to Basin Plan Discharge Prohibition 1, this Order grants an exception when not discharging to Corinda Los Trancos Creek is infeasible. The circumstances under which Basin Plan section 4.2 allows for exceptions are as follows:

- 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;

- It can be demonstrated that 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 the following:

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

This Order continues to grant an exception to Prohibition 1 for discharges to Corinda Los Trancos Creek for the following reasons:

- An inordinate burden would be placed on the Discharger relative to the beneficial uses protected to require the discharge to achieve a 10:1 dilution. To provide 10:1 dilution would require constructing and operating a deepwater outfall in the Pacific Ocean roughly 2.7 miles from the Facility.

- The Discharger has a treatment process and effluent management procedures that provide a level of environmental protection equivalent to Discharge Prohibition 1. The treatment process consists of adsorption via GAC vessels to remove of volatile organic compounds, automated pH control, air sparging and ultrafiltration for iron-hydroxide removal, and chlorination and dechlorination for ammonia treatment (see Fact Sheet section 2.1). Additionally, the Discharger sends the treated wastewater to a sedimentation basin for additional pollutant removal and treatment reliability prior to the receiving water. In case of a treatment upset, the sedimentation basin allows the Discharger to re-route the treated groundwater back to the treatment system prior to discharge. The sedimentation basin also provides 10:1 dilution during wet weather when the effluent mixes with stormwater. The riser pipe within the sedimentation basin (i.e., Discharge Point 001) can also receive creek headwaters rerouted around the landfill, adding additional mixing and dilution to the discharge. Finally, the Discharger diverts most of its treated groundwater from the treatment system for dust control on lined areas of the landfill or hauls it away with leachate for off-site treatment at a municipal wastewater treatment plant.

4.3. Technology-Based Effluent Limitations

4.3.1. Scope and Authority

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

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

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

- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD_5, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and the cost effectiveness of additional industrial treatment beyond BPT.

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

Where U.S. EPA has not yet developed technology-based standards for a particular industry or pollutant, CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of best professional judgment to derive technology-based effluent limits on a case-by-case basis. When best professional judgment is used, the permit must reflect specific factors outlines at 40 C.F.R. section 125.3. The technology-based effluent limits in this Order are based on best professional judgment, except for those based on Basin Plan Table 4-2 as discussed below.

4.3.2. Effluent Limitations Derived from Effluent Limitations Guidelines

U.S. EPA has not promulgated technology-based limits and standards (i.e., effluent limitations guidelines [ELGs]) for discharges of treated extracted groundwater associated with landfills. When developing ELGs for the Landfills Point Source Category (40 C.F.R. part 445), U.S. EPA found that such discharges were adequately controlled by corrective actions under Resource Conservation and Recovery Act or state cleanup actions. Because no ELGs apply to discharges of treated groundwater associated with landfills, the Regional Water Board may establish technology-based effluent limits based on best professional judgment under 40 C.F.R. § 125.3(c)(2). Here, the Landfills Point Source ELGs are used as guidance in developing technology-based limits for this Order based on best professional judgment. The Landfills Point Source

ELGs set forth the following requirements for pollutants of concern in municipal landfill discharges:

Table F-4. Landfills Point Source ELGs

Parameter	Units	Maximum Daily	Maximum Monthly Average
BOD_5	mg/L	140	37
TSS	mg/L	88	27
Ammonia (as N)	mg/L	10	4.9
α-Terpineol	mg/L	0.033	0.016
Benzoic acid	mg/L	0.12	0.071
ρ-cresol	mg/L	0.025	0.014
Phenol	mg/L	0.026	0.015
Zinc	µg/L	200	110
pH	standard units	6.0-9.0	

4.3.2.1. **BOD_5, and TSS.** This Order establishes the above technology-based limits for BOD_5 and TSS based on best professional judgement. These pollutants are subject to BPT control (40 C.F.R. section 445.23) and BCT control (40 C.F.R. section 445.22).

4.3.2.2. **Ammonia.** This Order imposes water quality-based effluent limits for ammonia (see Fact Sheet section 4.3.4.2) in lieu of the above technology-based limitations for ammonia. The Discharger submitted a report on the feasibility of adding ammonia treatment at the Facility (*Feasibility Study to Remove Ammonia from Groundwater as an Upgrade to the Groundwater Treatment System to Meet Permit Limits*, February 27, 2013) that concluded that adding biological nitrification, ion exchange, or air stripping of ammonia is infeasible. In 2017, the Discharger implemented breakpoint chlorination in the treatment system to treat ammonia. Currently, too few ammonia data from Monitoring Location EFF-001 are available since breakpoint chlorination was implemented to determine whether this treatment is sufficient to meet technology-based limits derived from the ELGs. Performance data will be evaluated during the next permit reissuance if enough data are available.

4.3.2.3. **α-Terpineol, benzoic acid, ρ-Cresol, phenol, and zinc.** This Order does not establish the above technology-based limitations for α-terpineol, benzoic acid, ρ-cresol, phenol, or zinc because these pollutants have not been detected in the discharge above reporting levels. Instead, this Order requires continued monitoring for these pollutants.

4.3.2.4. **pH.** This Order does not establish the above technology-based limitation for pH because pH is subject to a more stringent water quality-based effluent limit based on Basin Plan section 3.3.9 (see Fact Sheet section 4.3.4.5).

4.3.3. Effluent Limitations Derived from Other Guidance

The Discharger removes benzene and vinyl chloride using GAC. Nationwide, U.S. EPA reports that GAC adsorption systems are the most commonly used groundwater treatment method (Virginia State Water Control Board, *USEPA Model General Permit and the Fact Sheet for Permit No. VAG83*, December 1997). GAC can achieve pollutant removal efficiencies between 95 and 99.5 percent for groundwater pump-and-treat waste streams (U.S. EPA, *A Citizen's Guide to Activated Carbon Treatment*, USEPA 542-F-12-001, September 2012). When properly designed and operated, GAC can lower benzene and vinyl chloride concentrations to levels below analytical detection limits. Therefore, based on best professional judgement, this Order establishes maximum daily effluent limits for benzene and vinyl chloride of 0.50 µg/L, equal to the lowest State Implementation Plan minimum reporting levels for these pollutants. Effluent data indicate that the current treatment technology can meet these limits when the Discharger operates its GAC vessels properly. These limits are also consistent with those found in the VOC and Fuel General Permit (Order R2-2017-0048).

4.3.4. Effluent Limitations Based on Basin Plan

4.3.4.1. **Oil and Grease.** This Order establishes limits of 10 mg/L (average monthly) and 20 mg/L (maximum daily) for oil and grease based on Basin Plan Table 4-2.

4.3.4.2. **Chlorine.** This Order establishes a limit for total residual chlorine of 0.0 mg/L (instantaneous maximum) based on Basin Plan Table 4-2.

4.3.5. Effluent Limitations for Stormwater

As discussed in Fact Sheet section 4.3.2 above, the Discharger is not part of a category or class of point sources for which U.S. EPA has promulgated ELGs. Code of Federal Regulations, chapter 40, section 122.44(k)(3) requires permits to include best management practices (BMPs) in lieu numeric limitations where they are infeasible. Therefore, based on best professional judgment, this Order establishes stormwater BMPs as narrative technology-based effluent limitations to reduce or prevent discharges of pollutants in a manner that reflects best industry practices considering technological availability and economic practicability and achievability.

4.3.6. Factors Considered for Effluent Limits Established by Best Professional Judgment

Code of Federal Regulations, chapter 40, section 125.3(c)(2)(i) requires that the Regional Water Board consider the appropriate technology for the category or class of point sources of which the applicant is a member and any unique factors relating to the applicant. As discussed in Fact Sheet section 4.3.2

above, the Discharger is not part of a category or class of point sources for which U.S. EPA has promulgated ELGs. The Discharger does employ appropriate technologies (GAC adsorption and ultrafiltration) commonly used to treat the pollutants for which this Order establishes technology-based effluent limits by best professional judgement.

When using best professional judgment to impose technology-based effluent limitations based on BPT, BCT, and BAT controls, 40 C.F.R. section 125.3(d) requires that the Regional Water Board consider the following factors:

Table F-5. Factors Considered Pursuant to 40 C.F.R. section 125.3(d)

Factors	Considerations
Cost relative to pollution reduction benefits	The cost of imposing these limits is reasonable because the treatment system already exists and does not require upgrades to meet the limits; thus, no capital costs will be incurred. Treatment costs will be limited to those for ongoing operations and maintenance.
Age of equipment and facilities	The 5,000-lb GAC vessels, bag filters, pH control system, and air sparging system have been in place since at least 2011; the ultrafiltration system and breakpoint chlorination and dechlorination system were installed in 2017.
Process employed	The existing treatment system employs flow equalization, settling, bag filtration, GAC filtration, sodium hydroxide injection, in-pipe air sparging, ultrafiltration, breakpoint chlorination, and dechlorination to control pH and remove volatile organic compounds, TSS, ammonia, and residual chlorine.
Engineering aspects of various controls	The existing controls are practicable and capable of meeting the imposed limits. GAC filtration to remove volatile organic compounds from extracted groundwater; settling, bag filtration, and ultrafiltration to remove TSS; sodium hydroxide application to control pH; and dechlorination using sodium disulfide are commonly used processes. Breakpoint chlorination to remove ammonia is feasible, while other treatment (e.g., activated sludge) is not. The existing controls also treat BOD_5.
Process changes	No changes are necessary.
Non-water quality environmental impacts	There will be little or no change in non-water quality environmental impacts because energy, chemical, and material requirements will be the same as, or similar to, those of the previous requirements.
Reasonableness of relationship between costs of attaining a reduction in effluent and effluent reduction benefits derived	The cost of imposing these limits is reasonable given that the Discharger can comply without further modifying its treatment processes.
Comparison of cost and pollutant level of reduction of BOD_5 and TSS from the discharge from publicly owned treatment works to cost and level of reduction to BOD_5 and TSS from landfill-polluted groundwater treatment systems to meet BCT requirements.	The type of treatment (settling, bag filtration, and ultrafiltration) is less costly than the treatment publicly owned treatment works employ to comply with secondary treatment standards. The required level of pollutant reduction is less than the secondary treatment standards require for publicly owned treatment works.

Factors	Considerations
The cost of achieving effluent reduction to meet BAT requirements	The cost of attaining the limits for benzene and vinyl chloride is reasonable given that the Discharger can meet these limits with the existing treatment system; costs are thus limited to those for ongoing operations and maintenance.

4.4. Water Quality-Based Effluent Limitations

4.4.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(d) require permits to include limitations more stringent than federal technology-based requirements where necessary to achieve water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, water quality-based effluent limitations (WQBELs) must be established using (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting a narrative criterion, supplemented with relevant information. The process for determining reasonable potential and calculating WQBELs when necessary is intended to achieve applicable water quality objectives and criteria, and thereby protect designated beneficial uses of receiving waters. This Order does not impose WQBELs for industrial stormwater discharges because BMP-based TBELs are expected to be sufficient to eliminate reasonable potential.

4.4.2. Beneficial Uses and Water Quality Criteria and Objectives

Discharge Point 001 discharges to Corinda Los Trancos Creek. Fact Sheet section 3.3.1 identifies the beneficial uses of Corinda Los Trancos Creek. Water quality criteria and objectives to protect these beneficial uses are described below:

4.4.2.1. **Basin Plan Objectives.** The Basin Plan specifies numerous water quality objectives, including numeric objectives for 10 priority pollutants, un-ionized ammonia, and temperature. Because Corinda Los Trancos Creek has the MUN beneficial use under State Water Board Resolution No. 88-63 (see Fact Sheet section 3.3.1), the MCLs specified in Title 22 of the *California Code of Regulations* also apply as water quality objectives. The MCLs can be found in Title 22 Table 64431-A (Inorganic Chemicals) of section 64431, Table 64433.2-A (Fluoride) of section 64433.2, Table 64444-A (Organic Chemicals)

of section 64444, and Tables 64449-A (SMCLs-Consumer Acceptance Limits) and 64449-B (SMCLs-Ranges) of section 64449.

4.4.2.1.1. **Ammonia.** Basin Plan section 3.3.20 contains water quality objectives for un-ionized ammonia of 0.025 mg/L (as nitrogen) as an annual median for San Francisco Bay Region receiving waters. Acute water quality objectives do not apply to receiving waters other than San Francisco Bay. Effluent and receiving water data are available for total ammonia, but not un-ionized ammonia, because (1) sampling and laboratory methods are unavailable to analyze for un-ionized ammonia, and (2) the fraction of total ammonia that exists in the toxic un-ionized form depends on pH, salinity, and temperature of the receiving water.

The un-ionized fraction of the total ammonia was calculated using the following equations:

For salinity less than 1 ppt:

$$\text{Fraction of un-ionized ammonia} = (1 + 10^{[pK - pH]})^{-1}$$

Where:

pK = 0.09018 + 2729.92/T
T = temperature in Kelvin

The median un-ionized ammonia fraction was then used to express the annual average un-ionized objective as chronic total ammonia criteria. This approach is consistent with U.S. EPA guidance on translating dissolved metal water quality objectives to total recoverable metal water quality criteria (U.S. EPA, 1996, *The Metals Translator: Guidance for Calculating a Total Recoverable Limit form a Dissolved Criterion*, EPA Publication 823-B96-007). The equivalent chronic total ammonia criterion is 4.2 mg/L (as nitrogen).

4.4.2.1.2. **Temperature.** Corinda Los Trancos Creek supports 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 an 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°F above natural receiving water temperature.

4.4.2.2. **CTR Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of "water and organisms" and others are for consumption of "organisms only." The criteria applicable to "water and organisms" apply to Corinda Los Trancos Creek because its existing beneficial uses include municipal and domestic supply of water.

4.4.2.3. **NTR Criteria.** The NTR establishes numeric aquatic life and human health criteria for a number of toxic pollutants for San Francisco Bay waters upstream to and including the receiving water for this Discharger. The NTR criteria apply to Corinda Los Trancos Creek.

4.4.2.4. **Receiving Water Salinity.** Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water are to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to water with salinities in between these two categories, or tidally-influenced freshwaters that support estuarine beneficial uses, the water quality objectives are the lower of the salt or freshwater criteria (the latter calculated based on ambient hardness) for each substance.

Corinda Los Trancos Creek is freshwater based on salinity data collected at Monitoring Location RSW-001 between September 2013 and December 2017. During that period, the average salinity was 0.21 ppt, with a range from 0.17 ppt to 0.28 ppt. Because the salinity was less than 1 ppt in 100 percent of the samples, the reasonable potential analysis and effluent limitations in this Order are based on freshwater water quality objectives.

4.4.2.5. **Receiving Water Hardness.** Ambient hardness data were used to calculate freshwater water quality objectives that are hardness dependent. A hardness value of 105 mg/L as calcium carbonate was used to determine those objectives. This is the geometric mean hardness value observed at Monitoring Location RSW-001 from January 2019 through July 2023.

4.4.2.6. **Metals Translators.** Regulations at 40 C.F.R. section 122.45(c), require effluent limitations for metals to be expressed as total recoverable metal. Since the water quality objectives for metals are typically expressed as dissolved metal, translators must be used to convert metals concentrations from dissolved to total recoverable and vice versa. The CTR contains default translators; however, site-specific conditions, such as water temperature, pH, total suspended solids, and organic carbon may affect the form of metal

(dissolved, non-filterable, or otherwise) present and therefore available to cause toxicity. In general, dissolved metals are more available and more toxic to aquatic life than other forms. Site-specific translators can account for site-specific conditions, thereby preventing overly stringent or under-protective water quality objectives. The Discharger has not developed site-specific translators; therefore, default translators established at 40 C.F.R. section 131.38(b)(2), Table 2, were used for determining the need for and calculating WQBELs.

4.4.3. Reasonable Potential Analysis

4.4.3.1. **Available Information.** The reasonable potential analysis for this Order is based on effluent data collected from Monitoring Locations EFF-001 and ambient background data collected from Monitoring Locations RSW-001. Effluent data collected from January 2019 to December 2020 were used to determine reasonable potential for conventional pollutants. Effluent data after this date are not available, because the treatment system did not discharge.

This Order does not contain WQBELs for constituents that do not demonstrate reasonable potential; however, the MRP still requires monitoring for those pollutants. If effluent concentrations are found to have increased significantly, Provision 6.3.2 of the Order requires the Discharger to investigate the sources of the increases and implement remedial measures if the increases pose a threat to receiving water quality.

4.4.3.2. Priority Pollutants, Municipal Supply Pollutants, and Ammonia

4.4.3.2.1. **Methodology.** SIP section 1.3 sets forth the methodology used to assess whether a priority pollutant has reasonable potential to exceed a water quality objective. SIP section 1.3 applies to priority pollutants and is used here for ammonia and pollutants with primary MCLs as guidance. The analysis begins with identifying the maximum effluent concentration (MEC) observed for each pollutant based on available effluent concentration data and the ambient background concentrations (B). SIP section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential:

- **Trigger 1** is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective (MEC ≥ water quality objective).

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

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

4.4.3.2.2. **Analysis.** The maximum effluent concentrations, most stringent applicable water quality criteria and objectives, and ambient background concentrations used in the analysis are presented below, along with the reasonable potential analysis results (yes, no, or unknown) for each pollutant. Based on this analysis, reasonable potential was found for ammonia, arsenic, barium, chlorodibromomethane, chloroform, copper, cyanide, dichlorobromomethane, and selenium.

There is no reasonable potential for municipal supply pollutants with secondary MCLs, and these pollutants (chloride, color, electrical conductivity, iron, odor, manganese, methylene blue active substances, total dissolved solids, and turbidity) are excluded from Table F-6, below. Secondary MCLs are aesthetic standards intended to protect the public from undesirable taste, odor, or appearance in drinking water and apply as long-term (annual) averages. The Facility discharges are infrequent, intermittent, and only during wet weather; the Discharger has not discharged groundwater since August 2020 and is not expected to discharge continuously in the future. Furthermore, using the *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, March 1991) as guidance, this Order establishes a maximum dilution credit of 4.4:1 (D = 3.4) for these pollutants based on the Discharger's *NPDES Permit Reissuance Program Mixing Study Final Report* (see Fact Sheet section 4.4.4.1). Applying a dilution credit of 3.4 to the maximum effluent concentrations of municipal supply pollutants observed in the previous order term results in concentrations less than the secondary MCLs.

Table F-6. Reasonable Potential Analysis

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1],[2]	B or Minimum DL (µg/L) [1],[2]	RPA Result [3]
1	Antimony	6.0	0.16	0.35	No
2	**Arsenic**	**10**	**15**	**1.2**	**Yes**
3	Beryllium	4.0	<0.14	<0.14	No
4	Cadmium	2.6	<0.11	<0.11	No
5a	Chromium (III)	50	<5.0	<5.0	No
5b	Chromium (VI)	10	<0.032	0.048	No
6	**Copper**	**10**	**28**	**5.8**	**Yes**
7	Lead	3.4	<0.10	0.91	No
8	Mercury	0.025	<0.022	0.0175	No
9	Nickel	54	14	1.3	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1],[2]	B or Minimum DL (µg/L) [1],[2]	RPA Result [3]
10	**Selenium**	**5.0**	**31**	**0.74**	**Yes**
11	Silver	4.4	<0.1	<0.1	No
12	Thallium	1.7	<0.1	<0.1	No
13	Zinc	125	5.2	7.1	No
14	**Cyanide**	**5.2**	**6.5**	**1.3**	**Yes**
15	Asbestos (fibers/L)	7.0×10^{6}	$<1.0 \times 10^{6}$	$<1.0 \times 10^{6}$	No
16	2,3,7,8-TCDD	1.3×10^{-8}	$<2.1 \times 10^{-7}$	$<2.1 \times 10^{-7}$	No
17	Acrolein	320	<1.7	<1.0	No
18	Acrylonitrile	0.059	<0.4	0.4	No
19	Benzene	1	0.5	<0.050	No
20	Bromoform	360	98	<0.067	No
21	Carbon Tetrachloride	0.25	<0.062	<0.05	No
22	Chlorobenzene	70	<0.051	<0.05	No
23	**Chlorodibromomethane**	**0.40**	**30**	**<0.05**	**Yes**
24	Chloroethane	No Criteria	<0.07	<0.05	U
25	2-Chloroethylvinyl ether	No Criteria	<0.2	<0.2	U
26	**Chloroform**	**0.19**	**20**	**1.5**	**Yes**
27	**Dichlorobromomethane**	**0.56**	**15**	**<0.050**	**Yes**
28	1,1-Dichloroethane	5.0	<0.068	<0.051	No
29	1,2-Dichloroethane	0.38	<0.086	0.068	No
30	1,1-Dichloroethylene	0.057	<0.083	<0.05	No
31	1,2-Dichloropropane	0.52	<0.056	<0.050	No
32	1,3-Dichloropropylene	0.50	<0.27	<0.27	No
33	Ethylbenzene	300	<0.056	<0.05	No
34	Methyl Bromide	48	0.15	0.055	No
35	Methyl Chloride	No Criteria	<0.073	<0.055	U
36	Methylene Chloride	4.7	Unavailable	Unavailable	U
37	1,1,2,2-Tetrachloroethane	0.17	<0.075	<0.066	No
38	Tetrachloroethylene	0.80	<0.072	<0.050	No
39	Toluene	150	0.29	<0.05	No
40	1,2-Trans-Dichloroethylene	10	<0.077	<0.05	No
41	1,1,1-Trichloroethane	200	<0.068	<0.050	No
42	1,1,2-Trichloroethane	0.060	<0.054	<0.050	No
43	Trichloroethylene	2.7	<0.085	<0.081	No
44	Vinyl Chloride	0.50	0.23	<0.059	No
45	2-Chlorophenol	120	<0.085	<0.2	No
46	2,4-Dichlorophenol	93	<0.26	<0.23	No
47	2,4-Dimethylphenol	540	<0.30	<0.20	No
48	2-Methyl- 4,6-Dinitrophenol	13	<0.43	<0.24	No
49	2,4-Dinitrophenol	70	<0.37	<0.20	No
50	2-Nitrophenol	No Criteria	<0.39	<0.20	U

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1],[2]	B or Minimum DL (µg/L) [1],[2]	RPA Result [3]
51	4-Nitrophenol	No Criteria	<0.66	<0.3	U
52	3-Methyl 4-Chlorophenol	No Criteria	<0.2	<0.2	U
53	Pentachlorophenol	0.28	<0.43	<0.044	No
54	Phenol	1.0	<0.84	<0.21	No
55	2,4,6-Trichlorophenol	2.1	0.43	<0.2	No
56	Acenaphthene	1,200	<0.22	<0.20	No
57	Acenaphthylene	No Criteria	<0.031	<0.029	U
58	Anthracene	9,600	<0.034	<0.032	No
59	Benzidine	0.00012	<3.0	<1.6	No
60	Benzo(a)Anthracene	0.0044	<0.044	<0.034	No
61	Benzo(a)Pyrene	0.0044	<0.05	<0.05	No
62	Benzo(b)Fluoranthene	0.0044	<0.034	<0.034	No
63	Benzo(ghi)Perylene	No Criteria	<0.065	<0.065	U
64	Benzo(k)Fluoranthene	0.0044	<0.07	<0.07	No
65	Bis(2-Chloroethoxy)Methane	No Criteria	<0.27	<0.20	U
66	Bis(2-Chloroethyl)Ether	0.031	<0.86	<0.31	No
67	Bis(2-Chloroisopropyl)Ether	1,400	<1.7	<0.2	No
68	Bis(2-Ethylhexyl)Phthalate	1.8	<0.03	<0.03	No
69	4-Bromophenyl Phenyl Ether	No Criteria	<0.2	<0.2	U
70	Butylbenzyl Phthalate	3,000	<0.047	<0.047	No
71	2-Chloronaphthalene	1,700	<0.23	<0.20	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	<0.2	<0.2	U
73	Chrysene	0.0044	<0.06	<0.06	No
74	Dibenzo(a,h)Anthracene	0.0044	<0.051	<0.051	No
75	1,2-Dichlorobenzene	600	<0.055	<0.055	No
76	1,3-Dichlorobenzene	400	<0.066	<0.066	No
77	1,4-Dichlorobenzene	5.0	<0.05	<0.05	No
78	3,3 Dichlorobenzidine	0.040	<0.41	<0.41	No
79	Diethyl Phthalate	23,000	<0.2	<0.2	No
80	Dimethyl Phthalate	313,000	<0.034	<0.034	No
81	Di-n-Butyl Phthalate	2,700	<0.063	0.2	No
82	2,4-Dinitrotoluene	0.11	<0.87	<0.4	No
83	2,6-Dinitrotoluene	No Criteria	<0.46	<0.2	U
84	Di-n-Octyl Phthalate	No Criteria	<0.31	<0.21	U
85	1,2-Diphenyhydrazine	0.04	<0.44	<0.20	No
86	Fluoranthene	300	<0.41	<0.28	No
87	Fluorene	1,300	<0.029	<0.029	No
88	Hexachlorobenzene	0.00075	<0.029	<0.029	No
89	Hexachlorobutadiene	0.44	<0.078	<0.078	No
90	Hexachlorocyclopentadiene	50	<0.12	<0.12	No
91	Hexachloroethane	1.9	<0.057	<0.057	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1],[2]	B or Minimum DL (µg/L) [1],[2]	RPA Result [3]
92	Indeno(1,2,3-cd)Pyrene	0.0044	<0.032	<0.032	No
93	Isophorone	8.4	<0.41	<0.2	No
94	Naphthalene	No Criteria	<0.068	<0.068	U
95	Nitrobenzene	17	<0.39	<0.2	No
96	N-Nitrosodimethylamine	0.00069	<0.56	<0.56	No
97	N-Nitrosodi-n-Propylamine	0.0050	<0.56	<0.21	No
98	N-Nitrosodiphenylamine	5.0	<0.27	<0.20	No
99	Phenanthrene	No Criteria	<0.02	<0.02	U
100	Pyrene	960	<0.04	<0.04	No
101	1,2,4-Trichlorobenzene	5.0	<0.076	<0.076	No
102	Aldrin	0.00013	<0.00037	<0.00037	No
103	Alpha-BHC	0.0039	<0.00046	<0.00046	No
104	Beta-BHC	0.014	<0.00049	<0.00049	No
105	Gamma-BHC	0.019	<0.00048	<0.00048	No
106	Delta-BHC	No Criteria	<0.0048	<0.00048	U
107	Chlordane	0.00057	<0.03	<0.03	No
108	4,4'-DDT	0.00059	<0.00034	<0.00034	No
109	4,4'-DDE	0.00059	<0.00048	<0.00048	No
110	4,4'-DDD	0.00083	<0.00049	<0.00049	No
111	Dieldrin	0.00014	<0.00046	<0.00046	No
112	Alpha-Endosulfan	0.056	<0.00048	<0.00048	No
113	beta-Endosulfan	0.056	<0.0006	<0.00059	No
114	Endosulfan Sulfate	110	<0.00085	<0.00055	No
115	Endrin	0.036	<0.00072	<0.00069	No
116	Endrin Aldehyde	0.76	<0.00077	<0.00054	No
117	Heptachlor	0.00021	<0.00039	<0.00039	No
118	Heptachlor Epoxide	0.00010	<0.00084	<0.00064	No
119-125	PCBs sum	0.00017	<0.008	<0.008	No
126	Toxaphene	0.00020	<0.04	<0.04	No
	Total Ammonia (mg/L N)	**4.2**	**12**	**0.21**	**Yes**
	Aluminum	1,000	<14	3,300	No
	Barium	**1,000**	**2,300**	**21**	**Yes**
	Fluoride (mg/L)	2	0.32	0.083	No
	Nitrate + Nitrite (as N, mg/L)	10	0.15	1.9	No
	Nitrite (as N, mg/l)	1	0.078	0.01	No
	Sulfate	500	80	8.9	No
	Oil and Grease	No Criteria	<0.66	Unavailable	No
	Methoxychlor	30	<0.00076	<0.00076	No
	Alachlor	2	<0.090	<0.068	No
	Atrazine	1	<0.14	<0.068	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) [1],[2]	B or Minimum DL (µg/L) [1],[2]	RPA Result [3]
	Bentazon	18	<0.12	<0.12	No
	Methyl-tert-butyl ether	13	1.1	<0.050	No

Footnotes:

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

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

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

4.4.3.3. **Acute and Chronic Toxicity.** Toxicity Provisions section III.C.11 exempts insignificant non-stormwater dischargers from acute and chronic toxicity requirements if they do not have reasonable potential to cause or contribute to the exceedance of toxicity water quality objectives. This Order finds the Discharger insignificant. During the previous order term, the Discharger discharged groundwater infrequently at a relatively small average rate of 1,200 gpd and has not discharged groundwater to its sedimentation basin since August 2020. Additionally, the Discharger conducted quarterly acute and chronic toxicity tests during its periods of discharge and observed no toxicity. Therefore, the Discharger is exempt from toxicity requirements.

4.4.3.4. **Temperature.** The Discharger conducted a temperature study (Geo-Logic Associates, October 7, 2020) to determine whether the discharge is consistent with Basin Plan section 3.3.17, which prohibits the alteration of natural receiving water temperatures such that beneficial uses are adversely affected, and temperature increases greater than 2.8?C (5?F) above natural receiving water temperatures. The study was conducted between September 2019 and August 2020 and evaluated temperature changes in Corinda Los Trancos Creek during periods of discharge and non-discharge in dry and wet weather. The study concluded that the discharge causes a 2.8 ?F average temperature increase in Corinda Los Trancos Creek, which is less than the water quality objective in the Basin Plan. Therefore, this Order finds no reasonable potential for the discharge to cause or contribute to a temperature increase greater than 5 ?F in Corinda Los Trancos Creek such that its beneficial uses are adversely affected.

4.4.3.5. **pH.** There is reasonable potential for this discharge to cause or contribute to exceedances of the water quality objective for pH (Basin Plan section 3.3.9), because treatment system influent pH is often near 6.5 and treatment is needed to ensure that the water quality objectives are met.

4.4.4. Water Quality-Based Effluent Limitations

WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives. The WQBELs calculations are based on the procedures in SIP section 1.4., which is used as guidance for other pollutants.

4.4.4.1. **Mixing Zones and Dilution Credits.** This Order grants mixing zones for ammonia, arsenic, barium, copper, and cyanide in accordance with SIP section 1.4.2.2. The SIP defines a completely mixed discharge as one where no more than a 5 percent difference in the concentration of a pollutant exists across a transect of the receiving water at a point within two stream or river widths from the discharge point. At spring water flow and discharge effluent discharge rates, such as those prevailing during the mixing zone study described below, mixing would have to be rapid for this discharge to be completely mixed. Because the discharge point does not have a diffuser or other structure that would promote rapid mixing, the discharge is incompletely mixed. This Order satisfies Basin Plan section 4.6.1.2 conditions for granting dilution credits for incompletely mixed shallow-water discharges through Provision 6.3.3 (Pollutant Minimization Program), MRP section 6 (Receiving Water Monitoring Requirements), and the mixing zone analysis below.

The Discharger completed a mixing zone study (*NPDES Permit Reissuance Program Mixing Zone Study Final Report*, Geo-Logic Associates, April 2018). The mixing zone study consisted of a tracer study on discharges from the treatment system to Corinda Los Trancos Creek, conducted on January 24, 2018, with tracer concentrations and water quality data collected at Monitoring Location EFF-001 and several locations throughout the sedimentation basin, flow measurement weir, and downstream Corinda Los Trancos Creek. Based on data provided in the mixing zone study, a mixing zone extending 400 feet downstream from Discharge Point 001 (the riser pipe) would correspond to a dilution ratio of at least 4.4:1 (D=3.4). The actual dilution would be considerably greater during wet weather, when most discharges occur, because higher creek flows would cause more flushing and mixing.

SIP section 1.4.2.2 requires that mixing zones be as small as practicable; if the Discharger can comply with limits based on less dilution, then smaller mixing zones are practicable. For ammonia, arsenic, barium, and cyanide, monitoring data show that the Discharger can comply with mixing zones smaller than those corresponding to a dilution ratio of 4.4:1. Therefore, this Order establishes a 260-foot length mixing zone for ammonia and barium corresponding to a dilution ratio of 3:1 (D=2), and a 25-foot mixing zone for arsenic and cyanide corresponding to a dilution ratio of 2:1 (D=1). These distances are measured from Discharge Point 001.

SIP section 1.4.2.2.B requires that mixing zones be prohibited or significantly limited to protect beneficial uses depending on certain characteristics of pollutants in the discharge, including whether pollutants are carcinogenic, mutagenic, teratogenic, persistent, or bioaccumulative. The mixing zones described above would protect beneficial uses. Ammonia and cyanide are not carcinogenic, mutagenic, teratogenic, persistent, or bioaccumulative. Barium and copper, while persistent, are not carcinogenic, mutagenic, teratogenic, or bioaccumulative and would not remain in concentrations impacting beneficial uses because downstream concentrations beyond the mixing zones would meet the barium and copper water quality objectives. Arsenic is carcinogenic and bioaccumulative; however, its mixing zone is based on the most conservative arsenic objective, a primary MCL for drinking water, and there are no current or proposed drinking water intakes, nor organisms for human consumption, within its mixing zone. Nonetheless, this Order significantly limits the arsenic mixing zone to a dilution credit of D=1, where concentrations beyond this mixing zone would meet arsenic's primary MCL.

In accordance with SIP section 1.4.2.2.A, these mixing zones will not do any of the following:

4.4.4.1.1. **Compromise the integrity of the water body.** The mixing zones would be small relative to size of Corinda Los Trancos Creek and would not compromise the integrity of the entire water body. A 400-foot distance from Discharge Point 001 is a relatively small fraction of the approximately 5,000-foot length of Corinda Los Trancos Creek before its confluence with Pilarcitos Creek.

4.4.4.1.2. **Cause acutely toxic conditions to aquatic life passing through the mixing zones.** Ammonia, arsenic, barium, copper, and cyanide would not cause acutely toxic conditions inside the mixing zones. Acute toxicity bioassays of the discharge from the past ten years have not detected acutely toxic effects exceeding acute toxicity limits. Furthermore, the maximum effluent concentrations for arsenic and cyanide do not exceed their acute aquatic life criteria, barium is non-toxic, and ammonia degrades rapidly in the receiving water.

4.4.4.1.3. **Restrict the passage of aquatic life.** The mixing zones would not interfere with the movement of aquatic species or restrict the passage of aquatic life because they would not create a zone of acute toxicity or other objectionable water quality condition that aquatic life would avoid. As noted above, bioassay results show the discharge is not acutely toxic.

4.4.4.1.4. **Adversely impact biologically sensitive or critical habitats, including, but not limited to, habitat of species listed under federal or State endangered species laws.** The Basin Plan establishes preservation of

rare or endangered species (RARE) as a beneficial use of Corinda Los Trancos Creek. The mixing zones would not adversely affect biologically sensitive or critical habitats because no biologically sensitive or critical habitats are located within the mixing zones. The mixing zones would extend up to 400 feet from Discharge Point 001 (i.e., through the 200-foot discharge culvert and 200 feet downstream from the culvert outlet). A concrete discharge structure extends 150 feet downstream from the culvert outlet. Thus, the culvert and concrete discharge structure would account for the first 350 feet of the mixing zones; these structures have no biologically sensitive or critical habitats. A bioassessment study (*Field Monitoring Report, Ox Mountain Landfill, Bioassessment and Physical Habitat Monitoring*, Applied Marine Sciences, October 13, 2017) evaluated an approximately 330-foot reach of the natural Corinda Los Trancos Creek channel, including the remaining 50 feet of the mixing zones below the concrete discharge structure. The bioassessment found no sensitive or critical habitats. Additionally, a follow-up bioassessment study (*Field Monitoring Report, Ox Mountain Landfill, Bioassessment and Physical Habitat Monitoring*, Applied Marine Sciences, September 12, 2023) concluded that the discharge does not alter habitat in Corinda Los Trancos Creek beyond its mixing zones. Furthermore, based on acute and chronic bioassay results, the discharge would not create a zone of acute or chronic toxicity or otherwise impact the RARE beneficial use.

4.4.4.1.5. **Produce undesirable or nuisance aquatic life.** The mixing zones would not produce undesirable or nuisance aquatic life because the discharge of nutrients (including ammonia) have not caused undesirable or nuisance aquatic life, and existing discharges are not expected to increase. Intermittent ammonia discharges during wet weather cannot support or sustain algal growth or other nuisance aquatic life due to their brief and infrequent nature. Arsenic, barium, copper, and cyanide are not nutrients; therefore, they cannot contribute to undesirable or nuisance aquatic life. Furthermore, this Order imposes receiving water limitations that prohibit bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses.

4.4.4.1.6. **Result in floating debris, or scum.** The mixing zones would not result in floating debris, oil, or scum because the treatment system removes debris, oil, and scum. Furthermore, section 5.1.1 of this Order imposes receiving water limits that prohibit floating debris, oil, and scum caused by the discharge at any place or time.

4.4.4.1.7. **Produce objectionable color, odor, taste, or turbidity.** The mixing zones would not produce objectionable color, odor, taste, or turbidity because the discharge does not contain ammonia, arsenic, barium, copper, or cyanide in concentrations that would cause such effects. The Discharger's break-point chlorination treatment unit removes ammonia,

and treatment system effluent does not contain copper or cyanide above the drinking water MCLs (reasonable potential for those pollutants is based on aquatic toxicity). Any color, odor, taste, or turbidity would be restricted to within the mixing zones. In addition, no drinking water intakes would be in or near the mixing zones, and significant dilution would occur in the discharge culvert and creek. Furthermore, the receiving water limits imposed by section 5.1 of this Order prohibit alteration of color and turbidity in receiving waters beyond natural background levels; the Discharger has not observed objectionable color, odor, or turbidity resulting from the discharge. Based on this Order's requirements and the Discharger's ability to operate the treatment system in compliance with this Order, it is not expected that there would be discharge of ammonia, arsenic, barium, copper, and cyanide in amounts that would cause objectionable color, odor, taste, or turbidity.

4.4.4.1.8. **Cause objectionable bottom deposits.** The mixing zones would not cause objectionable bottom deposits because the treatment system removes suspended particles that could contribute to receiving water bottom deposits; particularly, the ultrafiltration step of the treatment system reduces suspended solids before flowing to the sedimentation basin where further settling occurs before discharge. In addition, section 5.1.4 of this Order imposes receiving water limits that prohibit bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses.

4.4.4.1.9. **Cause nuisance.** Water Code section 13050(m) defines "nuisance" to mean anything that meets all three of the following criteria:

- Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;
- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

Section 5.1 of this Order prohibits discharges from causing a nuisance. Furthermore, the Discharger conducts regular effluent monitoring that includes standard observations to confirm that nuisance conditions are not present

4.4.4.1.10. **Dominate the receiving water or overlap a mixing zone from a different outfall.** The mixing zones will not dominate the receiving water because they are small compared to the approximately 5,000-foot length

of Corinda Los Trancos Creek beyond the discharge point. The mixing zones will also not overlap a mixing zone from another outfall because the Regional Water Board has not granted any other mixing zones in Corinda Los Trancos Creek. Furthermore, the mixing zones do not account for the additional stormwater discharge from the sedimentation basin; they are based only on dilution occurring from upstream base flows.

4.4.4.1.11. **Be located at or near any drinking water intake.** Although Corinda Los Trancos Creek is considered a potential source of drinking water pursuant to State Water Board Resolution No. 88-63, the mixing zones would not be located at or near any existing or proposed drinking water intake.

4.4.4.2. **WQBEL Calculations.** The following tables show the WQBEL calculations for arsenic, copper, selenium, cyanide, chlorodibromomethane, chloroform, dichlorobromomethane, ammonia, and barium in accordance with SIP section 1.4.

Table F-7A. WQBEL Calculations

Pollutant	Arsenic	Copper	Selenium	Cyanide	Chlorodibro-momethane
Units	µg/L	µg/L	µg/L	µg/L	µg/L
Basis and Criteria type	Title 22 Primary MCLs	CTR Criterion	CTR Criterion	CTR Criterion	CTR Criterion - HH
Criteria - Acute	340	15	20	22	-
Criteria - Chronic	150	10	5.0	5.2	-
Site-Specific Objective Criteria - Acute	-	-	-	-	-
Site-Specific Objective Criteria - Chronic	-	-	-	-	-
Water Effects Ratio (WER)	1	1	1	1	1
Lowest WQO	4	10	5.0	5.2	0.40
Site Specific Translator - MDEL	-	-	-	-	-
Site Specific Translator - AMEL	-	-	-	-	-
Dilution Factor (D)	1	3.4	0	1	0
No. of samples per month	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	N
HH criteria analysis required? (Y/N)	Y	Y	N	Y	Y
Applicable Acute WQO	340	15	20	22	-
Applicable Chronic WQO	150	10	5.0	5.2	-

Pollutant	Arsenic	Copper	Selenium	Cyanide	Chlorodibro-momethane
HH Criteria	10	1,300	-	700	0.40
Background (Maximum Conc. for Aquatic Life Calc.)	1.2	5.8	0.74	1.3	-
Background (Average Conc. for Human Health Calc.)	0.97	2.2	-	1.7	0.07
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	Y	N	N
ECA Acute	680	45	20	43	-
ECA Chronic	300	23	5.0	9.1	-
ECA HH	19	5,700	-	1,400	0.40
	-				
No. of data points <10 or at least 80% of data reported non-detect? (Y/N)	Y	Y	Y	Y	Y
Avg of effluent data points	15	9	30	3.3	20
Std Dev of effluent data points	0.7	13	2.1	2.7	10
CV Calculated	N/A	N/A	N/A	N/A	N/A
CV (Selected) - Final	0.60	0.60	0.60	0.6	0.6
ECA Acute Mult99	0.32	0.32	0.32	0.32	-
ECA Chronic Mult99	0.53	0.53	0.53	0.53	-
LTA Acute	220	14	6.4	13.7	-
LTA Chronic	160	12	2.6	4.8	-
Minimum of LTAs	160	12	2.6	4.8	-
AMEL Mult95	1.6	1.6	1.6	1.6	1.6
MDEL Mult99	3.1	3.1	3.1	3.1	3.1
AMEL (Aquatic Life)	250	19	4.1	7.5	-
MDEL (Aquatic Life)	490	38	8.2	15	-
MDEL/AMEL Multiplier	2.0	2.0	2.0	2.0	2.0
AMEL (Human Health)	19	5,700	-	1,400	0.40
MDEL (Human Health)	38	11,000	-	2,800	0.80
Minimum of AMEL for Aq. Life vs HH	19	19	4.1	7.5	0.40
Minimum of MDEL for Aq. Life vs HH	38	38	8.1	15	0.80

Pollutant	Arsenic	Copper	Selenium	Cyanide	Chlorodibro-momethane
Previous Order Limit - AMEL	-	24	-	4.3	-
Previous Order Limit - MDEL	-	48	-	5.2	-
Final Limit - AMEL	**19**	**19**	**4.1**	**4.3**	**0.40**
Final Limit - MDEL	**38**	**38**	**8.2**	**5.2**	**0.80**

Table F-7B. WQBEL Calculations

Pollutant	Chloroform	Dichlorobromo-methane	Ammonia (Chronic)	Barium
Units	µg/L	µg/L	mg/L	mg/L
Basis and Criteria type	CTR Criterion - HH	CTR Criterion - HH	Basin Plan Aquatic Life	Title 22 Primary MCLs
Criteria - Acute	-	-	-	-
Criteria - Chronic	-	-	4.2	-
Site-Specific Objective Criteria - Acute	-	-	-	-
Site-Specific Objective Criteria - Chronic	-	-	-	-
Water Effects Ratio (WER)	1	1	1	1.0
Lowest WQO	0.19	0.56	4.2	1.0
Site Specific Translator - MDEL	-	-	-	-
Site Specific Translator - AMEL	-	-	-	-
Dilution Factor (D)	0	0	2	2
No. of samples per month	4	4	30	4
Aquatic life criteria analysis required? (Y/N)	N	N	Y	N
HH criteria analysis required? (Y/N)	Y	Y	N	Y
Applicable Acute WQO	-	-	-	-
Applicable Chronic WQO	-	-	4.2	-
HH Criteria	0.19	0.56	-	1.0
Background (Maximum Conc. for Aquatic Life Calc.)	1.50	-	0.21	0.02
Background (Average Conc. for Human Health Calc.)	0.14	0.13	-	0.02

Pollutant	Chloroform	Dichlorobromo-methane	Ammonia (Chronic)	Barium
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	N	N
ECA Acute	-	-	-	-
ECA Chronic	-	-	12	-
ECA HH	0.19	0.56	-	3.0
No. of data points <10 or at least 80% of data reported non-detect? (Y/N)	Y	Y	Y	Y
Avg of effluent data points	16	16	7.2	2.3
Std Dev of effluent data points	4	4	5.2	0.0
CV Calculated	N/A	N/A	N/A	N/A
CV (Selected) - Final	0.60	0.60	0.60	0.60
ECA Acute Mult99	-	-	-	-
ECA Chronic Mult99	-	-	0.93	-
LTA Acute	-	-	-	-
LTA Chronic	-	-	11	-
Minimum of LTAs	-	-	11	-
AMEL Mult95	1.6	1.6	1.2	1.6
MDEL Mult99	3.1	3.1	3.1	3.1
AMEL (Aquatic Life)	-	-	13	-
MDEL (Aquatic Life)	-	-	35	-
MDEL/AMEL Multiplier	2.0	2.0	2.6	2.0
AMEL (Human Health)	0.19	0.56	-	3.0
MDEL (Human Health)	0.38	1.1	-	6.0
Minimum of AMEL for Aq. Life vs HH	0.19	0.56	13	3.0
Minimum of MDEL for Aq. Life vs HH	0.38	1.1	35	6.0
Previous Order Limit - AMEL	-	-	15	-
Previous Order Limit - MDEL	-	-	40	-
Final Limit - AMEL	**0.19**	**0.56**	**13**	**3.0**

Pollutant	Chloroform	Dichlorobromo-methane	Ammonia (Chronic)	Barium
Final Limit - MDEL	**0.38**	**1.1**	**35**	**6.0**

4.4.4.3. **pH.** This Order imposes water quality-based pH effluent limits of 6.5 (minimum) and 8.5 (maximum) pursuant to Basin Plan Table 4-2 (for shallow-water discharges from all treatment facilities). This limit is more stringent than a technology-based limit would be (see Fact Sheet section 4.2.2.5).

4.5. Discharge Requirement Considerations

4.5.1. **Anti-Backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4), and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous order. The requirements of this Order are at least as stringent as those in the previous order.

This Order does not retain water quality-based effluent limitations for total dissolved solids, acute toxicity, and chronic toxicity because data no longer indicate reasonable potential to cause or contribute to exceedances of water quality objectives (see Fact Sheet section 4.4.3.2.2). This is consistent with State Water Board Order WQ 2001-16, in which the State Water Board held that anti-backsliding does not necessarily dictate that a pollutant that was limited in a prior permit must have a limit in a later permit, even though there is no reasonable potential that the pollutant discharge will cause or contribute to a water quality standard exceedance. The State Water Board stated that where the anti-backsliding exception in CWA section 303(d)(4)(B) is met, the limit may be removed. The removal of the total dissolved solids, acute toxicity, and chronic toxicity effluent limits here is consistent with and satisfies CWA section 303(d)(4)(B) because Corinda Los Trancos Creek and Pilarcitos Creek (a tributary to Corinda Los Trancos Creek) are not impaired by these constituents and the removal of the effluent limitations are consistent with antidegradation policies as explained below.

This Order also does not retain the best professional judgment-based and technology-based effluent limitations for phenol and zinc. CWA section 402(o) prohibits in renewed, reissued, or modified permits (a) the replacement of technology-based effluent limitations to reflect subsequently promulgated effluent limitation guidelines which are less stringent and (b) in the case of effluent limitations established under CWA section 301(b)(1)(C) or 303(d), effluent limitations which are less stringent than comparable limitations in the prior permit. Neither the phenol nor zinc effluent limitations fall within either criterion, such that only the regulatory anti-backsliding prohibition at 40 C.F.R. section 122.44(l) applies to these pollutants. Removal of the phenol and zinc effluent limitations is consistent with 40 C.F.R. section 122.44(l)(1), which allows backsliding if the circumstances on which the previous order was based

have materially and substantially changed since the time it was issued and would constitute cause for permit modification or revocation and reissuance under 40 C.F.R. section 122.62, such as new information (other than revised regulations, guidance, or test methods) that would have justified the application of different permit conditions at the time of permit issuance. Here, the circumstances have materially and substantially changed and new information from monitoring data collected during the previous order term demonstrated that phenol and zinc were either not detected in the discharge or were below reporting limits. Because these constituents were not detected in the discharge in reportable quantities, the effluent limitations are unnecessary and would not have been imposed in the prior permit had this new information been available. Moreover, these effluent limitations do not drive treatment performance at the Facility, such that retaining them is also unnecessary to maintain current performance, as explained in Fact Sheet section 4.5.2, below.

4.5.2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. It continues the status quo with respect to the level of discharge authorized in the previous order, which is the baseline by which to measure whether degradation will occur. The removal of the water quality-based effluent limitations for total dissolved solids, acute toxicity, and chronic toxicity, and the technology-based effluent limitations for phenol and zinc, will not degrade water quality because those limitations did not drive treatment performance at the Facility; treatment performance is maintained by the remaining effluent limitations imposed by this Order. Therefore, this Order does not allow for a reduced level of treatment or increased volume of discharge relative to the previous order, and water quality will not be degraded.

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

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

before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 C.F.R. section 131.21(c)(1). U.S. EPA approved the remaining beneficial uses and water quality objectives, so they are also applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in sections 5.1 and 5.2 of the Order are based on Basin Plan narrative and numeric water quality objectives. The receiving water limitation in section 5.3 of the Order requires compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specific categories of permits in accordance with 40 C.F.R. section 122.42. 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 permits either expressly or by reference.

In accordance with 40 C.F.R. section 123.25(a)(12), states may omit or modify conditions to impose more stringent requirements. Attachment G contains standard provisions that supplement the provisions in Attachment D. Attachment S contains standard provisions for stormwater discharges associated with industrial activities, which are consistent with the requirements of *NPDES General Permit for Stormwater Discharges Associated with Industrial Activities* (State Water Board Order 2014-0057-DWQ).

This Order omits the federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the State’s enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates Water Code section 13387(e) by reference.

6.2. Monitoring and Reporting Provisions

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

6.3. Special Provisions

6.3.1. Reopener Provisions

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

6.3.2. Effluent Characterization Study and Report

This Order does not include WQBELs for 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 13383, 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.

6.3.3. Pollutant Minimization Program

This provision is based on Basin Plan section 4.13.2 and SIP section 2.4.5.

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

7.1. Monitoring Requirements Rationale

7.1.1. **Influent Monitoring.** Influent monitoring is necessary to understand Facility operations. Monitoring for influent TSS, oil and grease, pH, nitrite, nitrate, arsenic, barium, copper, selenium, cyanide, chlorodibromomethane, chloroform, dichlorobromomethane, ammonia, α-terpineol, benzene, benzoic acid, ρ-cresol, phenol, zinc, vinyl chloride, and priority pollutants is needed to characterize the influent wastewater; detect changes in influent quality, including concentrations of limited pollutants; and assess treatment performance that may inform requirements in the next permit.

7.1.2. **Effluent Monitoring.** Effluent monitoring at Monitoring Location EFF-001 is necessary to understand Facility operations, evaluate compliance with this Order's effluent limitations, conduct future reasonable potential analyses, and evaluate compliance with Prohibition 3.3, which prohibits the discharge of treated groundwater greater than 115,200 gpd.

7.1.3. **Stormwater Monitoring.** Stormwater monitoring is necessary to evaluate BMP effectiveness and to determine whether additional BMPs are necessary to control stormwater discharges.

7.1.4. **Receiving Water Monitoring.** Receiving water monitoring is necessary to evaluate compliance with this Order's receiving water limitations, provide data for reasonable potential analyses, evaluate possible impacts to beneficial uses, and characterize the receiving water:

- Background receiving water monitoring at Monitoring Location RSW-001 is necessary to provide background data for reasonable potential analyses and characterize the receiving water prior to any impact from the discharge.

- Downstream receiving water monitoring at Monitoring Location RSW-002 is necessary to confirm that the total ammonia limits are protective of the Basin Plan water quality objective for un-ionized ammonia, to confirm that the mixing zones and dilution granted by this Order are protective of beneficial uses, and to evaluate compliance with this Order's receiving water limitations.

- Far-field receiving water monitoring at Monitoring Location RSW-003 is necessary to determine if the discharge has any far-field impacts and to characterize natural downstream receiving water conditions.

7.1.5. **Other Monitoring Requirements.** Pursuant to CWA section 308, U.S. EPA requires some dischargers to participate in a Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program that evaluates the analytical abilities of laboratories that perform or support NPDES permit-required monitoring. The program applies to discharger laboratories and contract laboratories, and evaluates each laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES program. There are two options to comply: (1) the Discharger may obtain and analyze DMR-QA samples, or (2) pursuant to a waiver U.S. EPA issued to the State Water Board, the Discharger may submit results from the most recent Water Pollution Performance Evaluation Study. MRP section 1.4 requires the Discharger to ensure that the results of the DMR-QA Study or most recent Water Pollution Performance Evaluation Study are submitted to the State Water Board, which forwards the results to U.S. EPA.

7.2. 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-8. Monitoring Requirements Summary

Parameter [1]	Influent INF-001	Effluent EFF-001	Stormwater EFF-002	Receiving Water RSW-001	Receiving Water RSW-002 and RSW-003
Flow	-	Continuous/D	-	Continuous/D	-
BOD_5	-	1/Quarter	-	-	-
TSS	2/Year	1/Quarter	2/Year	-	-
Oil and Grease	2/Year	1/Quarter	2/Year	-	-
pH [1]	2/Year	1/Quarter	2/Year	1/Quarter]	1/Quarter]
Dissolved Oxygen	-	-	-	1/Quarter	1/Year
Temperature	-	1/Quarter	-	1/Quarter	1/Quarter
Nitrite	2/Year	1/Quarter	-	-	-
Nitrate	2/Year	1/Quarter	-	-	-
Hardness as $CaCO_3$	-	1/Quarter	-	1/Quarter	1/Year
Arsenic, Total Recoverable	2/Year	1/Quarter	-		
Barium, Total Recoverable	2/Year	1/Quarter	-		
Copper, Total Recoverable	2/Year	1/Quarter	-	-	-
Selenium, Total Recoverable	Once	Once	-		
Cyanide, Total	2/Year	1/Quarter	-	-	-
Chlorodibromomethane	-	1/Quarter	-	-	-
Chloroform	-	1/Quarter	-	-	-
Dichlorobromomethane	-	1/Quarter	-	-	-
α-Terpineol	2/Year	1/Year	-	-	-
Ammonia, Total	2/Year	1/Quarter	-	1/Quarter	1/Quarter
Benzene	2/Year	1/Quarter	-	-	-
Benzoic acid	2/Year	1/Year	-	-	-
Chlorine, Total Residual	-	1/Week [2]	-	-	-
ρ-Cresol	2/Year	1/Year	-	-	-
Phenol	2/Year	1/Year	-	-	-
Zinc	2/Year	1/Year	-	-	-
Vinyl Chloride	2/Year	1/Quarter	-	-	-
Priority Pollutants [3]	Once	Once	-	Once	Once
Municipal Supply Pollutants [4]	Once	Once	-	Once	Once
Standard Observations	-	-	1/Month [5]	1/Quarter [6]	1/Quarter [6]

Footnotes:

[1] If pH is monitored continuously, the minimum, maximum, and average pH for each day is to be reported in self-monitoring reports.

[2] The Discharger may reduce this frequency to once per month when discharge to Corinda Los Trancos Creek is not occurring.

[3] The Discharger is to monitor for the pollutants listed in Attachment G, Table B.

[4] The Discharger is to monitor for the pollutants with Maximum Contaminant Levels, except for radionuclides. Priority pollutant monitoring conducted in accordance with this table may be used to satisfy this monitoring requirement.

[5] Stormwater standard observations are specified in Attachment S section 2.1.

[6] Standard observations are specified in Attachment G section 3.2.1.

8. PUBLIC PARTICIPATION

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

8.1. 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 (waterboards.ca.gov/sanfranciscobay).

Water Code sections 189.7 and 13149.2 require specific outreach and findings related to potential environmental justice, tribal impact, and racial equity considerations for reissued individual WDRs that include time schedules for achieving compliance with water quality objectives. This Order does not contain such a time schedule; therefore, the specified outreach and findings are not required.

8.2. 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 Executive Office at the Regional Water Board at 1515 Clay Street, Suite 1400, Oakland, California 94612, to the attention of Marcos De la Cruz.

Written comments were due at the Regional Water Board office by 5:00 p.m. on February 12, 2024.

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

Date: March 13, 2024
Time: 9:00 a.m.

Contact: Marcos De la Cruz, (510) 622-2365, marcos.delacruz@waterboards.ca.gov

Interested persons were provided notice of the hearing and information on how to participate. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge and Order.

Dates and venues can change. The Regional Water Board's website is (waterboards.ca.gov/sanfranciscobay), where one can access the current agenda for changes.

8.4. Reconsideration of Waste Discharge Requirements. Any person aggrieved by this Regional Water Board action may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050. The State Water Board must receive the petition at the following address within 30 calendar days of the date of Regional Water Board action:

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

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

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

8.5. Information and Copying. The Report of Waste Discharge, related supporting documents, and comments received are on file. To review these documents, please contact Melinda Wong, the Regional Water Board's custodian of records, by calling (510) 622-2300 or emailing Melinda.Wong@waterboards.ca.gov. Document copying may be arranged.

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

8.7. Additional Information. Requests for additional information or questions regarding this Order should be directed to Marcos De la Cruz, (510) 622-2365, marcos.delacruz@waterboards.ca.gov.

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

Contents

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

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.

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply – Not Supplemented

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

1.3. Duty to Mitigate – Supplement to Attachment D, Provision 1.3.

1.3.1. **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 1.3.2, below) into one document. In accordance with Regional Water Board Resolution No. 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:

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

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

1.3.1.3. Emergency standby power;

1.3.1.4. Protection against vandalism;

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

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

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

1.3.2. **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:

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

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

1.3.2.3. 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.

1.4. Proper Operation and Maintenance – Supplement to Attachment D, Provision 1.4

1.4.1. **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.

1.4.2. **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.

1.4.3. **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.

1.5. Property Rights – Not Supplemented

1.6. Inspection and Entry – Not Supplemented

1.7. Bypass – Not Supplemented

1.8. Upset – Not Supplemented

1.9. Other – Addition to Attachment D

1.9.1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.

1.9.2. 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.

1.9.3. 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.

2. STANDARD PROVISIONS – PERMIT ACTION – NOT SUPPLEMENTED

3. STANDARD PROVISIONS – MONITORING

3.1. Sampling and Analyses – Supplement to Attachment D, Provisions 3.1 and 3.2

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

3.1.2. **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.

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

3.1.3.1. **Sample Collection Timing**

3.1.3.1.1. 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.

3.1.3.1.2. 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.

3.1.3.1.3. 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).

3.1.3.1.4. 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.

3.1.3.1.4.1. 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

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

3.1.3.2. **Conditions Triggering Accelerated Monitoring**

3.1.3.2.1. **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.

3.1.3.2.2. **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.

3.1.3.2.3. **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.

3.1.3.2.4. **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.

3.1.3.2.5. **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.

3.1.3.2.5.1. **Bypass for Essential Maintenance.** If a Discharger bypasses a treatment unit for essential maintenance pursuant to Attachment D section 1.7.2, 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.

3.1.3.2.5.2. **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 1.7.4, 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.

3.2. Standard Observations – Addition to Attachment D

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

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

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

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

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

3.2.1.5. **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).

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

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

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

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

3.2.3. **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:

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

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

3.2.4. **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:

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

3.2.4.2. **Weather Conditions** — wind direction and estimated velocity.

4. STANDARD PROVISIONS – RECORDS

4.1. Records to be Maintained – Supplement to Attachment D, Provision 4.1

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.

4.2. Records of Monitoring – Supplement to Attachment D, Provision 4.2

Monitoring records shall include the following:

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

4.2.2. **Disinfection Process.** For the disinfection process, records shall include the following:

4.2.2.1. For bacteriological analyses:

4.2.2.1.1. Wastewater flow rate at the time of sample collection; and

4.2.2.1.2. 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).

4.2.2.2. For the chlorination process (when chlorine is used for disinfection), at least daily average values for the following:

4.2.2.2.1. Chlorine residual of treated wastewater as it enters the chlorine contact basin (mg/L);

4.2.2.2.2. Chlorine dosage (kg/day); and

4.2.2.2.3. Dechlorination chemical dosage (kg/day).

4.2.3. **Wastewater Treatment Process Solids.** For each treatment unit process that involves solids removal from the wastewater stream, records shall include the following:

4.2.3.1. 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

4.2.3.2. Final disposition of such solids (e.g., landfill, other subsequent treatment unit).

4.2.4. **Treatment Process Bypasses.** For all treatment process bypasses, including wet weather blending, records shall include the following:

4.2.4.1. Chronological log of treatment process bypasses;

4.2.4.2. Identification of treatment processes bypassed;

4.2.4.3. Beginning and ending dates and times of bypasses;

4.2.4.4. Bypass durations;

4.2.4.5. Estimated bypass volumes; and

4.2.4.6. 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.

4.2.5. **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 5.5.2, below.

4.3. Claims of Confidentiality – Not Supplemented

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information – Not Supplemented

5.2. Signatory and Certification Requirements – Not Supplemented

5.3. Monitoring Reports – Supplement to Attachment D, Provision 5.3

5.3.1. **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:

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

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

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

5.3.1.1.3. Causes of the violations;

5.3.1.1.4. 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);

5.3.1.1.5. 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;

5.3.1.1.6. 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;

5.3.1.1.7. 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

5.3.1.1.8. Signature. The transmittal letter shall be signed in accordance with Attachment D, Provision 5.2.

5.3.1.2. **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.

5.3.1.3. **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.

5.3.1.4. **Analysis Results**

5.3.1.4.1. **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.

5.3.1.4.2. **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:

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

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

5.3.1.4.3. **Duplicate Samples.** The Discharger shall report the average of duplicate sample analyses when reporting for a single sample result (or the median if one or more of the duplicates is DNQ or ND [see Provision 5.3.1.4.2, above]). For bacteria indicators, the Discharger shall report the geometric mean of the duplicate analyses.

5.3.1.4.4. **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
BEF_x = 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

5.3.1.5. **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.

5.3.1.6. **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:

5.3.1.6.1. 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;

5.3.1.6.2. List of approved analyses, including the following:

5.3.1.6.2.1. List of analyses for which the Discharger is certified;

5.3.1.6.2.2. 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

5.3.1.6.2.3. List of “waived” analyses, as approved;

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

5.3.1.6.4. 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.

5.4. Compliance Schedules – Not supplemented

5.5. Twenty-Four Hour Reporting – Supplement to Attachment D, Provision 5.5

5.5.1. **Oil or Other Hazardous Material Spills**

5.5.1.1. 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:

5.5.1.1.1. 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).

5.5.1.1.2. 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).

5.5.1.2. 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:

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

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

5.5.1.2.3. Nature of material spilled;

5.5.1.2.4. Quantity of material spilled;

5.5.1.2.5. Receiving water body affected, if any;

5.5.1.2.6. Cause of spill;

5.5.1.2.7. Estimated size of affected area;

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

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

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

5.5.1.2.11. Persons or agencies notified.

5.5.2. Unauthorized Municipal Wastewater Treatment Plant Discharges[1]

5.5.2.1. **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:

5.5.2.1.1. Incident description and cause;

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

5.5.2.1.3. Date and time that the unauthorized discharge started;

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

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

5.5.2.1.6. Identity of person reporting the unauthorized discharge.

5.5.2.2. **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 5.5.2.1, above, the following:

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

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

5.5.2.2.3. 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;

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

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[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.

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

5.5.2.2.6. 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

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

5.6. Planned Changes – Not supplemented

5.7. Anticipated Noncompliance – Not supplemented

5.8. Other Noncompliance – Not supplemented

5.9. Other Information – Not supplemented

6. STANDARD PROVISIONS – ENFORCEMENT – NOT SUPPLEMENTED

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – NOT SUPPLEMENTED

8. DEFINITIONS – ADDITION TO ATTACHMENT D

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

8.1. Arithmetic Calculations

8.1.1. **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:

Geometric Mean = Anti log (1/N ∑ Log C_i)

or

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.

8.1.2. **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:

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

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.

8.1.3. **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):

Removal Efficiency (%) =
100 x [1 - (Effluent Concentration / Influent Concentration)]

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

8.3. 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.

8.4. 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).

8.5. 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.

8.6. 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.

8.7. 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.

8.8. Untreated waste – raw wastewater.

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

CTR No.	Pollutant / Parameter	Analytical Method[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
1	Antimony	204.2	-	-	-	-	10	5	50	0.5	5	0.5	-	1000
2	Arsenic	206.3	-	-	-	20	-	2	10	2	2	1	-	1000
3	Beryllium	-	-	-	-	-	20	0.5	2	0.5	1	-	-	1000
4	Cadmium	200 or 213	-	-	-	-	10	0.5	10	0.25	0.5	-	-	1000
5a	Chromium (III)	SM 3500	-	-	-	-	-	-	-	-	-	-	-	-
5b	Chromium (VI)	SM 3500	-	-	-	10	5	-	-	-	-	-	-	1000
	Chromium (total)[3]	SM 3500	-	-	-	-	50	2	10	0.5	1	-	-	1000
6	Copper	200.9	-	-	-	-	25	5	10	0.5	2	-	-	1000
7	Lead	200.9	-	-	-	-	20	5	5	0.5	2	-	-	10,000
8	Mercury	1631[4]	-	-	-	-	-	-	-	-	-	-	-	-
9	Nickel	249.2	-	-	-	-	50	5	20	1	5	-	-	1000
10	Selenium	200.8 or SM 3114B or C	-	-	-	-	-	5	10	2	5	1	-	1000
11	Silver	272.2	-	-	-	-	10	1	10	0.25	2	-	-	1000
12	Thallium	279.2	-	-	-	-	10	2	10	1	5	-	-	1000
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]	100.2[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	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
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	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
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	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
84	Di-n-Octyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
59	Benzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
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[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	-	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
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	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

[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.

[7] Detected as azobenzene.

ATTACHMENT S– STORMWATER PROVISIONS, MONITORING, AND REPORTING REQUIREMENTS

CONTENTS

TABLE

ATTACHMENT S – STORMWATER PROVISIONS, MONITORING, AND REPORTING REQUIREMENTS

APPLICABILITY

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

1. STORMWATER PROVISIONS – PERMIT COMPLIANCE

1.1. Stormwater Pollution Prevention Plan (SWPPP)

The Discharger shall prepare a SWPPP that includes the following elements:

1.1.1. Facility name and contact information;

1.1.2. Site map;

1.1.3. List of industrial materials;

1.1.4. Description of potential sources;

1.1.5. Assessment of potential pollutant sources;

1.1.6. Minimum Best Management Practices (BMPs);

1.1.7. Advanced BMPs, if applicable;

1.1.8. Monitoring implementation plan;

1.1.9. Annual comprehensive facility compliance evaluation; and

1.1.10. 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 (Attachment G section 1.3.2).

1.2. 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:

1.2.1 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);

1.2.2. 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);

1.2.3. 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);

1.2.4. I dentification of all impervious areas, including paved areas, buildings, covered storage areas, or other roofed structures;

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

1.2.6. 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).

1.3. 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.

1.4. Potential Pollutant Sources

The Discharger shall describe and assess potential stormwater pollutant sources, including the following:

1.4.1. **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.

1.4.2. **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.

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

1.4.4. **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.

1.4.5. **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.

1.4.6. **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.

1.5. 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:

1.5.1. Facility areas with likely sources of pollutants;

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

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

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

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

1.5.6. Sampling, visual observation, and inspection records;

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

1.5.8. 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 1.6, below, will not adequately reduce or prevent pollutants in stormwater discharges and any necessary advanced BMPs, as described in Provision 1.7, below, for those areas.

1.6. Minimum Best Management Practices (BMPs)

The Discharger shall, to the extent feasible, implement and maintain the following BMPs:

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

1.6.1.1. 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;

1.6.1.2. Minimize or prevent material tracking;

1.6.1.3. Minimize dust generated from industrial materials or activities;

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

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

1.6.1.6. 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;

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

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

1.6.1.9. 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.

1.6.2. **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.

1.6.3. **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.

1.6.4. **Material Handling and Waste Management.** The Discharger shall do the following:

1.6.4.1. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm;

1.6.4.2. 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;

1.6.4.3. Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;

1.6.4.4. Divert run-on and stormwater generated from within the facility away from all stockpiled materials;

1.6.4.5. Clean all spills of industrial materials or wastes that occur during handling in accordance with spill response procedures; and,

1.6.4.6. 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.

1.6.5. **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.

1.6.6. **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.

1.6.7. **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.

1.7. 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 S-1, 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 S-1. Stormwater Action Levels

Parameter	Unit	Instantaneous Action Level	Annual Action Level
Total Suspended Solids	mg/L	400	100
Oil and Grease	mg/L	25	15
pH	s.u.	6.0-9.0[1]	----

Footnotes:

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

If, upon subsequent monitoring, the pollutants measured in Table S-1 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 1.6, above. The Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified pursuant to Provision 1.5.8, 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:

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

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

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

1.8. BMP Descriptions

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

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

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

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

1.8.4. The individual responsible for implementing the BMP;

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

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

1.9. 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:

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

1.9.2. 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;

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

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

1.9.5. An assessment of any other factors needed to comply with the requirements of the Annual Stormwater Report (see Provision 3.1, below).

2. STORMWATER PROVISIONS – MONITORING

2.1. Monthly Visual Observations

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

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

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

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

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

2.1.3. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted monthly visual observations (see Provision 3.1, below).

2.2. 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.

2.2.1. 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.

2.2.2. 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.

2.2.3. 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.

2.2.4. 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.

2.2.5. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted sampling event visual observations (see Provision 4.1, below).

2.3. 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.

2.4. SWPPP Revisions

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

2.5. Sampling and Analysis

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

2.5.2. Samples shall be (1) representative of stormwater associated with industrial activities and any commingled authorized non-stormwater dischargers; or (2) associated with the discharge of contained stormwater.

2.5.3. 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.

3. STORMWATER PROVISIONS – REPORTING

3.1. 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:

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

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

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

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

4. STORMWATER PROVISIONS – DEFINITIONS

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

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

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

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

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

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

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

4.1.7. 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 blowdowns or drains).

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