



San Francisco Bay Regional Water Quality Control Board

**TENTATIVE ORDER No. R2-2020-XXXX
NPDES No. CA0030180**

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

Table 1. Discharger Information

Discharger	Cedar Fair Entertainment Company
Facility Name	California's Great America
Facility Address	4701 Great America Parkway, Santa Clara
CIWQS Place Number	736379

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Wastewater, including stormwater	37.39752	121.96899	San Tomas Aquino Creek

Table 3. Administrative Information

This Order was adopted on:	[MONTH DAY, YEAR]
This Order shall become effective on:	July 1, 2020
This Order shall expire on:	June 30, 2025
CIWQS Regulatory Measure Number	
The Discharger shall file a Report of Waste Discharge for updated WDRs in accordance with California Code of Regulations, title 23, and as an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	October 3, 2024
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, San Francisco Bay Region, have classified this discharge as follows:	Minor

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

Michael Montgomery, Executive Officer

Contents

I.	Facility Information	3
II.	Findings.....	3
	A. Legal Authorities	3
	B. Background and Rationale for Requirements	3
	C. Notification of Interested Parties.....	3
	D. Consideration of Public Comment	3
III.	Discharge Prohibitions	3
IV.	Effluent Limitations and Discharge Specifications	4
V.	Receiving Water Limitations	4
VI.	Provisions.....	5
	A. Standard Provisions.....	5
	B. Monitoring and Reporting	6
	C. Special Provisions	6
	1. Reopener Provisions.....	6
	2. Retention Basin Management Plan	7
	3. Retention Basin Pollutants above Effluent Limitations	7

Tables

Table 1.	Discharger Information.....	1
Table 2.	Discharge Locations	1
Table 3.	Administrative Information	1
Table 4.	Effluent Limitations – Discharge Point No. 001	4

Attachments

Attachment A – Definitions	A-1
Attachment B – Facility Map.....	B-1
Attachment C – Process Flow Diagram.....	C-1
Attachment D – Federal Standard Provisions	D-1
Attachment E – Monitoring and Reporting Program (MRP).....	E-1
Attachment F – Fact Sheet.....	F-1
Attachment G – Regional Standard Provisions and Monitoring and Reporting Requirements	G-1
Attachment S – Stormwater Provisions, Monitoring, and Reporting Requirements	S-1

I. FACILITY INFORMATION

Information describing the stormwater collection and storage system at California's Great America is summarized in Table 1 and Fact Sheet (Attachment F) sections I and II.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States as listed in Table 2 subject to the WDRs in this Order.
- B. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information the Discharger submitted as part of its application, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E, G and S, are also incorporated into this Order.
- C. Notification of Interested Parties.** The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe these WDRs and provided an opportunity to submit written comments and recommendations. The Fact Sheet provides details regarding the notification.
- D. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. The Fact Sheet provides details regarding the public hearing.

THEREFORE, IT IS HEREBY ORDERED that Order No. R2-2015-0003 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes. In order to meet the provisions of Water Code division 7 (commencing with § 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous order.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated or untreated wastewater at a location or in a manner different than described in this Order is prohibited.
- B.** Discharge at Discharge Point No. 001 is prohibited except to prevent flooding.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The Discharger shall comply with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP):

Table 4. Effluent Limitations – Discharge Point No. 001

Parameter	Units	Average Monthly Effluent Limitation	Average Weekly Effluent Limitation ^[1]	Maximum Daily Effluent Limitation	Instantaneous Minimum Effluent Limitation	Instantaneous Maximum Effluent Limitation
Carbonaceous Biochemical Oxygen Demand (CBOD)	mg/L	—	25	—	—	—
Chlorine, Total Residual ^[2]	mg/L	—	—	—	—	0.0
Copper, Total Recoverable	µg/L	12	—	34	—	—
Oil and Grease	mg/L	10	—	20	—	—
pH	standard units	—	—	—	6.5	8.5
Total Suspended Solids (TSS)	mg/L	—	30	—	—	—
Acute Toxicity	percent survival	—	—	—	70	—

Unit Abbreviations:

mg/L = milligrams per liter

µg/L = micrograms per liter

Footnotes:

^[1] The weekly average concentration shall be calculated as described in Attachment G, section V.C.1.d.ii, using all samples collected in a calendar week. Samples shall not be collected when there is no discharge.

^[2] The Discharger shall calibrate and maintain total residual chlorine field test kits and analyzers (EPA-approved Standard Methods 4500-Cl F and G) to reliably quantify values of 0.10 mg/L and greater. The minimum level (ML) for total chlorine residual shall be 0.10 mg/L; the ML shall also be the reporting limit (RL). See Attachment E section VII.B.5.

V. RECEIVING WATER LIMITATIONS

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

1. Floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses;
2. Alteration of suspended sediment in such a manner as to cause nuisance or adversely affect beneficial uses, or detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life;
3. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses;
4. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
5. Alteration of temperature beyond present natural background levels;

6. Changes in turbidity that cause nuisance or adversely affect beneficial uses, or increases from normal background light penetration or turbidity relatable to waste discharge greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units (NTU), or turbidity increases above 55 NTU in areas where natural turbidity is less than 50 NTU;
 7. Coloration that causes nuisance or adversely affects beneficial uses;
 8. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
 9. Toxic or other deleterious substances in concentrations or quantities that cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
- B. The discharge shall not cause the following limits to be exceeded in receiving waters at any place within one foot of the water surface:
1. Dissolved Oxygen (DO) 7.0 mg/L, minimum

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

VI. PROVISIONS

A. Standard Provisions

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

2. The Discharger shall comply with all applicable provisions of Attachment G (*Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits*).
3. The Discharger shall comply with all applicable provisions of *Stormwater Provisions, Monitoring, and Reporting Requirements* (Attachment S).

B. Monitoring and Reporting

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

C. Special Provisions

1. Reopener Provisions

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

- a. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters.
- b. If new or revised water quality objectives or total maximum daily loads (TMDLs) come into effect for San Francisco Bay and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect the updated water quality objectives and wasteload allocations in the TMDLs. Adoption of the effluent limitations in this Order is not intended to restrict in any way future modifications based on legally adopted water quality objectives or TMDLs or as otherwise permitted under federal regulations governing NPDES permit modifications.
- c. If translator, dilution, or other water quality studies provide a basis for determining that a permit condition should be modified.
- d. If State Water Board precedential decisions, new policies, new laws, or new regulations are adopted.
- e. If an administrative or judicial decision on a separate NPDES permit or waste discharge requirements addresses requirements similar to this discharge.
- f. Or as otherwise authorized by law.

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

2. Retention Basin Management Plan

The Discharger shall submit a retention basin management plan with its annual Self-Monitoring Report (SMR) no later than February 1 of each year. The retention basin management plan shall cover January through December of the preceding year and identify planned activities for the current year. Each annual SMR shall include at least the following information:

- a. Description of how wastewater, including stormwater, flows through the park, with emphasis on the operation and management of the retention basins, highlighting any changes from the prior year's operation.
- b. Discussion of current pollutants of concern. The Discharger shall identify which pollutants were of concern during the reporting period and which pollutants are currently of concern and may be of potential concern in the future. This discussion shall explain the reason why the pollutants are or were considered of concern. Pollutants of concern shall include total residual chlorine, oxygen demand, suspended solids, and any other pollutants that potentially threaten to harm San Tomas Aquino Creek beneficial uses.
- c. Identification of sources of past, current, and future pollutants of concern.
- d. Identification of tasks to minimize discharges of pollutants of concern. This discussion shall identify the tasks the Discharger will take to reduce the pollutants of concern in the retention basin. These tasks shall include preventative measures focused on stormwater best management practices as required by Attachment G section I.C.2 and Attachment S section I.A, and other measures as necessary to prevent pollutants of concern from entering the retention basins.
- e. Outreach to employees. The Discharger shall inform its employees about the pollutants of concern, potential sources, and how they should reduce discharges of these pollutants.
- f. Effectiveness of tasks to prevent discharges of pollutants exceeding effluent limits. The Discharger shall report the effectiveness of past measures taken to reduce pollutants of concern in the retention basin. The Discharger shall report the criteria used to evaluate the effectiveness.

3. Retention Basin Pollutants above Effluent Limitations

The Discharger shall notify the Regional Water Board within 24 hours of becoming aware that a pollutant has been detected in the retention basin above this Order's effluent limits. The Discharger shall investigate the sources of the elevated pollutant, and identify and implement actions to reduce retention basin pollutant levels below effluent limits. The Discharger shall continue to implement such actions until retention basin pollutant concentrations are below effluent limits. The Discharger shall report the progress of its investigation and the effectiveness of its corrective actions weekly, unless a lower frequency is approved in writing by the Executive Officer, until pollutant levels are below effluent limits. The Discharger shall also include a summary of each incident in the subsequent annual SMR.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n \quad \text{where: } \Sigma x \text{ is the sum of the measured ambient water concentrations, and } n \text{ is the number of samples.}$$

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

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

Carcinogenic

Known to cause cancer in living organisms.

Coefficient of Variation

Measure of data variability calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

Sample result less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit

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

Effluent Concentration Allowance (ECA)

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

Enclosed Bay

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

Estimated Chemical Concentration

Concentration that results from the confirmed detection of the substance below the ML value by the analytical method.

Estuaries

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

Inland Surface Waters

All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

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

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

Sample results less than the laboratory's MDL.

Persistent Pollutants

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

Pollutant Minimization Program

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

Pollution Prevention

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

Reporting Level (RL)

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

Source of Drinking Water

Any water designated as having a municipal or domestic supply (MUN) beneficial use.

Standard Deviation (σ)

Measure of variability calculated as follows:

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

where:

x is the observed value;

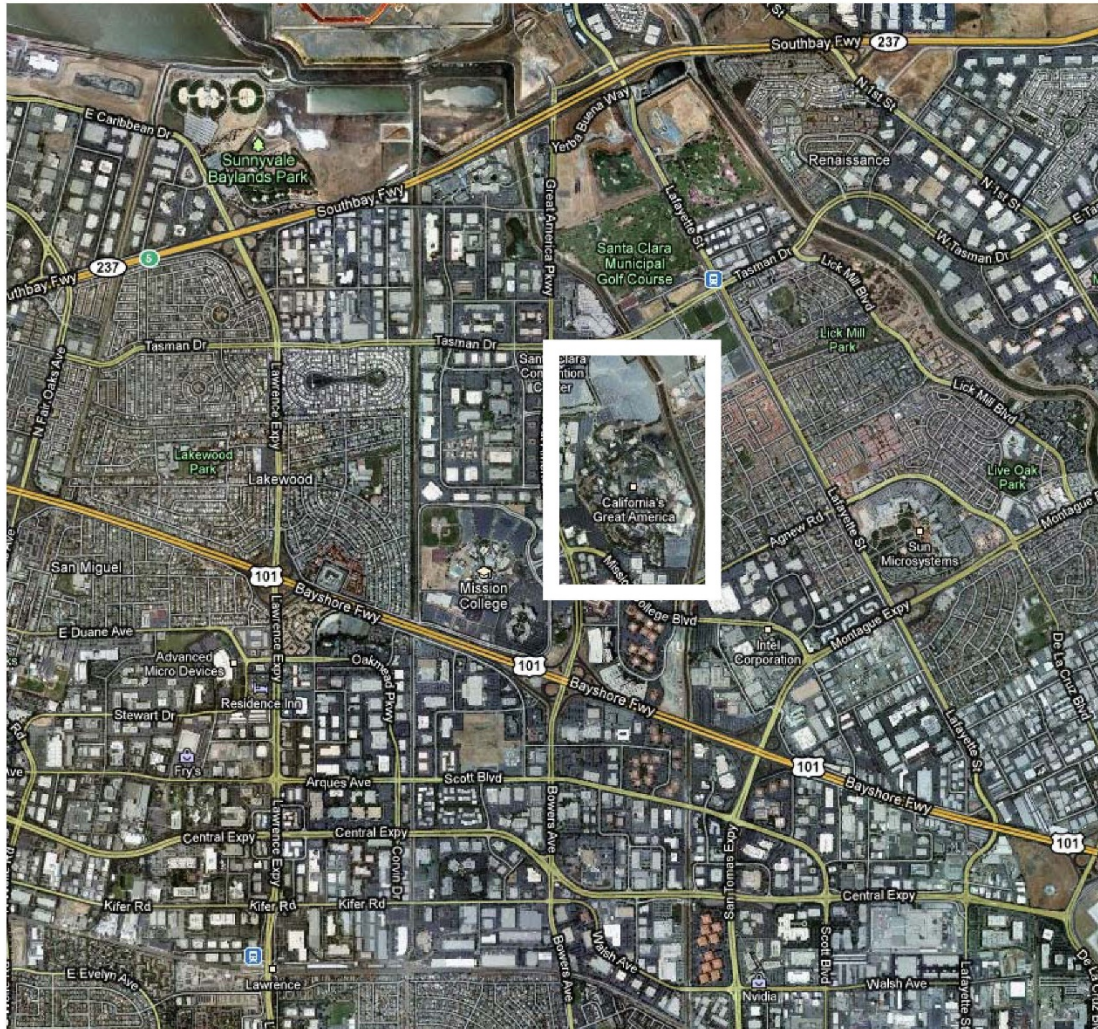
μ is the arithmetic mean of the observed values; and

n is the number of samples.

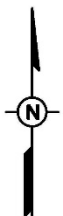
Toxicity Reduction Evaluation (TRE)

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

ATTACHMENT B – FACILITY MAPS




SITE LOCATION MAP
4701 GREAT AMERICA PARKWAY
SANTA CLARA, CALIFORNIA

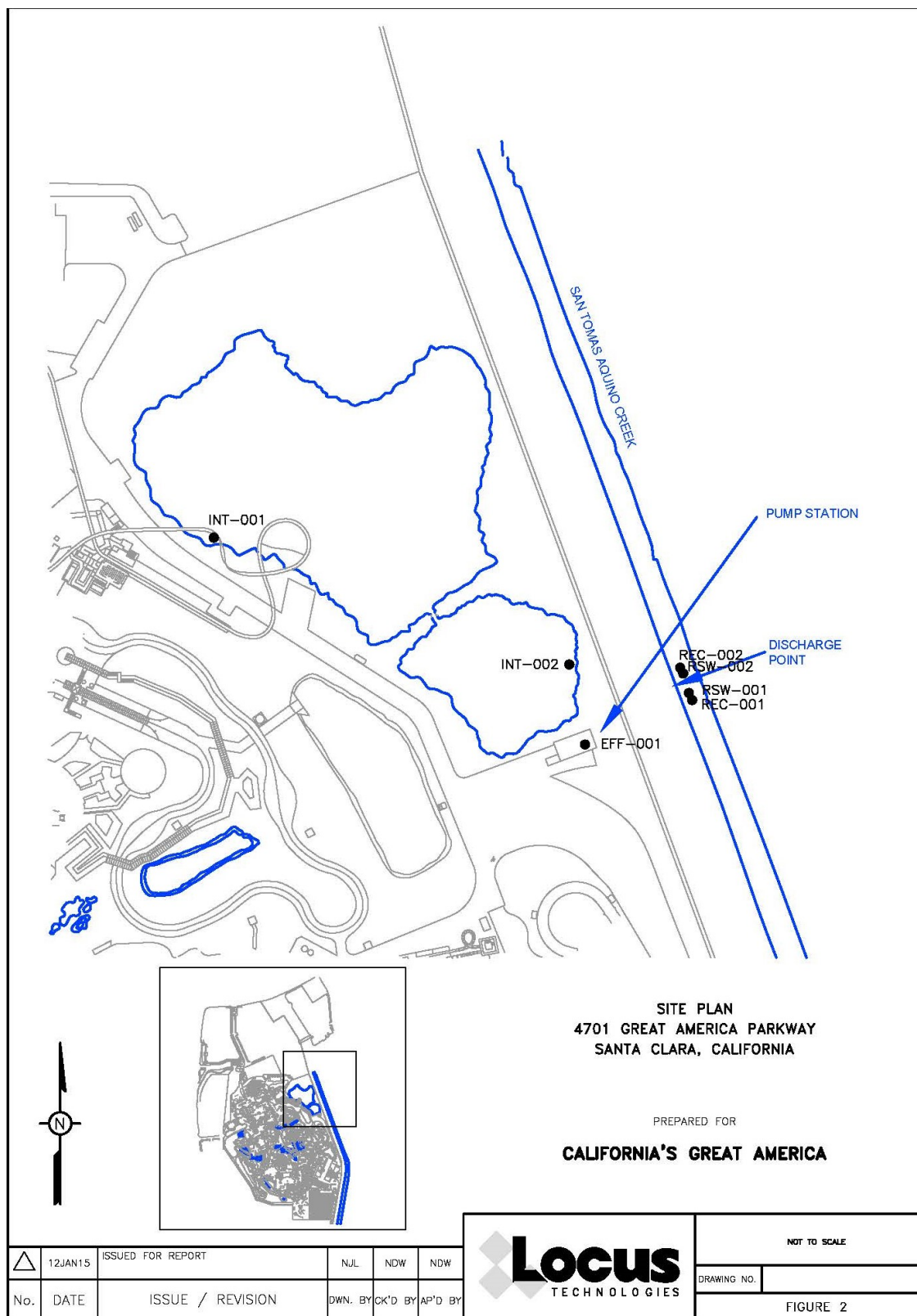


PREPARED FOR
CALIFORNIA'S GREAT AMERICA

△	9NOV09	ISSUED FOR REPORT	NDW	NDW	NDW
No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY

		DRAWING NO.	22-005-A11
		FIGURE 1	

ATTACHMENT C – SITE MAP



ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS—PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

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

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

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

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

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of

equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

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

- 4. **Approval.** The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions—Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

- a. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)
- b. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

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

- 1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
- 2. **Conditions necessary for a demonstration of upset.** A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

- b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
- c. The Discharger submitted notice of the upset as required in Standard Provisions—Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
- d. The Discharger complied with any remedial measures required under Standard Provisions—Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

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

II. STANDARD PROVISIONS—PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS—MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
 - 1. The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either (a) the method ML is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter, or (b) the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in a facility's discharge is

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

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

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

IV. STANDARD PROVISIONS—RECORDS

- A. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B. Records of monitoring information shall include the following:
 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
 3. The date(s) the analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):
 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
 2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS—REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger

shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions—Reporting V.B.2, V.B.3, V.B.4, V.B.5, and V.B.6 below. (40 C.F.R. § 122.41(k).)
2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

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

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

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions—Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions—Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions—Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)
6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R. § 122.22(e).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order. (40 C.F.R. § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

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

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

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (Alternatively, for an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1).) (40 C.F.R. § 122.41(l)(1)(ii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

J. Initial Recipient for Electronic Reporting Data

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

VI. STANDARD PROVISIONS—ENFORCEMENT

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

VII. ADDITIONAL PROVISIONS—NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels” (40 C.F.R. § 122.42(a)(1)):
 - a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));
 - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
 - d. The level established by the Regional Water Board in accordance with section 40 C.F.R. 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels” (40 C.F.R. § 122.42(a)(2)):
 - a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
 - b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
 - d. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

B. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Contents

I.	General Monitoring Provisions.....	E-2
II.	Monitoring Locations.....	E-2
III.	Retention Basin Monitoring Requirements	E-3
IV.	Effluent Monitoring Requirements	E-3
V.	Toxicity Testing Requirements.....	E-4
VI.	Receiving Water Monitoring Requirements	E-4
VII.	Reporting Requirements.....	E-5
	A. General Monitoring and Reporting Requirements	E-5
	B. Self-Monitoring Reports (SMRs).....	E-5
	C. Discharge Monitoring Reports (DMRs).....	E-7

Tables

Table E-1.	Monitoring Locations.....	E-2
Table E-2.	Retention Basin Monitoring.....	E-3
Table E-3.	Effluent Monitoring	E-3
Table E-4.	Receiving Water Monitoring	E-5
Table E-5.	CIWQS Reporting.....	E-6
Table E-6.	Monitoring Periods	E-6

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Clean Water Act section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and State laws and regulations.

I. GENERAL MONITORING PROVISIONS

- A. The Discharger shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 C.F.R. sections 122.62, 122.63, and 124.5. If any discrepancies exist between this MRP and the *Regional Standard Provisions, and Monitoring and Reporting Requirements (Supplement to Attachment D) for NPDES Wastewater Discharge Permits* (Attachment G) or *Stormwater Provisions, Monitoring, and Reporting Requirements* (Attachment S), this MRP shall prevail.
- B. The Discharger shall conduct all monitoring in accordance with Attachment D, section III, as supplemented by Attachment G. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit.
- C. The Discharger shall ensure that results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:
- State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street, Sacramento, CA 95814
- D. The Discharger shall implement a Quality Assurance-Quality Control Program for any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, conductivity, disinfectant residual) analyzed by a noncertified laboratory. The Discharger shall keep a manual onsite containing the steps followed in this program and must demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Locations

Sampling Location Type	Monitoring Location Name	Monitoring Location Description
Internal	INT-002	Lower retention basin
Effluent	EFF-001	Effluent pipe prior to mixing with receiving water
Receiving Water	RSW-001	San Tomas Aquino Creek within 100 feet downstream of the discharge pipe
Receiving Water	RSW-002	San Tomas Aquino Creek within 100 feet upstream of the discharge pipe

III. RETENTION BASIN MONITORING REQUIREMENTS

- A. The Discharger shall monitor the lower retention basin at Monitoring Location INT-002 as follows:

Table E-2. Retention Basin Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Carbonaceous Biochemical Oxygen Demand (CBOD)	mg/L	Grab	1/Month ^[1]
Chlorine, Total Residual	mg/L	Grab	1/Month ^[1]
Copper, Total Recoverable	µg/L	Grab	1/Month ^[1]
Oil and Grease	mg/L	Grab	1/Month ^[1]
pH	standard	Grab	1/Month ^[1]
Temperature	°C	Grab	1/Month ^[1]
Total Suspended Solids (TSS)	mg/L	Grab	1/Month ^[1]
Elevation (Retention Pond Water Surface)	feet	—	1/Month

Unit Abbreviations:

°C = degrees Celsius

µg/L= micrograms per liter

mg/L= milligrams per liter

Sampling Frequency:

1/Month = once per month as defined in Table E-6 during the wet season (October 1 through April 30) and any other month in which there is a discharge.

Footnote:

^[1] Monitoring frequency shall be increased to at least weekly following any result above effluent limits until results are below effluent limits.

IV. EFFLUENT MONITORING REQUIREMENTS

The Discharger shall monitor effluent at Monitoring Location EFF-001 as follows:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
CBOD	mg/L	Grab	1/Discharge ^[1]
Chlorine, Total Residual	mg/L	Grab	1/Discharge ^[1]
Oil and Grease	mg/L	Grab	1/Discharge ^[1]
pH	s.u.	Grab	1/Discharge ^[1]
Temperature	°C	Grab	1/Discharge
TSS	mg/L	Grab	1/Discharge ^[1]
Acute Toxicity ^[2]	% survival	Grab	1/Year
Ammonia	mg/L as N	Grab	1/Discharge
Copper, Total Recoverable	µg/L	Grab	1/Discharge ^[1]
Length of Discharge	hours	—	1/Discharge
Volume Discharged	MG	—	1/Discharge
Priority Pollutants ^[3]	µg/L	Grab	Once

Unit Abbreviations:

°C = degrees Celsius

µg/L= micrograms per liter

mg/L = milligrams per liter

MG = million gallons

% = percent

s.u. = standard pH units

Sampling Frequency:

1/Discharge = once during each discharge event

1/Year = once per year during discharge

Once = once during the permit term within 12 months prior to applying for permit reissuance

Footnotes:

[1] Effluent sampling may be used to satisfy Table E-2 monitoring requirements.

[2] Acute bioassay tests shall be performed in accordance with MRP section V.

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

V. TOXICITY TESTING REQUIREMENTS

1. Compliance with the acute toxicity effluent limitation shall be evaluated at Monitoring Location EFF-001 by measuring survival of test organisms exposed to 96-hour static renewal bioassays.
2. Test organisms shall be *Pimephales promelas* (fathead minnow). Alternatively, the Executive Officer may specify a more sensitive organism or, if testing a particular organism proves unworkable, the most sensitive organism available.
3. All bioassays shall be performed according to the most up-to-date protocols in 40 C.F.R. part 136, currently *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition (EPA-821-R-02-012). If these protocols prove unworkable, the Executive Officer and the Environmental Laboratory Accreditation Program may grant exceptions in writing upon the Discharger's request with justification.
4. If the Discharger demonstrates that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limit may be determined after test samples are adjusted to remove the influence of those substances. Written acknowledgement that the Executive Officer concurs with the Discharger's demonstration and that the adjustment will not remove the influence of other substances must be obtained prior to any such adjustment. The Discharger is authorized to adjust the effluent pH in order to minimize ammonia toxicity interference.
5. Bioassay water monitoring shall include daily monitoring for pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If final or intermediate results of an acute bioassay test indicate a violation or threatened violation (e.g., the percentage of surviving test organisms is less than 70 percent), the Discharger shall initiate a new test as soon as practical, investigate the cause of the mortalities, and report its findings in the next self-monitoring report. The Discharger shall repeat the test until a test fish survival rate of 90 percent or greater is observed. If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

VI. RECEIVING WATER MONITORING REQUIREMENTS

The Discharger shall monitor San Tomas Aquino Creek at Monitoring Locations RSW-001 and RSW-002 as follows:

Table E-4. Receiving Water Monitoring

Parameter	Units	Sample Type	Monitoring Location	Minimum Sampling Frequency
Hardness, Total as Calcium Carbonate (CaCO ₃)	mg/L	Grab	RSW-002	1/Year ^[1]
pH	s.u.	Grab	RSW-001 and RSW-002	1/Discharge
Temperature	°C	Grab	RSW-001 and RSW-002	1/Discharge
TSS	mg/L	Grab	RSW-002	1/Discharge
Ammonia	mg/L as N	Grab	RSW-002	1/Discharge
Priority Pollutants ^[2]	µg/L	Grab	RSW-002	Once
Standard Observations ^[3]	—	—	RSW-001 and RSW-002	1/Discharge

Unit Abbreviations:

°C = degrees Celsius
µg/L = micrograms per liter
mg/L = milligrams per liter
s.u. = standard pH units

Sampling Frequencies:

1/Discharge = once per discharge event
1/Year = once per year
Once = once during the permit term within 12 months prior to applying for permit reissuance

Footnotes:

- ^[1] Hardness shall be monitored at least annually regardless of whether a discharge occurs.
^[2] The Discharger shall monitor for the pollutants listed in Attachment G, Table B
^[3] Standard Observations are listed in Attachment G section III.B.1.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

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

B. Self-Monitoring Reports (SMRs)

- SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Website (http://www.waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittal in the event of a planned service interruption for electronic submittal.
- SMR Due Dates and Contents.** The Discharger shall submit SMRs by the due dates, and with the contents, specified below:
 - Annual SMR.** Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the items described in sections V.C.1.f of Attachment G. See also Provision VI.C.2 (Effluent Characterization Study and Report) of this Order for requirements to submit reports with the annual SMR.
 - Specifications for Submitting SMRs to CIWQS.** The Discharger shall submit analytical results and other information using one of the following methods:

Table E-5. CIWQS Reporting

Parameter		Method of Reporting: EDF/CDF data upload or manual entry	Method of Reporting: Attached File
All parameters identified in influent, effluent, and receiving water monitoring tables (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 Beryllium Cyanide Arsenic Cadmium Chromium Copper Lead Mercury	Nickel Selenium Silver Thallium Zinc Dioxins and 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]	—
Analytical Method		Not required (Discharger may select “data unavailable”) ^[1]	—
Collection Time Analysis Time		Not required (Discharger may select “0:00”) ^[1]	—

Footnotes:

- ^[1] The Discharger shall continue to monitor at the minimum frequency specified in this MRP, keep records of the measurements, and make the records available upon request.
- ^[2] These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this MRP or other provisions of this Order (except for biosolids, sludge, or ash provisions).

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

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

Table E-6. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period
1/Month	First day of calendar month following or on Order effective date	First day of calendar month through last day of calendar month
1/Year	Closest January 1 before or after Order effective date ^[1]	January 1 through December 31
Once	Order effective date	Once during the permit term within 12 months prior to applying for permit reissuance

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period
Each occurrence	First day of discharge	First day of discharge through last day of discharge

Footnote:

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

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

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected" or ND.
- d. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and in the Fact Sheet and Attachments A, D, and G. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

C. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using the Electronic Self-Monitoring Reports module eSMR 2.5 or the latest upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the [DMR website](http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring), [http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring].

ATTACHMENT F - FACT SHEET

Contents

I.	Permit Information.....	F-3
II.	Facility Description.....	F-4
	A. Discharge Point and Receiving Water.....	F-4
	B. Existing Wastewater Treatment and Controls.....	F-4
	C. Summary of Existing Requirements and Monitoring Data.....	F-5
	D. Compliance Summary	F-6
	E. Planned Changes	F-6
III.	Applicable Plans, Policies, and Regulations.....	F-6
	A. Legal Authorities.....	F-6
	B. California Environmental Quality Act	F-7
	C. State and Federal Regulations, Policies, and Plans.....	F-7
	1. Water Quality Control Plan.....	F-7
	2. National Toxics Rule (NTR) and California Toxics Rule (CTR)	F-7
	3. State Implementation Policy	F-7
	4. Antidegradation Policy.....	F-8
	5. Domestic Water Quality	F-8
	6. Anti-Backsliding Requirements	F-8
	7. Endangered Species Act Requirements.....	F-8
	8. Mercury Provisions	F-9
	D. Impaired Waters on CWA 303(d) List.....	F-9
IV.	Rationale For Effluent Limitations and Discharge Specifications	F-9
	A. Discharge Prohibitions	F-9
	1. Discharge Prohibition III.A (No discharge other than as described in this Order)	F-9
	2. Discharge Prohibition III.B (No discharge except to prevent flooding)	F-9
	B. Exception to Shallow Water Discharge Prohibition.....	F-10
	C. Technology-Based Effluent Limitations	F-11
	1. Scope and Authority	F-11
	2. Effluent Limitations	F-11
	D. Water Quality-Based Effluent Limitations.....	F-12
	1. Scope and Authority	F-12
	2. Beneficial Uses and Water Quality Criteria and Objectives	F-12
	3. Need for Water Quality-Based Effluent Limitations (Reasonable Potential Analysis) ..	F-13
	4. Water Quality-Based Effluent Limitation Calculations	F-18
	E. Discharger Requirement Considerations.....	F-19
	1. Anti-backsliding	F-19
	2. Antidegradation	F-19
	3. Stringency of Requirements for Individual Pollutants	F-20
V.	Rationale for Receiving Water Limitations	F-20
VI.	Rationale for Provisions.....	F-20
	A. Standard Provisions.....	F-20
	B. Monitoring and Reporting.....	F-20
	C. Special Provisions	F-21
	1. Reopener Provisions.....	F-21

2. Retention Basin Management Plan	F-21
3. Retention Basin Pollutants Above Effluent Limitations	F-21
VII. Monitoring and Reporting Program (MRP).....	F-21
A. MRP Requirements Rationale	F-21
1. Retention Basin Monitoring	F-21
2. Effluent Monitoring.....	F-21
3. Receiving Water Monitoring.....	F-21
4. Toxicity Testing	F-22
5. Other Monitoring Requirements	F-22
B. Monitoring Requirements Summary	F-22
VIII. Public Participation.....	F-22
A. Notification of Interested Parties.....	F-23
B. Written Comments	F-23
C. Public Hearing.....	F-23
D. Reconsideration of Waste Discharge Requirements	F-23
E. Information and Copying	F-24
F. Register of Interested Persons	F-24
G. Additional Information.....	F-24

Tables

Table F-1. Facility Information.....	F-3
Table F-2. Historic Numeric Effluent Limitations and Monitoring Data.....	F-5
Table F-3. Exceedances of Numeric Effluent Limits	F-6
Table F-4. Beneficial Uses.....	F-7
Table F-5. Reasonable Potential Analysis	F-14
Table F-6. WQBEL Calculations.....	F-18
Table F-7. Monitoring Requirements Summary	F-22

ATTACHMENT F – FACT SHEET

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility:

Table F-1. Facility Information

WDID	2 438655001
CIWQS Place ID	736379
Discharger	Cedar Fair Entertainment Company
Facility Name	California's Great America
Facility Address	4701 Great America Parkway Santa Clara, CA 95054 Santa Clara County
Facility Contact, Title, Phone	Michael Maney, Director of FMC, 408-986-5867
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	Cedar Fair Entertainment Company 2401 Agnew Road Santa Clara 95054
Billing Address	Same as Mailing Address
Facility Type	Amusement Park, SIC code 7996
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	No
Reclamation Requirements	None
Permitted Flow	6,000 gallons per minute
Watershed	Santa Clara Valley
Receiving Water	San Tomas Aquino Creek
Receiving Water Type	Inland Surface Water (Fresh)

- A. Cedar Fair Entertainment Company (Discharger) owns and operates California's Great America (Facility), an amusement park in Santa Clara. For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.
- B. The Discharger is regulated pursuant to National Pollutant Discharge Elimination System (NPDES) Permit No. CA0030180. It was previously subject to Order No. R2-2015-0003 (previous order), which was adopted on January 21, 2015, and expired on February 29, 2020. The Facility discharges mostly (but not entirely) stormwater to San Tomas Aquino Creek, a water of the United States within the Santa Clara Basin. Attachment B shows the location of the site and Attachment C provides a site map showing where surface water is stored and discharged.

- C. The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its WDRs and NPDES permit on May 29, 2019. The Discharger is authorized to discharge subject to the WDRs in this Order at the discharge location described in Table 2 of this Order. 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, Table 3 of this Order limits the effective period for the discharge authorization. Pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all requirements for continuation of expired permits. (See 40 C.F.R. § 122.6[d].)

II. FACILITY DESCRIPTION

The Facility is a 96-acre amusement park and water park open to the public seven days per week during the summer months, and on some holidays and weekends during the rest of the year. It features several pools and water rides, and its wastewater consists of stormwater, water (originally potable) used in pools and water rides, minor amounts of groundwater from onsite wells (occasionally used as make-up water), and tertiary-treated recycled water used for irrigation and to supply the fire protection system. South Bay Water Recycling, which provides recycled water from the San Jose / Santa Clara Regional Wastewater Facility, provides about 49 million gallons per year to the Facility.

The Facility is surrounded by earthen embankments so no stormwater or other runoff leaves or enters the Facility; runoff instead flows to a pair of retention basins in the northeast corner of the Facility (see Attachment C). This Order covers discharges from the retention basins when runoff exceeds the retention basins' capacity.

A. Discharge Point and Receiving Water

The Facility discharges from the retention basins to San Tomas Aquino Creek, a freshwater stream tributary to Guadalupe Slough in South San Francisco Bay. The discharge point (Discharge Point No. 001) is a shallow-water outfall located on the northeast side of the park across the San Tomas Aquino Creek Trail. See Table 2 for Discharge Point No. 001's latitude and longitude, and Attachment C for a Facility map that shows the location of Discharge Point No. 001.

B. Existing Wastewater Treatment and Controls

The retention basins are a pair of approximately 14-foot deep earthen basins, separated by an embankment, with a combined area of approximately 3.8 acres. The basins are connected by a channel that allows flow through the embankment. At the end of the operating season, the Discharger empties about one million gallons from its water rides into the retention basins. The retention basins prevent frequent discharge and provide treatment by settling and dissipation.

The retention basins do not have the capacity to contain stormwater from the entire property during large storms. In that case, the Discharger pumps water from the retention basins and discharges it at Discharge Point No. 001 to prevent flooding, which may otherwise inundate nearby structures. Also, the Discharger pumps water from the retention basins as necessary to prevent damage to several concrete footings in the upper basin that support a non-water contact

ride and to prevent public contact during flooding. The maximum discharge rate equals the Discharger's pumping capacity of 6,000 gallons per minute.

The primary pollutants of concern are as follows:

- **Total Residual Chlorine.** Chlorine is present in the Facility's primary source waters—potable water and recycled water—both of which are disinfected. The Discharger also chlorinates water circulated through pools and rides, providing onsite filtration and disinfection before returning the water to use.
- **Copper.** Copper is present because the Discharger hires licensed contractors to add copper-based algae control chemicals to the retention basins as needed in spring and summer. Since spring 2015, the Discharger has typically used Cutrine®-Ultra (elemental copper) in upstream ponds during summer. The Discharger has typically used Reward (diquat dibromide) and GreenClean Pro Granular Algaecide (sodium carbonate peroxyhydrate) in the retention basins during spring.
- **Suspended Solids, Oxygen Demand, and Acute Toxicity.** Suspended solids, oxygen demand from decaying organic matter, and acute toxicity are of concern due to algae growth in the retention basins.

C. Summary of Existing Requirements and Monitoring Data

Effluent limitations contained in the previous order and representative monitoring data from the previous order term (2015-2019) are presented below:

Table F-2. Historic Numeric Effluent Limitations and Monitoring Data

Parameter	Unit	Weekly Average Effluent Limit	Instantaneous Minimum Effluent Limit	Instantaneous Maximum Effluent Limit	Average of Effluent Data	Maximum of Effluent Data	Number of Samples
Discharge Days per Year	d/yr	—	—	—	5.8	11	—
Discharge Volume per Day	MGD	—	—	—	1.9	3.4	29 ^[1]
Discharge Duration ^[2]	hours	—	—	—	7.3	17	29 ^[1]
Oil and Grease	mg/L	—	—	—	< 1.6	3.0	4
pH	standard units	—	6.5	8.5	7.2	7.1-7.3 ^[3]	17
Total Suspended Solids (TSS)	mg/L	25	—	—	7.3 ^[5]	67	17 ^[4]
Carbonaceous Biochemical Oxygen Demand, 5-day @ 20°C (CBOD)	mg/L	30	—	—	< 5.0 ^[5]	5.5	17 ^[4]

Parameter	Unit	Weekly Average Effluent Limit	Instantaneous Minimum Effluent Limit	Instantaneous Maximum Effluent Limit	Average of Effluent Data	Maximum of Effluent Data	Number of Samples
Chlorine Residual	mg/L	—	—	0.0	< 0.10	< 0.10	17
Acute Toxicity	% Survival	[5]	[5]	[5]	100	100	4

Unit Abbreviations:

d/yr = days per year
mg/L = milligrams per liter
MGD = million gallons per day
% Survival = percent survival

Footnotes:

- [1] Discharges occurred on 29 days. The Discharger reported the volume of water discharged from midnight to midnight on each of the 29 days. The average and maximum values are from those data.
- [2] Hours of discharge on each calendar day (midnight to midnight).
- [3] Range of pH results (minimum to maximum).
- [4] CBOD and TSS samples were collected in triplicate from 2018 through 2019. Averages are calculated using composite results; the number of samples counts triplicate samples as single samples.
- [5] Minimum survival of 70 percent.

D. Compliance Summary

The Discharger exceeded numeric effluent limitations one time during the previous order term. On September 28, 2016, the Regional Water Board issued Order R2-2016-1026, imposing a mandatory minimum penalty of \$3,000:

Table F-3. Exceedances of Numeric Effluent Limits

Exceedance Date	Exceeded Parameter	Units	Effluent Limitation	Reported Concentration
12/11/2015	Total Suspended Solids	mg/L	30	67

The Discharger reported that the above violation may have been caused by runoff from the maintenance yard and a portion of the staff parking lot in the southern end of the park. To investigate the cause of the violation, the Discharger collected and analyzed triplicate samples from the park's main drainage areas during four rain events in 2016; the Discharger found that the highest average TSS concentration of 125 mg/L came from the drainage area including the maintenance yard and part of the staff parking lot. The Discharger complied with the TSS limit for the rest of the order term.

E. Planned Changes

The Discharger plans no changes to its operations.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

A. Legal Authorities

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

(commencing with § 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge locations described in Table 2 subject to the WDRs in this Order.

B. California Environmental Quality Act

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

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plan

The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (hereinafter 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 No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. San Tomas Aquino Creek does not meet any of the exceptions under State Water Board Resolution 88-63. Therefore, the municipal or domestic supply beneficial use applies. Beneficial uses applicable to San Tomas Aquino Creek are as follows:

Table F-4. Beneficial Uses

Discharge Points	Receiving Water	Beneficial Uses
001	San Tomas Aquino Creek	Cold water Habitat (COLD) Preservation of Rare and Endangered Species (RARE) Warm water Habitat (WARM) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Municipal Supply (MUN)

2. National Toxics Rule (NTR) and California Toxics Rule (CTR)

U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR apply in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and incorporated the previously adopted NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. State Implementation Policy

On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated for California through the NTR and the

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

4. Antidegradation Policy

Federal regulations at 40 C.F.R. section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, which is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. (See Fact Sheet § IV.D.1 Antidegradation.)

5. Domestic Water Quality

In accordance with Water Code section 106.3, it is the policy of the State of California is that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order 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.

6. Anti-Backsliding Requirements

CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. (See Fact Sheet § IV.D.2 Anti-Backsliding.)

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 the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect beneficial uses, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

8. Mercury Provisions

On May 2, 2017, the State Water Board adopted Resolution 2017-0027, which approved *Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions* (Mercury Provisions), thereby establishing water quality objectives for mercury in most State waters. The Mercury Provisions (§ III.D.3) supersede the freshwater mercury water quality objectives in Basin Plan Table 3-4. Requirements of this Order implement the Mercury Provisions.

D. Impaired Waters on CWA 303(d) List

In April 2018, U.S. EPA approved a revised list of impaired waters prepared pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where necessary, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for waters on the 303(d) list to establish wasteload allocations for point sources and load allocations for nonpoint sources and thus achieve the water quality standards. San Tomas Aquino Creek is not listed as an impaired water body.

IV. 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.

A. Discharge Prohibitions

1. Discharge Prohibition III.A (No discharge other than as described in this Order)

This prohibition is based on 40 C.F.R. section 122.21(a), duty to apply, and Water Code section 13260, which requires filing an application and Report of Waste Discharge before discharges can occur. Discharges not described in the permit application and Report of Waste Discharge, and subsequently in this Order, are prohibited.

2. Discharge Prohibition III.B (No discharge except to prevent flooding)

This prohibition minimizes discharges to San Tomas Aquino Creek by restricting discharges to when they are necessary for the purpose stated in the Discharger's application.

B. Exception to Shallow Water Discharge Prohibition

Basin Plan Table 4-1, Discharge Prohibition 1, prohibits discharges not receiving a minimum of 10:1 initial dilution; however, Discharge Prohibition 1 does not apply to this discharge. Discharge Prohibition 1 states:

Waste discharges will contain some levels of pollutants regardless of treatment. This prohibition will require that these pollutants, when of concern to beneficial uses, be discharged away from areas such as nontidal waters and dead-end sloughs. This prohibition will (a) provide an added degree of protection from the continuous effects of waste discharge, (b) provide a buffer against the effects of abnormal discharges caused by temporary plant upsets or malfunctions, (c) minimize public contact with undiluted wastes, and (d) reduce the visual (aesthetic) impact of waste discharges.

This discharge is mainly of stormwater and is not continuous; discharge occurs only a few times each year for less than a week at a time. The retention basins prevent abnormal discharges and are not subject to treatment upset; discharge from them is only possible when the Discharger pumps retention basin water to the discharge point, and the retention basins' treatment processes (settling and dissipation) are not subject to upset or malfunction. The retention basins prevent discharge except when driven by large storms. Thus, the retention basins restrict discharge to times when the flow in San Tomas Aquino Creek is greatest and the likelihood of public contact is least, which minimizes public contact and reduces the visual impact of discharges.

Furthermore, this discharge would qualify for an exception to Discharge Prohibition 1 if the prohibition applied. Basin Plan section 4.2 provides for exceptions under certain circumstances, including:

- 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;

The Basin Plan further states:

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

An inordinate burden would be placed on the Discharger relative to the beneficial uses protected to require the discharge to achieve 10:1 dilution. Upstream flow in San Tomas Aquino Creek is insufficient to achieve 10:1 dilution consistently throughout the year, and constructing and operating a deep-water outfall (e.g., in San Francisco Bay) to provide consistent dilution would require construction and operation of a discharge pipe several miles long.

The Discharger provides an equivalent level of environmental protection by discharging only during large storms, when flow and dilution in San Tomas Aquino Creek are likely to be greatest, and preventing discharge of inadequately treated wastewater. Its retention basins discharge only when the Discharger runs its discharge pump, which reliably prevents discharge outside of large storms and of inadequately treated wastewater. The Discharger minimizes pollutants entering the retention basins in stormwater, and therefore potentially being discharged, by developing and implementing BMPs reflecting best industry practice as required by

Provision VI.C.2.d of and Attachment S to this Order (see Fact Sheet section VI.C.2). Finally, the Discharger monitors the retention basins and ensures pollutant concentrations comply with permit limits prior to discharge, as required by MRP section III and Provision VI.C.3 of this Order (see Fact Sheet sections VI.C.3 and VI.A.1).

C. Technology-Based Effluent Limitations

1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum and any more stringent effluent limitations necessary to meet water quality standards. There are no U.S. EPA-promulgated Effluent Limitations Guidelines for the Amusement Park (SIC code 7996) industry category.

2. Effluent Limitations

This Order's technology-based effluent limitations are based on Basin Plan Table 4-2, which applies to sewage discharges and may be applied selectively to non-sewage discharges. This Order applies Basin Plan Table 4-2 requirements for selected pollutants (listed below) because the Facility's non-potable water source is tertiary-treated and chlorinated recycled wastewater from the San Jose / Santa Clara Wastewater Treatment Plant. This Order does not impose limitations for settleable matter or coliform bacteria because neither pollutant is expected to be in the discharge in significant concentrations. Further rationale for this Order's technology-based effluent limitations is presented below:

- a. **Oil and Grease.** This Order's oil and grease effluent limitations are based on Basin Plan Table 4-2.
- b. **Carbonaceous Biochemical Oxygen Demand (CBOD).** This Order's weekly average CBOD limitation of 25 mg/L is technologically feasible for the Facility and is unchanged from the previous order. This limit is more stringent than Basin Plan Table 4.2 requires but is retained to avoid backsliding.
- c. **pH.** This Order's pH effluent limitations are based on Basin Plan Table 4-2.
- d. **Total Residual Chlorine.** This Order's total residual chlorine effluent limitation is based on Basin Plan Table 4-2. For the purpose of compliance determination, this Order retains the minimum level (ML) for total residual chlorine analysis of 0.10 mg/L established by the previous order. This ML is appropriate due to the capabilities of field instruments commercially available, based on U.S. EPA guidance¹ and a 2004 study by the Missouri Department of Natural Resources on total residual chlorine analysis using a field colorimeter.² The 2004 study concluded that total residual chlorine results between the method detection limit (MDL) of 0.040 mg/l and the ML of 0.10 mg/L are unreliable due to analytical noise.

¹ U.S. EPA, 1994. National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality Based Effluent Limitations Set Below the Analytical Detection/Quantitation Levels. NTIS PB95-159109.

² Missouri Department of Natural Resources, 2004, Permit Manual, Appendix T: Total Chlorine Residual Study.

- e. **Total Suspended Solids (TSS).** This Order's weekly average TSS limitation of 30 mg/L is technologically feasible for the Facility and is unchanged from the previous order. This limit is more stringent than Basin Plan Table 4.2 requires but is retained to avoid backsliding.

D. Water Quality-Based Effluent Limitations

1. Scope and Authority

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

2. Beneficial Uses and Water Quality Criteria and Objectives

Discharge Point No. 001 discharges to San Tomas Aquino Creek. Fact Sheet section III.C.1, above, identifies the beneficial uses of San Tomas Aquino Creek. Water quality criteria and objectives to protect these beneficial uses are described below:

- a. **Basin Plan Objectives.** The Basin Plan specifies numerous water quality objectives, such as numeric objectives for 10 priority pollutants and un-ionized ammonia, and narrative objectives for acute and chronic toxicity and temperature. Because San Tomas Aquino Creek has the MUN beneficial use based on State Water Board Resolution No. 88-63 (see Fact Sheet § III.C.1), drinking water standards (i.e., maximum contaminant levels) also apply as water quality objectives.
- b. **California Toxics Rule Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of "water and organisms" and others are for consumption of "organisms only."
- c. **National Toxics Rule Criteria.** The NTR establishes numeric aquatic life and human health criteria for a number of toxic pollutants for San Francisco Bay waters upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. The NTR criteria apply to San Tomas Aquino Creek.

- d. Mercury Provisions Objectives.** The Mercury Provisions specify water column criteria for mercury depending on water body type and beneficial uses. San Tomas Aquino Creek is a flowing water body that supports cold freshwater habitat; warm freshwater habitat; preservation of rare, threatened, or endangered species; and wildlife habitat beneficial uses. Mercury Provisions section IV.D.2.b, Table 1, establish an annual average total mercury criterion of 0.012 µg/L for San Tomas Aquino Creek water.
- e. Receiving Water Salinity.** Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater versus saltwater) of the receiving water are to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to waters with salinities between these two categories, or tidally influenced freshwaters that support estuarine beneficial uses, the water quality objectives are the lower of the salt or freshwater objectives (the latter calculated based on ambient hardness) for each substance. Freshwater criteria apply to San Tomas Aquino Creek.
- f. Water Hardness.** The geometric mean of the hardness data collected at Monitoring Location RSW-001 from November 2015 to December 2018 (256 mg/L) were used used to calculate freshwater water quality objectives that are hardness dependent.

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

Assessing whether a pollutant has reasonable potential to cause or contribute to exceedances of a water quality objective is the fundamental step in determining whether a WQBEL is required. The reasonable potential analysis presented below applies to Discharge Point No. 001 This discharge is subject to numeric WQBELs where reasonable potential is indicated.

- a. Methodology.** State Implementation Policy section 1.3 sets forth the methodology used for this Order for assessing whether a priority pollutant has reasonable potential to exceed a water quality objective. SIP section 1.3 applies to priority pollutants and is used here for dioxin-TEQ, ammonia, total dissolved solids, turbidity, chloride, and phenols, 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 concentration (B). State Implementation Policy section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential:
 - i. Trigger 1** is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective ($MEC \geq$ water quality objective).
 - ii. Trigger 2** is activated if the ambient background concentration observed in the receiving water is greater than the water quality objective ($B >$ water quality objective) *and* the pollutant is detected in any effluent sample.

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

The Mercury Provisions (§ IV.D.2.c) modify SIP section 1.3 for mercury. The maximum effluent concentration and ambient background concentration are maximum annual averages, calculated as the arithmetic mean over each calendar year, with non-detect results estimated as half the method detection limit.

- b. Effluent Data.** Effluent monitoring data collected at Monitoring Location EFF-001 from January 2015 through December 2018 were used for this reasonable potential analysis.
- c. Ambient Background Data.** Receiving water monitoring data collected at Monitoring Location RSW-001 from January through December 2010 (i.e., data collected under the previous order) were used for this reasonable potential analysis for all toxic pollutants except copper. Copper data were collected from 2015 through 2018. (Copper was the only toxic pollutant monitored at Monitoring Location RSW-001 over that period.)
- d. Reasonable Potential Analysis.** The maximum effluent concentrations, most stringent applicable water quality criteria and objectives, and ambient background concentrations used in the analysis are presented in the following table, along with the reasonable potential analysis results (yes or no) for each pollutant. Copper was found to have reasonable potential to cause or contribute to exceedances of the copper water quality objectives.

Table F-5. Reasonable Potential Analysis

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL ^{[1][2]} (µg/L)	B or Minimum DL ^{[1][2]} (µg/L)	Result ^[3]
1	Antimony	6.0	0.95	1.7	No
2	Arsenic	10	7.2	7.3	No
3	Beryllium	4.0	ND < 0.050	ND < 1.0	No
4	Cadmium	2.4	ND < 0.15	ND < 0.50	No
5a	Chromium (III)	50	1.4	5.5	No
5b	Chromium (VI)	11	ND < 0.0020	ND < 10	No
6	Copper	21	146	21	Yes
7	Lead	11	0.85	3.4	No
8	Mercury ^[4]	0.012	0.0021	0.012	No
9	Nickel	100	3.6	9.1	No
10	Selenium	5.0	ND < 0.054	ND < 5.0	No
11	Silver	20	ND < 0.039	ND < 0.50	No
12	Thallium	1.7	ND < 0.22	ND < 1.0	No
13	Zinc	266	14	39	No
14	Cyanide	5.2	ND < 0.0010	ND < 5.0	No
15	Asbestos	7,000,000	Unavailable	Unavailable	No
16	2,3,7,8-TCDD (Dioxin)	1.4 E-08	ND < 1.1E-6	ND < 1.1E-6	U
17	Acrolein	320	ND < 3.3	ND < 50	No
18	Acrylonitrile	0.059	ND < 1.6	ND < 50	U
19	Benzene	1.0	ND < 0.071	ND < 0.50	No

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL ^{[1][2]} (µg/L)	B or Minimum DL ^{[1][2]} (µg/L)	Result ^[3]
20	Bromoform	4.3	ND < 0.053	ND < 0.50	No
21	Carbon Tetrachloride	0.25	ND < 0.045	0.50	No
22	Chlorobenzene	70	ND < 0.075	ND < 0.50	No
23	Chlorodibromomethane	0.40	Unavailable	ND < 0.50	No
24	Chloroethane	No Criteria	ND < 0.40	ND < 0.50	U
25	2-Chloroethylvinyl Ether	No Criteria	ND < 0.23	ND < 0.50	U
26	Chloroform	No Criteria	ND < 0.044	ND < 0.50	U
27	Dichlorobromomethane	0.56	ND < 0.060	ND < 0.50	No
28	1,1-Dichloroethane	5.0	ND < 0.078	ND < 0.50	No
29	1,2-Dichloroethane	0.38	ND < 0.066	ND < 0.50	No
30	1,1-Dichloroethylene	0.057	ND < 0.13	ND < 0.50	U
31	1,2-Dichloropropane	0.52	ND < 0.060	ND < 0.50	No
32	1,3-Dichloropropylene	0.50	Unavailable	ND < 0.50	No
33	Ethylbenzene	300	ND < 0.091	ND < 0.50	No
34	Methyl Bromide	48	Unavailable	ND < 0.50	No
35	Methyl Chloride	No Criteria	Unavailable	ND < 0.50	U
36	Methylene Chloride	4.7	ND < 0.15	ND < 0.50	No
37	1,1,2,2-Tetrachloroethane	0.17	ND < 0.063	ND < 0.50	No
38	Tetrachloroethylene	0.80	Unavailable	ND < 0.50	No
39	Toluene	150	ND < 0.078	ND < 0.50	No
40	1,2-Trans-Dichloroethylene	10	Unavailable	ND < 0.50	No
41	1,1,1-Trichloroethane	200	ND < 0.063	ND < 0.50	No
42	1,1,2-Trichloroethane	0.60	ND < 0.045	ND < 0.50	No
43	Trichloroethylene	2.7	Unavailable	ND < 0.50	No
44	Vinyl Chloride	0.50	ND < 0.080	ND < 0.30	No
45	Chlorophenol	120	ND < 1.5	ND < 5.0	No
46	2,4-Dichlorophenol	93	ND < 1.3	ND < 5.0	No
47	2,4-Dimethylphenol	540	ND < 1.2	ND < 3.0	No
48	2-Methyl-4,6-Dinitrophenol	13	ND < 1.9	ND < 5.0	No
49	2,4-Dinitrophenol	70	ND < 4.8	ND < 5.0	No
50	2-Nitrophenol	No Criteria	ND < 2.5	ND < 5.0	U
51	4-Nitrophenol	No Criteria	ND < 1.1	ND < 10	U
52	3-Methyl-4-Chlorophenol	No Criteria	ND < 1.3	ND < 1.1	U
53	Pentachlorophenol	0.28	ND < 1.9	ND < 20	U
54	Phenol	21,000	ND < 1.6	ND < 3.0	No
55	2,4,6-Trichlorophenol	2.1	ND < 0.95	ND < 5.0	No
56	Acenaphthene	1,200	ND < 1.3	ND < 5.0	No
57	Acenaphthylene	No Criteria	ND < 1.5	ND < 5.0	U
58	Anthracene	9,600	ND < 1.3	ND < 5.0	No
59	Benzidine	0.00012	Unavailable	ND < 50	No
60	Benzo(a)Anthracene	0.0044	ND < 1.3	ND < 5.0	No
61	Benzo(a)Pyrene	0.0044	ND < 1.1	ND < 5.0	No
62	Benzo(b)Fluoranthene	0.0044	ND < 1.3	ND < 5.0	No
63	Benzo(ghi)Perylene	No Criteria	ND < 1.4	ND < 10	U

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL ^{[1][2]} (µg/L)	B or Minimum DL ^{[1][2]} (µg/L)	Result ^[3]
64	Benzo(k)Fluoranthene	0.0044	ND < 1.4	ND < 5.0	No
65	Bis(2-Chloroethoxy)Methane	No Criteria	ND < 1.2	ND < 10	U
66	Bis(2-Chloroethyl)Ether	0.031	ND < 1.5	ND < 10	U
67	Bis(2-Chloroisopropyl)Ether	1,400	ND < 2.6	ND < 10	No
68	Bis(2-Ethylhexyl)Phthalate	1.8	ND < 1.9	ND < 4.0	U
69	4-Bromophenyl Phenyl Ether	No Criteria	ND < 1.2	ND < 5.0	U
70	Butylbenzyl Phthalate	3,000	ND < 1.3	ND < 5.0	No
71	2-Chloronaphthalene	1,700	ND < 1.5	ND < 5.0	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	ND < 1.3	ND < 5.0	U
73	Chrysene	0.0044	ND < 1.4	ND < 5.0	No
74	Dibenzo(a,h)Anthracene	0.0044	ND < 1.3	ND < 10	No
75	1,2-Dichlorobenzene	600	ND < 0.051	ND < 0.50	No
76	1,3-Dichlorobenzene	400	ND < 0.052	ND < 0.50	No
77	1,4-Dichlorobenzene	5.0	ND < 0.12	ND < 0.50	No
78	3,3-Dichlorobenzidine	0.040	ND < 0.60	ND < 50	No
79	Diethyl Phthalate	23,000	ND < 1.6	ND < 5.0	No
80	Dimethyl Phthalate	313,000	ND < 1.5	ND < 5.0	No
81	Di-n-Butyl Phthalate	2,700	ND < 1.1	ND < 10	No
82	2,4-Dinitrotoluene	0.11	ND < 1.4	ND < 5.0	U
83	2,6-Dinitrotoluene	No Criteria	ND < 1.3	ND < 5.0	U
84	Di-n-Octyl Phthalate	No Criteria	ND < 1.2	ND < 10	U
85	1,2-Diphenylhydrazine	0.040	Unavailable	ND < 10	No
86	Fluoranthene	300	ND < 1.5	ND < 5.0	No
87	Fluorene	1,300	ND < 1.5	ND < 5.0	No
88	Hexachlorobenzene	0.00075	ND < 1.2	ND < 5.0	No
89	Hexachlorobutadiene	0.44	ND < 1.3	ND < 10	U
90	Hexachlorocyclopentadiene	50	ND < 4.8	ND < 10	No
91	Hexachloroethane	1.9	ND < 1.7	ND < 5.0	No
92	Indeno(1,2,3-cd) Pyrene	0.0044	ND < 1.4	ND < 10	No
93	Isophorone	8.4	ND < 1.8	ND < 5.0	No
94	Naphthalene	No Criteria	ND < 1.4	ND < 5.0	U
95	Nitrobenzene	17	ND < 1.6	ND < 5.0	No
96	N-Nitrosodimethylamine	0.00069	ND < 2.2	ND < 5.0	U
97	N-Nitrosodi-n-Propylamine	0.0050	ND < 1.9	ND < 5.0	U
98	N-Nitrosodiphenylamine	5.0	ND < 1.2	ND < 5.0	No
99	Phenanthrene	No Criteria	ND < 1.3	ND < 5.0	U
100	Pyrene	960	ND < 1.2	ND < 5.0	No
101	1,2,4-Trichlorobenzene	5.0	ND < 1.4	ND < 5.0	No
102	Aldrin	0.00013	ND < 0.010	ND < 0.096	No
103	alpha-BHC	0.0039	ND < 0.0090	ND < 0.096	U
104	beta-BHC	0.014	ND < 0.010	ND < 0.96	No
105	gamma-BHC	0.019	ND < 0.010	ND < 0.96	No
106	delta-BHC	No Criteria	ND < 0.0080	ND < 0.96	U
107	Chlordane	0.00057	ND < 0.010	ND < 0.96	No

CTR #	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL ^{[1][2]} (µg/L)	B or Minimum DL ^{[1][2]} (µg/L)	Result ^[3]
108	4,4-DDT	0.00059	ND < 0.020	ND < 0.19	No
109	4,4-DDE	0.00059	ND < 0.020	ND < 0.19	No
110	4,4-DDD	0.00083	ND < 0.020	ND < 0.19	No
111	Dieldrin	0.00014	ND < 0.020	ND < 0.19	No
112	alpha-Endosulfan	0.056	ND < 0.010	ND < 0.96	No
113	beta-Endosulfan	0.056	ND < 0.010	ND < 0.19	No
114	Endosulfan Sulfate	110	ND < 0.020	ND < 0.19	No
115	Endrin	0.036	ND < 0.020	ND < 0.19	No
116	Endrin Aldehyde	0.76	ND < 0.020	ND < 0.19	No
117	Heptachlor	0.00021	ND < 0.010	ND < 0.96	No
118	Heptachlor Epoxide	0.00010	ND < 0.010	ND < 0.96	No
119-125	PCBs sum	0.00017	ND < 0.052 ^[5]	ND < 0.94 ^[5]	No
126	Toxaphene	0.00020	ND < 0.20	ND < 1.9	No

Footnotes:

- ^[1] The maximum effluent concentration and ambient background concentration are the actual detected concentrations unless preceded by a "<" sign, in which case the value shown is the minimum detection level (DL).
- ^[2] The maximum effluent concentration or ambient background concentration is "Unavailable" when there are no monitoring data for the constituent.
- ^[3] RPA Results = Yes, if MEC ≥ WQC, B > WQC and MEC is detected, or Trigger 3
= No, if MEC and B are < WQC or all effluent data are undetected
= Undetermined (U), if no criteria have been promulgated or data are insufficient.
- ^[4] The Mercury Provisions supersede Basin Plan Table 3-4 (see Fact Sheet § III.C.9). In accordance with the Mercury Provisions, the water quality objective (C), MEC, and B are annual averages calculated as described in Fact Sheet section IV.D.2.b.
- ^[5] Minimum of PCB congener MDLs. Each PCB congener concentration was below the detection limit.

- e. Ammonia.** There was insufficient data to analyze reasonable potential for ammonia; the Monitoring and Reporting Program (MRP) (Attachment E) therefore requires effluent ammonia monitoring (MRP Table E-3) and background ammonia, temperature, and pH monitoring (MRP Table E-4).
- f. Acute Toxicity.** Basin Plan section 4.5.5.3.1 requires acute toxicity monitoring and limitations, implying there is reasonable potential for the discharge to cause or contribute to exceedances of the acute toxicity water quality objective.
- g. Chronic Toxicity.** A reasonable potential analysis for chronic toxicity is not required because the discharges are episodic and short term.
- h. Temperature.** There were insufficient data to analyze reasonable potential for temperature; the MRP (Attachment E) therefore requires effluent temperature monitoring (MRP Table E-3) and receiving water temperature monitoring (MRP Table E-4). Because discharge occurs mostly during the winter months, the discharge is not likely to be warm enough to affect receiving water temperature.

4. Water Quality-Based Effluent Limitation Calculations

WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives. For copper, the WQBELs are based on the procedure specified in SIP section 1.4.

SIP section 1.4.2 allows dilution credits under certain circumstances. Discharge Point No. 001 is not submerged and does not have a diffuser; also, San Tomas Aquino Creek does not have enough upstream flow to provide dilution year-round. Therefore, this Order does not grant a dilution for copper.

- a. **Calculations.** The following table shows the WQBEL calculations for copper based on SIP section 1.4:

Table F-6. WQBEL Calculations

PRIORITY POLLUTANTS	Copper
Units	µg/L
Basis and Criteria type	BP & CTR FW Aquatic Life
Criteria -Acute	34
Criteria -Chronic	21
SSO Criteria -Acute	—
SSO Criteria -Chronic	—
Water Effects ratio (WER)	1
Lowest WQO	21
Site Specific Translator – MDEL	—
Site Specific Translator – AMEL	—
Dilution Factor (D) (if applicable)	0
No. of samples per month	4
Aquatic life criteria analysis required? (Y/N)	Y
HH criteria analysis required? (Y/N)	N
Applicable Acute WQO	34
Applicable Chronic WQO	21
HH criteria	—
Background (Maximum Conc for Aquatic Life calc)	21
Background (Average Conc for Human Health calc)	—
Is the pollutant on the 303d list (Y/N)?	N
ECA acute	34
ECA chronic	21
ECA HH	—
Number of data points <10 or at least 80% of data reported non-detect? (Y/N)	N
Avg of effluent data points	36

PRIORITY POLLUTANTS	Copper
Units	µg/L
Std Dev of effluent data points	54
CV calculated	1.5
CV (Selected) – Final	1.5
ECA acute mult99	0.14
ECA chronic mult99	0.27
LTA acute	4.9
LTA chronic	5.5
minimum of LTAs	4.9
AMEL mult95	2.4
MDEL mult99	6.9
AMEL (aq life)	12
MDEL(aq life)	34
MDEL/AMEL Multiplier	2.9
AMEL (human health)	—
MDEL (human health)	—
minimum of AMEL for Aq. life vs HH	12
minimum of MDEL for Aq. Life vs HH	34
Current limit in permit (30-day average)	—
Current limit in permit (daily)	—
Final limit – AMEL	12
Final limit – MDEL	34

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

E. Discharger Requirement Considerations

1. Anti-backsliding

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

2. Antidegradation

This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. 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. This Order does not allow for a reduced level of treatment or increase effluent limitations relative to those in the previous order.

3. Stringency of Requirements for Individual Pollutants

This Order contains technology-based effluent limitations for individual pollutants. This Order's 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.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

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

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

Attachment S contains stormwater provisions consistent with the State Water Board's *General Permit for Stormwater Discharges Associated with Industrial Activities* (NPDES No. CAS000001) (Industrial General Permit), including requirements for the Discharger to prepare a Stormwater Pollution Prevention Plan.

B. Monitoring and Reporting

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 sections 13267 and 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 background regarding these requirements, see Fact Sheet section VII.

C. Special Provisions

1. Reopener Provisions

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

2. Retention Basin Management Plan

This provision is required to ensure that the retention basins are operated such that pollutant levels are minimized. It requires the Discharger to implement best management practices to prevent pollutants from entering the retention basins. Minimizing pollutants in the retention basins minimizes the potential for effluent limitation violations when a discharge occurs.

3. Retention Basin Pollutants Above Effluent Limitations

This provision is required to ensure that discharges meet effluent limitations. If retention basin monitoring indicates pollutant levels in the retention basins are above effluent limits, then any discharge is likely to result in an effluent limitation violation. This provision requires the Discharger to take actions to reduce excessive pollutants found in the retention basins before a discharge occurs.

VII. MONITORING AND REPORTING PROGRAM (MRP)

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

A. MRP Requirements Rationale

1. Retention Basin Monitoring

Retention basin monitoring is necessary to evaluate water quality conditions prior to discharge. Since the effluent only receives treatment by physical settling, retention basin monitoring will alert the Discharger of potential problems before discharge is necessary.

2. Effluent Monitoring

Effluent monitoring is necessary to evaluate compliance with this Order's effluent limits. Effluent volume and discharge duration monitoring is necessary to understand Facility operations.

3. Receiving Water Monitoring

Receiving water monitoring is necessary to characterize the receiving water (e.g., to provide background values for future reasonable potential analyses) and the effects of the discharges on the receiving water (i.e., to determine compliance with receiving water limitations).

4. Toxicity Testing

Acute toxicity testing is necessary to evaluate compliance with the acute toxicity effluent limitations. *Pimephales promelas* (fathead minnow) is the test species.

5. Other Monitoring Requirements

Pursuant to CWA section 308, U.S. EPA requires major and selected minor dischargers to participate in a Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program. The program annually evaluates the analytical abilities of laboratories that perform or support NPDES permit-required monitoring. The program applies to discharger laboratories and contract laboratories. There are two options to comply: (1) dischargers can obtain and analyze DMR-QA samples, or (2) pursuant to a waiver U.S. EPA issued to the State Water Board, dischargers can submit results from the most recent Water Pollution Performance Evaluation Study. Dischargers must submit results annually to the State Water Board, which then forwards the results to U.S. EPA.

B. Monitoring Requirements Summary

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

Table F-7. Monitoring Requirements Summary

Parameter	Retention Basins INT-002	Effluent EFF-001	Receiving Water RSW-001	Receiving Water RSW-002
CBOD	1/Month	1/Discharge	—	—
Chlorine, Total Residual	1/Month	1/Discharge	—	—
Copper, Total Recoverable	1/Month	1/Discharge	—	—
Hardness, Total as CaCO ₃	—	—	—	1/Year
Oil and Grease	1/Month	1/Discharge	—	—
pH	1/Month	1/Discharge	1/Discharge	1/Discharge
Temperature	1/Month	1/Discharge	1/Discharge	1/Discharge
Total Suspended Solids	1/Month	1/Discharge	—	1/Discharge
Acute Toxicity	—	1/Year	—	—
Ammonia	—	1/Discharge	—	1/Discharge
Elevation	1/Month	—	—	—
Length of Discharge	—	1/Discharge	—	—
Volume of Discharge	—	1/Discharge	—	—
Priority pollutants	—	Once	—	Once
Standard Observations	—	—	1/Discharge	1/Discharge

VIII. PUBLIC PARTICIPATION

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

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. The public had access to the agenda and any changes in dates and locations through the [Regional Water Board's website](http://www.waterboards.ca.gov/sanfranciscobay) at <http://www.waterboards.ca.gov/sanfranciscobay>.

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were due either in person or by mail at the Regional Water Board office at 1515 Clay Street, Suite 1400, Oakland, California 94612, to the attention of John H Madigan, P.E. For full staff response and Regional Water Board consideration, the written comments were due at the Regional Water Board office by **5:00 p.m.** on **[MONTH DAY], 2020**.

C. Public Hearing

The Regional Water Board held a public hearing on the tentative WDRs during its regular meeting at the following date and time, and at the following location:

Date: May 13, 2020
Time: 9:00 a.m.
Location: Elihu Harris State Office Building
1515 Clay Street, 1st Floor Auditorium
Oakland, CA 94612
Contact: John H. Madigan, (510) 622-2405, John.Madigan@waterboards.ca.gov

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested to be in writing.

Dates and venues change. The [Regional Water Board web address](http://www.waterboards.ca.gov/sanfranciscobay) is <http://www.waterboards.ca.gov/sanfranciscobay>, where one could access the current agenda for changes in dates and locations.

D. Reconsideration of Waste Discharge Requirements

Any aggrieved person may petition the State Water Board to review the Regional Water Board's decision regarding the final WDRs. The State Water Board must receive the petition at the following address within 30 calendar days of the Regional Water Board action:

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

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

E. Information and Copying

The Report of Waste Discharge, related supporting documents, and comments received are on file and may be inspected at the address above at any time between 9:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged by calling (510) 622-2300.

F. Register of Interested Persons

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

G. Additional Information

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

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

November 2017

Contents

I.	STANDARD PROVISIONS – PERMIT COMPLIANCE	G-1
A.	Duty to Comply	G-1
B.	Need to Halt or Reduce Activity Not a Defense	G-1
C.	Duty to Mitigate	G-1
1.	Contingency Plan	G-1
2.	Spill Prevention Plan.....	G-2
D.	Proper Operation and Maintenance.....	G-2
1.	Operation and Maintenance Manual	G-2
2.	Wastewater Facilities Status Report.....	G-2
3.	Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs)	G-2
E.	Property Rights.....	G-2
F.	Inspection and Entry.....	G-2
G.	Bypass	G-2
H.	Upset.....	G-2
I.	Other	G-2
II.	STANDARD PROVISIONS – PERMIT ACTION	G-3
III.	STANDARD PROVISIONS – MONITORING	G-3
A.	Sampling and Analyses	G-3
1.	Certified Laboratories.....	G-3
2.	Minimum Levels	G-3
3.	Monitoring Frequency.....	G-3
B.	Standard Observations.....	G-5
1.	Receiving Water Observations.....	G-5
2.	Wastewater Effluent Observations.....	G-5
3.	Beach and Shoreline Observations.....	G-6
4.	Waste Treatment and/or Disposal Facility Periphery Observations	G-6
IV.	STANDARD PROVISIONS – RECORDS.....	G-6
A.	Records to be Maintained.....	G-6
B.	Records of Monitoring	G-6
1.	Analytical Information	G-6
2.	Disinfection Process	G-6
3.	Wastewater Treatment Process Solids	G-7
4.	Treatment Process Bypasses	G-7
5.	Treatment Facility Overflows	G-7
C.	Claims of Confidentiality	G-7
V.	STANDARD PROVISIONS – REPORTING.....	G-7
A.	Duty to Provide Information	G-7
B.	Signatory and Certification Requirements	G-7
C.	Monitoring Reports	G-7
1.	Self-Monitoring Reports.....	G-7
D.	Compliance Schedules	G-11
E.	Twenty-Four Hour Reporting.....	G-11
1.	Oil or Other Hazardous Material Spills.....	G-11
2.	Unauthorized Municipal Wastewater Treatment Plant Discharges	G-12

F. Planned Changes	G-13
G. Anticipated Noncompliance	G-13
H. Other Noncompliance.....	G-13
I. Other Information.....	G-13
VI. STANDARD PROVISION – ENFORCEMENT	G-13
VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS	G-13
VIII. DEFINITIONS.....	G-13

REGIONAL STANDARD PROVISIONS, AND MONITORING AND REPORTING REQUIREMENTS

APPLICABILITY

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

I. STANDARD PROVISIONS - PERMIT COMPLIANCE

A. Duty to Comply – Not Supplemented

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

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

- 1. Contingency Plan.** The Discharger shall maintain a Contingency Plan as prudent in accordance with current facility emergency planning. The Contingency Plan shall describe procedures to ensure that existing facilities remain in, or are rapidly returned to, operation in the event of a process failure or emergency incident, such as employee strike, strike by suppliers of chemicals or maintenance services, power outage, vandalism, earthquake, or fire. The Discharger may combine the Contingency Plan and Spill Prevention Plan (see Provision I.C.2, below) into one document. In accordance with Regional Water Board Resolution 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:
 - a.** Sufficient personnel for continued facility operation and maintenance during employee strikes or strikes against contractors providing services;
 - b.** Maintenance of adequate chemicals or other supplies, and spare parts necessary for continued facility operations;
 - c.** Emergency standby power;
 - d.** Protection against vandalism;
 - e.** Expeditious action to repair failures of, or damage to, equipment, including any sewer lines;
 - f.** Reporting of spills and discharges of untreated or inadequately treated wastes, including measures taken to clean up the effects of such discharges; and
 - g.** Maintenance, replacement, and surveillance of physical condition of equipment and facilities, including any sewer lines.

2. **Spill Prevention Plan.** The Discharger shall maintain a Spill Prevention Plan to prevent accidental discharges and to minimize the effects of any such discharges. The Spill Prevention Plan shall do the following:
 - a. Identify the possible sources of accidental discharge, untreated or partially-treated waste bypass, and polluted drainage;
 - b. State when current facilities and procedures became operational and evaluate their effectiveness; and
 - c. Predict the effectiveness of any proposed facilities and procedures and provide an implementation schedule with interim and final dates when the proposed facilities and procedures will be constructed, implemented, or operational.

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

1. **Operation and Maintenance Manual.** The Discharger shall maintain an Operation and Maintenance Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain a useful and relevant document, the Operation and Maintenance Manual shall be kept updated to reflect significant changes in treatment facility equipment and operational practices. The Operation and Maintenance Manual shall be maintained in usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.
2. **Wastewater Facilities Status Report.** The Discharger shall maintain a Wastewater Facilities Status Report and regularly review, revise, or update it, as necessary. This report shall document how the Discharger operates and maintains its wastewater collection, treatment, and disposal facilities to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
3. **Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs).** POTWs shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, section 3680, of the California Code of Regulations.

E. Property Rights – Not Supplemented

F. Inspection and Entry – Not Supplemented

G. Bypass – Not Supplemented

H. Upset – Not Supplemented

I. Other – Addition to Attachment D

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

2. Collection, treatment, storage, and disposal systems shall be operated in a manner that precludes public contact with wastewater. If public contact with wastewater could reasonably occur on public property, warning signs shall be posted.
3. If the Discharger submits a timely and complete Report of Waste Discharge for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

II. STANDARD PROVISIONS – PERMIT ACTION – Not Supplemented

III. STANDARD PROVISIONS – MONITORING

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

1. **Certified Laboratories.** Water and waste analyses shall be performed by a laboratory certified for these analyses in accordance with California Water Code section 13176.
2. **Minimum Levels.** For the 126 priority pollutants, the Discharger should use the analytical methods listed in Table B unless the Monitoring and Reporting Program (MRP, Attachment E) requires a particular method or minimum level (ML). All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.
3. **Monitoring Frequency.** The MRP specifies the minimum sampling and analysis schedule.
 - a. **Sample Collection Timing**
 - i. The Discharger shall collect influent samples on varying days selected at random and shall not include any plant recirculation or other sidestream wastes, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative influent sampling plan if it is representative of plant influent and complies with all other permit requirements.
 - ii. The Discharger shall collect effluent samples on days coincident with influent sampling, unless otherwise stipulated by the MRP. If influent sampling is not required, the Discharger shall collect effluent samples on varying days selected at random, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative effluent sampling plan if it is representative of plant discharge and in compliance with all other permit requirements.
 - iii. The Discharger shall collect effluent grab samples during periods of daytime maximum peak flows (or peak flows through secondary treatment units for facilities that recycle effluent).
 - iv. Effluent sampling for conventional pollutants shall occur on at least one day of any multiple-day bioassay the MRP requires. During the course of the bioassay, on at least one day, the Discharger shall collect and retain samples of the discharge. In the event that a bioassay result does not comply with effluent limitations, the Discharger shall analyze the retained samples for pollutants that could be toxic to aquatic life and for which it has effluent limitations.

- (a) The Discharger shall perform bioassays on final effluent samples; when chlorine is used for disinfection, bioassays shall be performed on effluent after chlorination and dechlorination; and
- (b) The Discharger shall analyze for total ammonia nitrogen and calculate the amount of un-ionized ammonia whenever test results fail to meet effluent limitations.

b. Conditions Triggering Accelerated Monitoring

- i. **Average Monthly Effluent Limitation Exceedance.** If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter (or if the required sampling frequency is once per month or less and the monthly sample exceeds the average monthly effluent limitation), the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling show that the parameter complies with the average monthly effluent limitation.
- ii. **Maximum Daily Effluent Limitation Exceedance.** If a sample result exceeds a maximum daily effluent limitation, the Discharger shall, within 24 hours after the result is received, increase its sampling frequency to daily until the results from two samples collected on consecutive days show compliance with the maximum daily effluent limitation.
- iii. **Acute Toxicity.** If final or intermediate results of an acute bioassay indicate a violation or threatened violation (e.g., the percentage of surviving test organisms of any single acute bioassay is less than 70 percent), the Discharger shall initiate a new test as soon as practical or as described in applicable State Water Board plan provisions that become effective after adoption of these Regional Standard Provisions. The Discharger shall investigate the cause of the mortalities and report its findings in the next self-monitoring report.
- iv. **Chlorine.** The Discharger shall calibrate chlorine residual analyzers against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, the Discharger shall collect grab samples at least every 30 minutes until compliance with the limitation is achieved, unless the Discharger monitors chlorine residual continuously. In such cases, the Discharger shall continue to conduct continuous monitoring.
- v. **Bypass.** Except as indicated below, if a Discharger bypasses any portion of its treatment facility, it shall monitor flows and collect samples at affected discharge points and analyze samples for all constituents with effluent limitations on a daily basis for the duration of the bypass. The Discharger need not accelerate chronic toxicity monitoring. The Discharger also need not collect and analyze samples for mercury, dioxin-TEQ, and PCBs after the first day of the bypass. The Discharger may satisfy the accelerated acute toxicity monitoring requirement by conducting a flow-through test or static renewal test that captures the duration of the bypass (regardless of the method specified in the MRP). If bypassing disinfection units only, the Discharger shall only monitor bacteria indicators daily.

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

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

B. Standard Observations – Addition to Attachment D

- 1. Receiving Water Observations.** The following requirements only apply when the MRP requires standard observations of receiving waters. Standard observations shall include the following:
 - a. Floating and Suspended Materials** (e.g., oil, grease, algae, and other macroscopic particulate matter) — presence or absence, source, and size of affected area.
 - b. Discoloration and Turbidity** — color, source, and size of affected area.
 - c. Odor** — presence or absence, characterization, source, and distance of travel.
 - d. Beneficial Water Use** — estimated number of water-associated waterfowl or wildlife, fisherpeople, and other recreational activities.
 - e. Hydrographic Condition** — time and height of high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the sampling date and time).
 - f. Weather Conditions** — wind direction, air temperature, and total precipitation during five days prior to observation.
- 2. Wastewater Effluent Observations.** The following requirements only apply when the MRP requires standard observations of wastewater effluent. Standard observations shall include the following:

- a. **Floating and Suspended Material of Wastewater Origin** (e.g., oil, grease, algae, and other macroscopic particulate matter) — presence or absence.
 - b. **Odor** — presence or absence, characterization, source, distance of travel, and wind direction.
- 3. **Beach and Shoreline Observations.** The following requirements only apply when the MRP requires standard observations of beaches or shorelines. Standard observations shall include the following:
 - a. **Material of Wastewater Origin** — presence or absence, description of material, estimated size of affected area, and source.
 - b. **Beneficial Use** — estimate of number of people participating in recreational water contact, non-water contact, and fishing activities.
- 4. **Waste Treatment and/or Disposal Facility Periphery Observations.** The following requirements only apply when the MRP requires standard observations of the periphery of waste treatment or disposal facilities. Standard observations shall include the following:
 - a. **Odor** — presence or absence, characterization, source, and distance of travel.
 - b. **Weather Conditions** — wind direction and estimated velocity.

IV. STANDARD PROVISIONS – RECORDS

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

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

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

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

Monitoring records shall include the following:

- 1. **Analytical Information.** Records shall include analytical method detection limits, minimum levels, reporting levels, and related quantification parameters.
- 2. **Disinfection Process.** For the disinfection process, records shall include the following:
 - a. For bacteriological analyses:
 - i. Wastewater flow rate at the time of sample collection; and

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

C. Claims of Confidentiality – Not Supplemented

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information – Not Supplemented

B. Signatory and Certification Requirements – Not Supplemented

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

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

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

- i.** Identification of all violations of effluent limitations or other waste discharge requirements found during the reporting period;
- ii.** Details regarding the violations, such as parameters, magnitude, test results, frequency, and dates;
- iii.** Causes of the violations;
- iv.** Corrective actions taken or planned to resolve violations and prevent recurrences, and dates or time schedules for implementation (the Discharger may refer to previously submitted reports that address the corrective actions);
- v.** Explanation for any data invalidation. Data should not be submitted in a self-monitoring report if it does not meet quality assurance/quality control standards. However, if the Discharger wishes to invalidate a measurement after submitting it in a self-monitoring report, the Discharger shall identify the measurement suspected to be invalid and state the Discharger's intent to submit, within 60 days, a formal request to invalidate the measurement. The formal request shall include the original measurement in question, the reason for invalidating the measurement, all relevant documentation that supports invalidation (e.g., laboratory sheet, log entry, test results), and a discussion of the corrective actions taken or planned (with a time schedule for completion) to prevent recurrence of the sampling or measurement problem;
- vi.** Description of blending, if any. If the Discharger blends, it shall describe the duration of blending events and certify whether the blending complied with all conditions for blending;
- vii.** Description of other bypasses, if any. If the Discharger bypasses any treatment units (other than blending), it shall describe the duration of the bypasses and effluent quality during those times; and
- viii.** Signature. The transmittal letter shall be signed in accordance with Attachment D, Provision V.B.

- b. Compliance Evaluation Summary.** Each self-monitoring report shall include a compliance evaluation summary that addresses each parameter for which the permit specifies effluent limitations, the number of samples taken during the monitoring period, and the number of samples that exceed the effluent limitations.
- c. More Frequent Monitoring.** If the Discharger monitors any pollutant more frequently than required by the MRP, the Discharger shall include the results of such monitoring in the calculation and reporting of the data submitted in the self-monitoring report.
- d. Analysis Results**
- i. Tabulation.** Each self-monitoring report shall include tabulations of all required analyses and observations, including parameters, dates, times, sample stations, types of samples, test results, method detection limits, method minimum levels, and method reporting levels (if applicable), signed by the laboratory director or other responsible official.
- ii. Multiple Samples.** Unless the MRP specifies otherwise, when determining compliance with effluent limitations (other than instantaneous effluent limitations) and more than one sample result is available, the Discharger shall compute the arithmetic mean. If the data set contains one or more results that are “Detected, but Not Quantified (DNQ)” or “Not Detected” (ND), the Discharger shall instead compute the median in accordance with the following procedure:
- (a)** The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- (b)** The median of the data set shall be determined. If the data set has an odd number of data points, the median is the middle value. If the data set has an even number of data points, the median is the average of the two values around the middle, unless one or both of these values is ND or DNQ, in which case the median shall be the lower of the two results (where DNQ is lower than a quantified value and ND is lower than DNQ).
- iii. Duplicate Samples.** The Discharger shall report the average of duplicate sample analyses when reporting for a single sample result (or the median if one or more of the duplicates is DNQ or ND [see Provision V.C.1.c.ii, above]). For bacteria indicators, the Discharger shall report the geometric mean of the duplicate analyses.
- iv. Dioxin-TEQ.** The Discharger shall report for each dioxin and furan congener the analytical results of effluent monitoring, including the reporting level, the method detection limit, and the measured concentration. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating dioxin-TEQ, the Discharger shall set congener concentrations below the minimum levels (MLs) to zero. The Discharger shall calculate and report dioxin-TEQ using the following formula, where the MLs, toxicity equivalency factors (TEFs), and bioaccumulation equivalency factors (BEFs) are as provided in Table A:

$$\text{Dioxin-TEQ} = \sum (C_x \times \text{TEF}_x \times \text{BEF}_x)$$

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

- e. **Results Not Yet Available.** The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. Certain analyses may require additional time to complete analytical processes and report results. In these cases, the Discharger shall describe the circumstances in the self-monitoring report and include the data for these parameters and relevant discussions of any violations in the next self-monitoring report due after the results are available.
- f. **Annual Self-Monitoring Reports.** By the date specified in the MRP, the Discharger shall submit an annual self-monitoring report covering the previous calendar year. The report shall contain the following:
- 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;
 - List of approved analyses, including the following:

- (a) List of analyses for which the Discharger is certified;
 - (b) List of analyses performed for the Discharger by a separate certified laboratory (copies of reports signed by the laboratory director of that laboratory need not be submitted but shall be retained onsite); and
 - (c) List of “waived” analyses, as approved;
- iii. Plan view drawing or map showing the Discharger’s facility, flow routing, and sampling and observation station locations; and
 - iv. Results of facility report reviews. The Discharger shall regularly review, revise, and update, as necessary, the Operation and Maintenance Manual, Contingency Plan, Spill Prevention Plan, and Wastewater Facilities Status Report so these documents remain useful and relevant to current practices. At a minimum, reviews shall be conducted annually. The Discharger shall describe or summarize its review and evaluation procedures, recommended or planned actions, and estimated time schedule for implementing these actions. The Discharger shall complete changes to these documents to ensure that they remain up-to-date.

D. Compliance Schedules – Not supplemented

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

1. Oil or Other Hazardous Material Spills

- a. Within 24 hours of becoming aware of a spill of oil or other hazardous material not contained onsite and completely cleaned up, the Discharger shall report as follows:
 - i. If the spill exceeds reportable quantities for hazardous materials listed in 40 C.F.R. part 302. The Discharger shall call the California Office of Emergency Services (800-852-7550).
 - ii. If the spill does not exceed reportable quantities for hazardous materials listed in 40 C.F.R., part 302, the Discharger shall call the Regional Water Board (510-622-2369).
- b. The Discharger shall submit a written report to the Regional Water Board within five working days following either of the above telephone notifications unless directed otherwise by Regional Water Board staff. A report submitted electronically is acceptable. The written report shall include the following:
 - i. Date and time of spill, and duration if known;
 - ii. Location of spill (street address or description of location);
 - iii. Nature of material spilled;
 - iv. Quantity of material spilled;
 - v. Receiving water body affected, if any;

- vi. Cause of spill;
- vii. Estimated size of affected area;
- viii. Observed impacts to receiving waters (e.g., oil sheen, fish kill, water discoloration);
- ix. Corrective actions taken to contain, minimize, or clean up the spill;
- x. Future corrective actions planned to prevent recurrence, and implementation schedule; and
- xi. Persons or agencies notified.

2. Unauthorized Municipal Wastewater Treatment Plant Discharges¹

- a. **Two-Hour Notification.** For any unauthorized discharge that enters a drainage channel or surface water, the Discharger shall, as soon as possible, but not later than two hours after becoming aware of the discharge, notify the California Office of Emergency Services (800-852-7550) and the local health officer or director of environmental health with jurisdiction over the affected water body. Notification shall include the following:
 - i. Incident description and cause;
 - ii. Location of threatened or involved waterways or storm drains;
 - iii. Date and time that the unauthorized discharge started;
 - iv. Estimated quantity and duration of the unauthorized discharge (to the extent known), and estimated amount recovered;
 - v. Level of treatment prior to discharge (e.g., raw wastewater, primary-treated wastewater, or undisinfected secondary-treated wastewater); and
 - vi. Identity of person reporting the unauthorized discharge.
- b. **Five-Day Written Report.** Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision V.E.2.a, above, the following:
 - i. Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;
 - ii. Efforts implemented to minimize public exposure to the unauthorized discharge;
 - iii. Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;

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.

- iv. Corrective measures taken to minimize the impact of the unauthorized discharge;
- v. Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;
- vi. Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and
- vii. Quantity and duration of the unauthorized discharge, and the amount recovered.

F. Planned Changes – Not supplemented

G. Anticipated Noncompliance – Not supplemented

H. Other Noncompliance – Not supplemented

I. Other Information – Not supplemented

VI. STANDARD PROVISION – ENFORCEMENT – Not Supplemented

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – Not Supplemented

VIII. DEFINITIONS – Addition to Attachment D

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

A. Arithmetic Calculations –

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

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

or

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

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

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

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

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

In which “N” is the number of samples analyzed in any calendar day and “Qi” and “Ci” 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, “Ci” is the concentration measured in the composite sample and “Qi” is the average flow rate occurring during the period over which the samples are composited. The daily concentration of a constituent measured over any calendar day shall be determined from the flow-weighted average of the same constituent in the combined waste streams as follows:

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

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

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

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

- B. **Blending** – the practice of bypassing biological treatment units and recombining the bypass wastewater with biologically-treated wastewater.
- C. **Composite Sample** – a sample composed of individual grab samples collected manually or by an automatic sampling device on the basis of time or flow as specified in the MRP. For flow-based composites, the proportion of each grab sample included in the composite sample shall be within plus or minus five percent (+/-5%) of the representative flow of the waste stream being measured at the time of grab sample collection. Alternatively, equal volume grab samples may be individually analyzed with the flow-weighted average calculated by averaging flow-weighted ratios of each grab sample analytical result. Grab samples comprising time-based composite samples shall be collected at intervals not greater than those specified in the MRP. The quantity of each grab sample comprising a time-based composite sample shall be a set of flow proportional volumes as specified in the MRP. If a particular time-based or flow-based composite sampling protocol is not specified in the MRP, the Discharger shall determine and implement the most representative protocol.
- D. **Duplicate Sample** – a second sample taken from the same source and at the same time as an initial sample (such samples are typically analyzed identically to measure analytical variability).
- E. **Grab Sample** – an individual sample collected during a short period not exceeding 15 minutes. Grab samples represent only the condition that exists at the time the sample is collected.

- F. Overflow** – the intentional or unintentional spilling or forcing out of untreated or partially-treated waste from a transport system (e.g., through manholes, at pump stations, or at collection points) upstream of the treatment plant headworks or from any part of a treatment plant.
- G. Priority Pollutants** – those constituents referred to in 40 C.F.R. part 122 as promulgated in the Federal Register, Vol. 65, No. 97, Thursday, May 18, 2000, also known as the California Toxics Rule.
- H. Untreated waste** – raw wastewater.

Table B
List of Monitoring Parameters, Analytical Methods, and Minimum Levels (µg/L)²

CTR No.	Pollutant/Parameter	Analytical Method ³	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGFAA	HYD RIDE	CVA A	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) ⁴	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 (note) ⁵	-	-	-	-	-	-	-	-	-	-	-	-
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) ⁶	0100.2 ⁷	-	-	-	-	-	-	-	-	-	-	-	-
16	2,3,7,8-TCDD and 17 congeners (Dioxin)	1613	-	-	-	-	-	-	-	-	-	-	-	-
17	Acrolein	603	2.0	5	-	-	-	-	-	-	-	-	-	-
18	Acrylonitrile	603	2.0	2	-	-	-	-	-	-	-	-	-	-
19	Benzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
33	Ethylbenzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
39	Toluene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
20	Bromoform	601	0.5	2	-	-	-	-	-	-	-	-	-	-
21	Carbon Tetrachloride	601	0.5	2	-	-	-	-	-	-	-	-	-	-
22	Chlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-

² 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.

³ 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.

⁴ 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 µg/l).

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

⁶ MUN = Municipal and Domestic Supply. This designation, if applicable, is in the Findings of the permit.

⁷ Determination of Asbestos Structures over 10 [micrometers] in Length in Drinking Water Using MCE Filters, U.S. EPA 600/R-94-134, June 1994.

CTR No.	Pollutant/Parameter	Analytical Method ³	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVA A	DCP
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	-	-	-	-	-	-	-	-	-	-
46	2,4-Dichlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
47	2,4-Dimethylphenol	604	1	2	-	-	-	-	-	-	-	-	-	-
48	2-Methyl-4,6-Dinitrophenol or	604	10	5	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant/Parameter	Analytical Method ³	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVA A	DCP
	Dinitro-2-methylphenol													
49	2,4-Dinitrophenol	604	5	5	-	-	-	-	-	-	-	-	-	-
50	2-Nitrophenol	604	-	10	-	-	-	-	-	-	-	-	-	-
51	4-Nitrophenol	604	5	10	-	-	-	-	-	-	-	-	-	-
52	3-Methyl-4-Chlorophenol	604	5	1	-	-	-	-	-	-	-	-	-	-
53	Pentachlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
54	Phenol	604	1	1	-	50	-	-	-	-	-	-	-	-
55	2,4,6-Trichlorophenol	604	10	10	-	-	-	-	-	-	-	-	-	-
56	Acenaphthene	610 HPLC	1	1	0.5	-	-	-	-	-	-	-	-	-
57	Acenaphthylene	610 HPLC	-	10	0.2	-	-	-	-	-	-	-	-	-
58	Anthracene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
60	Benzo(a)Anthracene or 1,2 Benzanthracene	610 HPLC	10	5	-	-	-	-	-	-	-	-	-	-
61	Benzo(a)Pyrene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
62	Benzo(b)Fluoranthene or 3,4 Benzofluoranthene	610 HPLC	-	10	10	-	-	-	-	-	-	-	-	-
63	Benzo(ghi)Perylene	610 HPLC	-	5	0.1	-	-	-	-	-	-	-	-	-
64	Benzo(k)Fluoranthene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
74	Dibenzo(a,h)Anthracene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
86	Fluoranthene	610 HPLC	10	1	0.05	-	-	-	-	-	-	-	-	-
87	Fluorene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
92	Indeno(1,2,3-cd)Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
100	Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
68	Bis(2-Ethylhexyl)Phthalate	606 or 625	10	5	-	-	-	-	-	-	-	-	-	-
70	Butylbenzyl Phthalate	606 or 625	10	10	-	-	-	-	-	-	-	-	-	-
79	Diethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
80	Dimethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
81	Di-n-Butyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
84	Di-n-Octyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
59	Benzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant/Parameter	Analytical Method ³	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVA A	DCP
71	2-Chloronaphthalene	625	-	10	-	-	-	-	-	-	-	-	-	-
72	4-Chlorophenyl Phenyl Ether	625	-	5	-	-	-	-	-	-	-	-	-	-
73	Chrysene	625	-	10	5	-	-	-	-	-	-	-	-	-
78	3,3'-Dichlorobenzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
82	2,4-Dinitrotoluene	625	10	5	-	-	-	-	-	-	-	-	-	-
83	2,6-Dinitrotoluene	625	-	5	-	-	-	-	-	-	-	-	-	-
85	1,2-Diphenylhydrazine (note) ⁸	625	-	1	-	-	-	-	-	-	-	-	-	-
88	Hexachlorobenzene	625	5	1	-	-	-	-	-	-	-	-	-	-
89	Hexachlorobutadiene	625	5	1	-	-	-	-	-	-	-	-	-	-
90	Hexachlorocyclopentadiene	625	5	5	-	-	-	-	-	-	-	-	-	-
91	Hexachloroethane	625	5	1	-	-	-	-	-	-	-	-	-	-
93	Isophorone	625	10	1	-	-	-	-	-	-	-	-	-	-
94	Naphthalene	625	10	1	0.2	-	-	-	-	-	-	-	-	-
95	Nitrobenzene	625	10	1	-	-	-	-	-	-	-	-	-	-
96	N-Nitrosodimethylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
97	N-Nitrosodi-n-Propylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
98	N-Nitrosodiphenylamine	625	10	1	-	-	-	-	-	-	-	-	-	-
99	Phenanthrene	625	-	5	0.05	-	-	-	-	-	-	-	-	-
101	1,2,4-Trichlorobenzene	625	1	5	-	-	-	-	-	-	-	-	-	-
102	Aldrin	608	0.005	-	-	-	-	-	-	-	-	-	-	-
103	α-BHC	608	0.01	-	-	-	-	-	-	-	-	-	-	-
104	β-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-
105	γ-BHC (Lindane)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
106	δ-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-
107	Chlordane	608	0.1	-	-	-	-	-	-	-	-	-	-	-
108	4,4'-DDT	608	0.01	-	-	-	-	-	-	-	-	-	-	-
109	4,4'-DDE	608	0.05	-	-	-	-	-	-	-	-	-	-	-
110	4,4'-DDD	608	0.05	-	-	-	-	-	-	-	-	-	-	-
111	Dieldrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
112	Endosulfan (alpha)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
113	Endosulfan (beta)	608	0.01	-	-	-	-	-	-	-	-	-	-	-
114	Endosulfan Sulfate	608	0.05	-	-	-	-	-	-	-	-	-	-	-
115	Endrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
116	Endrin Aldehyde	608	0.01	-	-	-	-	-	-	-	-	-	-	-
117	Heptachlor	608	0.01	-	-	-	-	-	-	-	-	-	-	-

⁸ Measurement for 1,2-Diphenylhydrazine may use azobenzene as a screen: if azobenzene is measured at >1 ug/l, then the Discharger shall analyze for 1,2-Diphenylhydrazine.

CTR No.	Pollutant/Parameter	Analytical Method ³	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVA A	DCP
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	-	-	-	-	-	-	-	-	-	-	-

ATTACHMENT S
STORMWATER PROVISIONS, MONITORING, AND REPORTING
REQUIREMENTS

November 2017

Contents

I.	STANDARD PROVISIONS – PERMIT COMPLIANCE	S-1
A.	Stormwater Pollution Prevention Plan (SWPPP).....	S-1
B.	Site Map	S-1
C.	List of Industrial Materials	S-2
D.	Potential Pollutant Sources.....	S-2
E.	Assessment of Potential Pollutant Sources	S-3
F.	Minimum Best Management Practices (BMPs).....	S-4
G.	Action Levels and Advanced BMPs	S-5
H.	BMP Descriptions	S-6
I.	Annual Comprehensive Facility Compliance Evaluation	S-6
II.	STANDARD PROVISIONS – MONITORING	S-7
A.	Visual Observations	S-7
1.	Monthly Visual Observations	S-7
2.	Sampling Event Visual Observations	S-7
3.	Visual Observation Records	S-8
4.	SWPPP Revisions	S-8
B.	Sampling and Analysis.....	S-8
III.	STANDARD PROVISIONS – REPORTING.....	S-8
A.	Annual Stormwater Report.....	S-8
IV.	DEFINITIONS	S-9

STORMWATER PROVISIONS

APPLICABILITY

These stormwater provisions only apply to facilities that do not direct all stormwater flows from process areas to a wastewater treatment plant's headworks or do not enroll in NPDES Permit No. CAS000001 (General Permit for Stormwater Discharges Associated with Industrial Activities).

I. STANDARD PROVISIONS - PERMIT COMPLIANCE

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

1. Facility name and contact information;
2. Site map;
3. List of industrial materials;
4. Description of potential pollution sources;
5. Assessment of potential pollutant sources;
6. Minimum Best Management Practices (BMPs);
7. Advanced BMPs, if applicable;
8. Monitoring implementation plan;
9. Annual comprehensive facility compliance evaluation; and
10. Date SWPPP initially prepared and dates of each SWPPP amendment.

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

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

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

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

1. The facility boundary, stormwater drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas (the maps shall include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and locations of nearby water bodies [e.g., rivers, lakes, wetlands] or municipal storm drain inlets that may receive the facility's industrial stormwater discharges and authorized non-stormwater discharges);
 2. Locations of stormwater collection and conveyance systems, associated discharge locations, and direction of flow (the maps shall include sample locations if different than the discharge locations);
 3. Locations and descriptions of structural control measures (e.g., catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers) that affect industrial stormwater discharges, authorized non-stormwater discharges, and run-on;
 4. Identification of all impervious areas, including paved areas, buildings, covered storage areas, or other roofed structures;
 5. Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks have occurred; and
 6. Areas of industrial activity (the maps shall identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage and maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources).
- C. List of Industrial Materials.** The SWPPP shall contain a list of industrial materials handled at the facility and the locations where each material is stored, received, shipped, and handled, as well as the typical quantities and handling frequency.
- D. Potential Pollutant Sources.** The Discharger shall describe and assess potential stormwater pollutant sources, including the following:
1. **Industrial Processes.** Industrial processes may include manufacturing, cleaning, maintenance, recycling, and disposal. The SWPPP shall describe the type, characteristics, and approximate quantity of industrial materials used and areas protected by containment structures and the corresponding containment capacity.
 2. **Material Handling and Storage Areas.** The SWPPP shall describe the type, characteristics, and quantity of industrial materials handled or stored; shipping, receiving, and loading procedures; spill and leak prevention and response procedures; and areas protected by containment structures and the corresponding containment capacity.
 3. **Dust and Particulate Generating Activities.** The SWPPP shall describe the discharge locations, source type, and characteristics of the dust or particulate pollutant.
 4. **Significant Spills and Leaks.** The Discharger shall evaluate the facility for areas where spills and leaks can occur. The SWPPP shall list any industrial materials spilled or leaked in significant quantities and discharged from the facility's stormwater conveyance system

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

5. **Non-Stormwater Discharges.** The SWPPP shall describe all non-stormwater discharges, including the source, quantity, frequency, characteristics, and associated drainage area, and indicate whether these discharges are authorized or unauthorized.
6. **Erodible Surfaces.** The SWPPP shall describe any facility locations where soil erosion may be caused by industrial activity, contact with stormwater, authorized and unauthorized non-stormwater discharges, or run-on from areas surrounding the facility.

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

1. Facility areas with likely sources of pollutants;
2. Pollutants likely to be present in industrial stormwater discharges;
3. Approximate quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each industrial material handled, produced, stored, recycled, or disposed;
4. Degree to which the pollutants associated with such materials may be exposed to, and mobilized by, contact with stormwater;
5. Direct and indirect pathways by which pollutants may be exposed to stormwater;
6. Sampling, visual observation, and inspection records;
7. Effectiveness of existing BMPs to reduce or prevent pollutants in industrial stormwater discharges; and
8. Estimated effectiveness of implementing, to the extent feasible, minimum BMPs to reduce or prevent pollutants in industrial stormwater discharges.

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

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

- 1. Good Housekeeping.** The Discharger shall do the following:
 - a. Observe all outdoor areas associated with industrial activity, including stormwater discharge locations, drainage areas, conveyance systems, waste handling and disposal areas, and perimeter areas affected by off-facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly;
 - b. Minimize or prevent material tracking;
 - c. Minimize dust generated from industrial materials or activities;
 - d. Ensure that all facility areas impacted by rinse or wash waters are cleaned as soon as possible;
 - e. Cover all stored industrial materials that can be readily mobilized by contact with stormwater;
 - f. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;
 - g. Prevent disposal of any rinse or wash waters or industrial materials into the stormwater conveyance system;
 - h. Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking areas) that contact industrial areas of the facility; and,
 - i. Minimize authorized non-stormwater discharges from non-industrial areas (e.g., potable water, fire hydrant testing) that contact areas of the sanitary or industrial facility.
- 2. Preventative Maintenance.** The Discharger shall (1) identify all equipment and systems used outdoors that may spill or leak pollutants, (2) observe the identified equipment and systems to detect leaks or identify conditions that may result in the development of leaks, (3) establish an appropriate schedule for maintenance of identified equipment and systems, and (4) establish procedures for prompt maintenance and repair of equipment and maintenance of systems when conditions exist that may result in the development of spills or leaks.
- 3. Spill and Leak Prevention and Response.** The Discharger shall (1) establish procedures and controls to minimize spills and leaks; (2) develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system (spilled or leaked industrial materials shall be cleaned promptly and disposed of properly); (3) identify and describe all necessary and appropriate spill and leak response equipment, locations of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and (4) identify and train appropriate spill and leak response personnel.
- 4. Material Handling and Waste Management.** The Discharger shall do the following:
 - a. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm;

- b. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powers, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;
 - c. Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
 - d. Divert run-on and stormwater generated from within the facility away from all stockpiled materials;
 - e. Clean all spills of industrial materials or wastes that occur during handling in accordance with spill response procedures; and,
 - f. Observe and clean, as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.
- 5. Erosion and Sediment Control.** The Discharger shall (1) implement effective wind erosion controls; (2) provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storms; (3) maintain effective perimeter controls and stabilize site entrances and exits to sufficiently control discharges of erodible materials; and (4) divert run-on and stormwater generated from within the facility away from erodible materials.
- 6. Employee Training.** The Discharger shall ensure that all personnel implementing the SWPPP are properly trained with respect to BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. The Discharger shall identify which personnel need to be trained, their responsibilities, and the type of training they are to receive and maintain documentation of completed training and the personnel that received the training with the SWPPP.
- 7. Quality Assurance and Record Keeping.** The Discharger shall (1) develop and implement management procedures to ensure that appropriate personnel implement all SWPPP elements; (2) develop methods of tracking and recording BMP implementation; and (3) maintain BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five years.
- G. Action Levels and Advanced BMPs.** If the Discharger samples total suspended solids (TSS), oil and grease, or pH in excess of an action level in Table A, the Discharger shall review the SWPPP to identify appropriate modifications to existing BMPs or additional BMPs as necessary to reduce pollutant discharge concentrations to levels below the action level. The Discharger shall revise the SWPPP accordingly before the next storm, if possible, or as soon as practical, and in no event later than three months following the exceedance.

Table A
Stormwater Action Levels

Parameter	Unit	Instantaneous Action Level	Annual Action Level
Total Suspended Solids	mg/L	400	100
Oil & Grease	mg/L	25	15

Parameter	Unit	Instantaneous Action Level	Annual Action Level
pH	standard units	6.0-9.0 ^[1]	—

Footnote:

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

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

- 1. Exposure Minimization BMPs.** These include storm resistant shelters (either permanent or temporary) that prevent the contact of stormwater with identified industrial materials.
- 2. Stormwater Containment and Discharge Reduction BMPs.** These include BMPs that divert, infiltrate, reuse, contain, retain, or reduce the volume of stormwater runoff.
- 3. Treatment Control BMPs.** These include mechanical, chemical, biologic, or any other treatment technology that will meet the treatment design standard.

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

1. The pollutants the BMP is designed to reduce or prevent;
2. The frequency, times of day, or conditions when the BMP is scheduled for implementation;
3. The locations within each area of industrial activity or industrial pollutant source where the BMP shall be implemented;
4. The individual responsible for implementing the BMP;
5. The procedures, including maintenance procedures, and instructions to implement the BMP effectively; and
6. The equipment and tools necessary to implement the BMP effectively.

I. Annual Comprehensive Facility Compliance Evaluation. The Discharger shall conduct one annual facility evaluation for each reporting year (July 1 to June 30). If the Discharger conducts an annual evaluation fewer than 8 months, or more than 16 months, after it conducts the previous annual evaluation, it shall document the justification for doing so. The Discharger shall revise the SWPPP, as appropriate, and implement the revisions within 90 days of the annual evaluation. At a minimum, the annual evaluations shall consist of the following:

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

2. An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the stormwater conveyance system;
3. An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials;
4. An inspection of equipment needed to implement the BMPs; and
5. An assessment of any other factors needed to comply with the requirements of the Annual Stormwater Report (see Provision III.A, below).

II. STANDARD PROVISIONS – MONITORING

A. Visual Observations

1. Monthly Visual Observations

- a. At least once per month, the Discharger shall visually observe each drainage area for the following:
 - i. The presence or indication of prior, current, or potential unauthorized non-stormwater discharges and their sources;
 - ii. Authorized non-stormwater discharges, sources, and associated BMPs; and
 - iii. Outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential sources of industrial pollutants.
- b. The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and on days without precipitation.
- c. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted monthly visual observations (see Provision III.A, below).

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

- a. The Discharger shall ensure that visual observations of stormwater discharged from containment sources (e.g., secondary containment or storage ponds) are conducted at the time that the discharge is sampled.
- b. If the Discharger employs volume-based or flow-based treatment BMPs, it shall sample any bypass that occurs while the visual observations and sampling of stormwater discharges are conducted.
- c. The Discharger shall visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and sources of any discharged pollutants.

- d. If a discharge location is not visually observed during the sampling event, the Discharger shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.
 - e. The Discharger shall provide an explanation in the Annual Stormwater Report for uncompleted sampling event visual observations (see Provision III.A, below).
3. **Visual Observation Records.** The Discharger shall maintain records of all visual observations. Records shall include the date, approximate time, locations observed, presence and probable source of any observed pollutants, name of persons who conducted the observations, and any response actions and/or additional SWPPP revisions necessary in response to the visual observations.
 4. **SWPPP Revisions.** The Discharger shall revise its BMPs as necessary when the visual observations indicate pollutant sources have not been adequately addressed.

B. Sampling and Analysis

1. The Discharger shall collect and analyze stormwater samples as specified in the MRP.
2. Samples shall be (i) representative of stormwater associated with industrial activities and any commingled authorized non-stormwater dischargers; or (ii) associated with the discharge of contained stormwater.
3. On a facility-specific basis, the Discharger shall also analyze additional parameters that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment. These additional parameters may be modified (added or removed) in accordance with any updated SWPPP pollutant source assessment.

III. STANDARD PROVISIONS – REPORTING

- A. **Annual Stormwater Report.** The results of the Discharger's Annual Comprehensive Facility Compliance Evaluation shall be reported in the Annual Stormwater Report to the Regional Water Board no later than July 30. The Discharger shall include in the Annual Stormwater Report the following:
 1. A compliance checklist that indicates whether the Discharger has complied with or addressed all applicable requirements of the SWPPP;
 2. An explanation for any non-compliance requirements within the reporting year, as indicated in the compliance checklist;
 3. An identification, including page numbers and sections, of all revisions made to the SWPPP within the reporting year; and
 4. The date(s) of the annual evaluation.

IV. DEFINITIONS

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

1. Fire-hydrant and fire prevention or response system flushing;
 2. Potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems;
 3. Drinking fountain water and atmospheric condensate, including refrigeration, air conditioning, and compressor condensate;
 4. Irrigation drainage and landscape watering, provided that all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's labels;
 5. Uncontaminated natural springs, groundwater, foundation drainage, footing drainage;
 6. Seawater infiltration where the seawater is discharged back into the source; or,
 7. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from cooling towers (e.g., "piped" cooling tower blowdown or drains).
- B. Stormwater** – stormwater runoff, snow melt runoff, and surface runoff and drainage, excluding infiltration and runoff from agricultural land.