

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

1515 Clay Street, Suite 1400, Oakland, California 94612
waterboards.ca.gov/sanfranciscobay

**REVISED TENTATIVE ORDER R2-2022-00XX
NPDES PERMIT CA0030228**

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

Discharger **Schnitzer Steel Industries, Inc.**
Name of Facility **Schnitzer Steel Products Company**
Facility Address **1101 Embarcadero West
Oakland, California 94607
Alameda County**

Table 1. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated process water, cooling water, dust suppression water, wash water, and stormwater	37.7962	-122.2287	Oakland Inner Harbor

This Order was adopted on:

This Order shall become effective on:

This Order shall expire on:

CIWQS regulatory measure number:

<Adoption Date>

July 1, 2022

June 30, 2027

XXXXXX

The Discharger shall file a Report of Waste Discharge as an application for updated WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than **October 1, 2026**. The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) have classified this discharge as “**minor**.”

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

Thomas Mumley, Interim Executive Officer

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1. FACILITY INFORMATION

Information describing Schnitzer Steel Industries, Inc.'s Schnitzer Steel Products Company (Facility) is summarized on the cover page and in Fact Sheet (Attachment F) sections 1 and 2. Fact Sheet section 1 also includes information regarding the permit application.

2. FINDINGS

The Regional Water Board finds the following:

- 2.1. Legal Authorities.** This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States as described in Table 1 subject to the WDRs in this Order.
- 2.2. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information the Discharger submitted as part of its application, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E and G are also incorporated into this Order.
- 2.3. Notification of Interested Parties.** The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe these WDRs and has provided an opportunity to submit written comments and recommendations. Fact Sheet section 8.1 provides details regarding the notification.
- 2.4. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Fact Sheet section 8.3 provides details regarding the public hearing.

THEREFORE, IT IS HEREBY ORDERED that Order R2-2016-0045 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Water Code division 7 (commencing with § 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous order.

3. DISCHARGE PROHIBITIONS

- 3.1. Discharge of treated or partially-treated wastewater at a location or in a manner different than described in this Order is prohibited.
- 3.2. Discharge at Discharge Point 001 is prohibited whenever the Discharger is allowed to discharge wastewater to the East Bay Municipal Utility District (EBMUD) wastewater treatment plant via the sanitary sewer.
- 3.3. Discharge greater than 600 gallons per minute (gpm) is prohibited at Discharge Point 001.
- 3.4. Bypass of untreated or partially-treated wastewater to waters of the United States is prohibited, except as provided for in Attachment D section 1.7 of this Order.
- 3.5 Discharge of untreated stormwater, process wastewater, or waste materials (e.g., dust suppression water, wash water, spilled product, fugitive dust, dirt, rubbish, refuse, or debris), except as authorized by this Order, directly or indirectly to waters of the United States is prohibited.

4. EFFLUENT LIMITATIONS

4.1. Discharge Point 001

- 4.1.1 **Effluent Limitations.** The discharge at Discharge Point 001 shall meet the following effluent limitations, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP, Attachment E):

Table 2. Effluent Limitations

Parameter	Units	Average Monthly ^[3]	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Suspended Solids	mg/L	30	45	-	-	-
Oil and Grease	mg/L	10	-	20	-	-
pH ^[1]	standard units	-	-	-	6.5	8.5
Copper, Total Recoverable	µg/L	5.5	-	11	-	-
Lead, Total Recoverable	µg/L	7.0	-	14	-	-
Zinc, Total Recoverable	µg/L	47	-	95	-	-
Acute Toxicity ^[2]	percent survival	-	-	-	70	-

Footnotes:

^[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. section 401.17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (1) the total time

during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (2) no individual excursion from the required pH range shall exceed 60 minutes.

- [2] Bioassays shall be conducted in accordance with MRP section 5.2. A bioassay test showing survival of less than 70% shall represent a violation of this effluent limit.
- [3] Compliance with average monthly effluent limitations shall be based on at least two monitoring results collected within the same calendar month. If a second sample cannot be collected within a calendar month because no additional discharge event occurs within the month, then the single sample shall only be used to evaluate compliance with the maximum daily effluent limit.

4.1.2. Best Management Practices (BMPs). In accordance with Provision 6.3.5, the Discharger shall implement Best Management Practices (BMPs) as part of a Water Pollution Prevention Plan (WPPP). BMPs shall reflect best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) to reduce or prevent discharges of pollutants in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

5. RECEIVING WATER LIMITATIONS

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

- 5.1.1. Floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses;
- 5.1.2. Alteration of suspended sediment in such a manner as to cause nuisance or adversely affect beneficial uses or detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life;
- 5.1.3. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses;
- 5.1.4. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
- 5.1.5. Alteration of temperature beyond present natural background levels unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses;
- 5.1.6. Changes in turbidity that cause nuisance or adversely affect beneficial uses, or increases from normal background light penetration or turbidity greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units, or above 55 nephelometric turbidity units in areas where natural turbidity is less than or equal to 50 nephelometric turbidity units;
- 5.1.7. Coloration that causes nuisance or adversely affects beneficial uses;
- 5.1.8. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or

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

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

5.2.1. Dissolved Oxygen 5.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations

5.2.2. Dissolved Sulfide Natural background levels

5.2.3. pH The pH shall not be depressed below 6.5 nor raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.

5.2.4. Nutrients Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

5.3. The discharge shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board or State Water Resources Control Board (State Water Board) as required by the CWA and regulations adopted thereunder beyond any mixing zone established through this Order. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board may revise or modify this Order in accordance with the more stringent standards.

6. PROVISIONS

6.1. Standard Provisions

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

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

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

6.2. Monitoring and Reporting Provisions

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

6.3. Special Provisions

6.3.1. Reopener Provisions

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

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

6.3.2. Effluent Characterization Study and Report

- 6.3.2.1. **Study Elements.** The Discharger shall characterize and evaluate the discharge from Discharge Point 001 as required by the MRP to verify that the reasonable potential analysis conclusions of this Order remain valid and to inform the next permit reissuance. If concentrations of any of the priority pollutants listed in Attachment G, Table B, significantly increase over past performance. The Discharger shall investigate the cause of any such

increase. The investigation may include, but need not be limited to, an increase in monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. The Discharger shall establish remedial measures addressing any increase resulting in reasonable potential to cause or contribute to an exceedance of applicable water quality objectives. This requirement may be satisfied through identification of the constituent as a “pollutant of concern” in the Discharger’s Pollutant Minimization Program, described in Provision 6.3.3.

6.3.2.2. **Reporting Requirements**

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

6.3.3. **Pollutant Minimization Program**

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

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

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

6.3.3.2. If triggered for a reason set forth in Provision 6.3.3.1, above, the Discharger’s Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals:

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

6.3.3.2.2. Quarterly monitoring for the reportable priority pollutants in the influent to the wastewater treatment system. The Executive Officer may approve

alternative measures when influent monitoring is unlikely to produce useful analytical data;

- 6.3.3.2.3. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation;
- 6.3.3.2.4. Implementation of appropriate cost-effective control measures for the reportable priority pollutants, consistent with the control strategy; and
- 6.3.3.2.5. Inclusion of the following specific items within the annual report:
 - 6.3.3.2.5.1. All Pollutant Minimization Program monitoring results for the previous year;
 - 6.3.3.2.5.2. List of potential sources of the reportable priority pollutants;
 - 6.3.3.2.5.3. Summary of all actions undertaken pursuant to the control strategy; and
 - 6.3.3.2.5.4. Description of actions to be taken in the following year.

6.3.4. **Storage and Treatment Standard Operation and Maintenance Procedures**

- 6.3.4.1. By November 1, 2022, the Discharger shall submit its updated standard operation and maintenance procedures for the wastewater storage and treatment system as described below (in addition to complying with the operations and maintenance requirements of Attachments D and G, sections 1.4). The Discharger shall maintain a copy of the standard operation and maintenance procedures at the Facility, update it as necessary, and notify the Regional Water Board of significant revisions. The standard operation and maintenance procedures shall, at a minimum, contain the following elements:
 - 6.3.4.1.1. Scrap acceptance criteria to ensure that Discharger operators screen all incoming scrap metal to minimize hazardous or radioactive material and other pollutants that can adversely affect treatment system effluent quality;
 - 6.3.4.1.2. Procedures to ensure that onsite wastewater storage (i.e., storage within the 1.2-million gallon storage tank, the 0.98 million gallon storage tank, and any additional onsite storage structures) and reuse are optimized so as to minimize discharges to Discharge Point 001 and to minimize onsite ponding (e.g., by preemptively discharging stored wastewater to the sanitary sewer when significant rain is anticipated and by efficiently transferring ponded water to the 1.2-million-gallon and 0.98 million-gallon storage tanks);
 - 6.3.4.1.3. Operational parameters and settings to ensure that the system is operating optimally when discharge to Discharge Point 001 is necessary

(e.g., control parameters to maintain when discharging to Discharge Point 001 versus the sanitary sewer);

- 6.3.4.1.4. Monitoring protocols to ensure compliance with the MRP;
- 6.3.4.1.5. Maintenance requirements (e.g., criteria that trigger removal of sludge, backwash of filters, and regeneration of activated carbon; and inspection and replacement frequency of critical equipment); and
- 6.3.4.1.6. Operator training (e.g., refresher training before the wet season begins each year).

6.3.5. **Water Pollution Prevention Plan**

6.3.5.1. By November 1, 2022, the Discharger shall update its Water Pollution Prevention Plan (WPPP) that contains the following elements as described further below: (1) site map, (2) list of industrial materials, (3) potential pollutant sources, (4) best management practices (BMPs), (5) monitoring plan, (6) annual evaluation, and (7) annual report. The WPPP shall set forth BMPs for stormwater, process wastewater, and process-related materials to comply with discharge limitations, including Discharge Prohibition 3.5 of this Order, and to achieve the following objectives:

- Collect, convey, and retain stormwater and process wastewater onsite for reuse;
- Reduce or prevent pollutants in stormwater and process wastewater delivered to the onsite wastewater treatment system; and
- Prevent offsite discharges that could directly or indirectly affect waters of the United States.

The Discharger shall maintain a copy of the WPPP at the Facility, update it as necessary, and notify the Regional Water Board of significant revisions within 30 days of making such revisions.

6.3.5.1.1. **Site Map.** The WPPP shall contain one or more site maps that illustrate the following:

- 6.3.5.1.1.1. Facility boundary and stormwater and process wastewater drainage areas, including the flow direction of each drainage area, areas of soil erosion (i.e., unpaved soil or soil with compromised pavement), and nearby surface water bodies and municipal storm drain inlets;
- 6.3.5.1.1.2. Locations of stormwater and process wastewater collection and conveyance systems, associated treatment systems, discharge locations, and direction of flow;

- 6.3.5.1.1.3. Locations of structural control measures (e.g., storage tanks, catch basins, berms, detention ponds, secondary containment, oil/water separators, and diversion barriers) that affect stormwater and process wastewater flows;
- 6.3.5.1.1.4. Impervious areas, including paved areas, buildings, covered storage areas, and other roofed structures;
- 6.3.5.1.1.5. Locations where materials are directly exposed to precipitation or wind, and locations where significant spills or leaks have occurred;
- 6.3.5.1.1.6. Industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage and maintenance areas, material handling, conveyance, and processing areas, waste treatment and storage areas, dust or particulate generating areas, cleaning and materials reuse areas, and other areas of industrial activity that may have potential pollutant sources.
- 6.3.5.1.2. **List of Industrial Materials.** The WPPP shall include a list of industrial materials or wastes handled at the Facility and the locations where each material is stored, received, shipped, and handled, as well as the typical quantities and handling frequencies.
- 6.3.5.1.3. **Potential Pollutant Sources.** The WPPP shall contain the following elements:
 - 6.3.5.1.3.1. **Description of Potential Pollutant Sources**
 - 6.3.5.1.3.1.1. **Industrial Processes.** The WPPP shall describe each industrial process, including shredding, dust suppression, ship loading, equipment washdown, and any other activities that generate water that drains to stormwater or process wastewater conveyance systems. The WPPP shall describe the type, characteristics, and approximate quantity of industrial materials used in or resulting from each process. The WPPP shall identify and describe areas protected by containment structures and the corresponding containment capacity.
 - 6.3.5.1.3.1.2. **Material Handling and Storage Areas.** The WPPP shall describe each material handling and storage area, including the type, characteristics, and quantity of industrial materials or wastes handled or stored; the shipping, receiving, and loading procedures; the spill or leak prevention and response procedures; and the areas protected by containment structures and corresponding containment capacity.
 - 6.3.5.1.3.1.3. **Dust, Particulate, Debris, and Refuse Generating Activities.** The WPPP shall identify all industrial activities that generate dust, particulate, debris, or refuse that may be deposited within the Facility

boundaries or at offsite locations that could directly or indirectly affect waters of the United States. These activities shall include, but not be limited to, onsite material transfer, ship loading and unloading, shredding, and Joint Products Plant operations. The WPPP shall describe such activities, locations where these materials may accumulate, source types, and characteristics.

6.3.5.1.3.1.4. **Significant Spills and Leaks.** The WPPP shall identify Facility areas where spills or leaks can likely occur. The WPPP shall list the following for the previous five years:

1. any industrial materials that have spilled or leaked in significant quantities and have been discharged to (or had the potential to discharge to) waters of the United States; and
2. any toxic chemicals identified in 40 C.F.R. section 302 that have been reported on U.S. EPA Form R, as well as any oil or hazardous substances in excess of reportable quantities (40 C.F.R. §§ 110, 117, and 302) discharged to waters of the United States.

In each case, the WPPP shall include the location, characteristics, and approximate quantity of the materials spilled or leaked; approximate quantity of the materials discharged; the cleanup or remedial actions that occurred or are planned; the approximate remaining quantity of materials that have the potential to be discharged; and the preventive measures taken to ensure that spills or leaks do not recur.

6.3.5.1.3.1.5. **Erodible Surfaces.** The WPPP shall describe Facility locations where soil or other particulate erosion may be caused by industrial activity (e.g., truck traffic) or contact with water or wind. These locations shall, at a minimum, include areas of unpaved soil or soil with compromised pavement.

6.3.5.1.3.2. **Assessment of Potential Pollutant Sources**

6.3.5.1.3.2.1. The WPPP shall include a narrative assessment of all areas of industrial activity with potential industrial pollutant sources. At a minimum, the assessment shall include the following:

1. Facility areas with likely pollutant sources, including but not limited to areas where wastewater or waste materials (e.g., dust suppression water, wash water, spilled product, fugitive dust, dirt, rubbish, refuse, or debris) could directly or indirectly affect waters of the United States;
2. Pollutants likely to be present;

3. Approximate quantity, physical characteristics, and location of each industrial material handled, produced, processed, stored, recycled, or disposed;
4. Degree to which the pollutants associated with those materials may be discharged directly or indirectly (e.g., through contact with water or wind) to waters of the United States;
5. Direct and indirect pathways (e.g., through contact with water or wind) by which pollutants may be discharged to waters of the United States;
6. Sampling, visual observation, and inspection records; and
7. Effectiveness of existing BMPs in meeting the WPPP objectives.

6.3.5.1.3.2.2. Based on the assessment above, the WPPP shall identify any Facility areas where the minimum BMPs described in Provision 6.3.5.1.4.1 below will not adequately meet the WPPP objectives. The Discharger shall identify and implement, to the extent feasible, advanced BMPs as described in Provision 6.3.5.1.4.2 below for such areas.

6.3.5.1.3.2.3. Based on the assessment above, the WPPP shall identify any drainage areas with no exposure to industrial activities and materials.

6.3.5.1.4. **Best Management Practices.** The WPPP shall describe BMPs as required below:

6.3.5.1.4.1. **Minimum BMPs.** The Discharger shall implement and maintain each of the following minimum BMPs. The Discharger shall select, design, install, and implement BMPs in a manner that reflects best industry practice considering technological availability and economic practicability and achievability to meet the WPPP objectives and applicable effluent limits.

6.3.5.1.4.1.1 **Good Housekeeping.** The Discharger shall undertake the following:

1. Observe outdoor areas to determine housekeeping needs. These areas shall include stormwater and process wastewater drainage areas, conveyance systems, areas around ship loading operations, and materials handling and storage areas. They shall also include offsite areas in the vicinity of the Facility, including Embarcadero West and adjacent neighboring properties. If access to neighboring properties cannot be arranged, observations shall be made to the extent possible from reasonably accessible areas. Any dust, debris, waste, spills,

leaks, or tracked materials associated with the Discharger's operations shall be cleaned up and disposed of properly;

2. Minimize or prevent material tracking (e.g., by trucks);
3. Minimize or control dust, particulate, debris, and refuse generated from industrial materials or activities; and
4. Sweep paved surfaces to minimize the potential for pollutants to be tracked offsite.

6.3.5.1.4.1.2. **Preventive Maintenance.** The Discharger shall undertake the following:

1. Identify all equipment and systems used outdoors that may spill or leak pollutants;
2. Inspect the identified equipment and systems to detect leaks and 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.

6.3.5.1.4.1.3. **Spill and Leak Prevention and Response.** The Discharger shall undertake the following:

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 water conveyance systems (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.

6.3.5.1.4.1.4. **Material Handling and Waste Management.** The Discharger shall undertake the following:

1. Screen all incoming scrap to minimize the chance of accepting materials that could be significant sources of pollutants (see Provision 6.3.4.2);
2. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with water or wind;
3. Cover, contain, or otherwise manage all stored industrial materials (including but not limited to non-solid industrial materials or wastes, such as particulates, powders, shredded material, etc.) that can be readily mobilized, transported, or dispersed by contact with water or wind;
4. Cover or close industrial waste disposal containers and industrial material storage containers when not in use;
5. Divert stormwater and process wastewater away from stockpiled materials;
6. Employ measures to minimize ponding of stormwater and process wastewater in the vicinity of stockpiled materials;
7. Clean up all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures in Provision 6.3.5.1.4.1.3 above; and
8. Observe and clean, as appropriate, any outdoor material or waste handling equipment or containers (e.g., conveyor system, skiff pan) that can be contaminated by contact with industrial materials or wastes.

6.3.5.1.4.1.5. **Erosion and Sediment Controls.** For each erodible surface location identified in Provision 6.3.5.1.3.1.5 above, the Discharger shall undertake the following:

1. Implement effective wind erosion controls;
2. Provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to forecasted storms;
3. Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control erodible materials that could be discharged or tracked offsite (e.g., by using paving, wheel washes, and sweeping); and
4. Divert stormwater and process wastewater generated from within the Facility away from all erodible materials.

- 6.3.5.1.4.1.6. **Employee Training Program.** The Discharger shall undertake the following:
1. Ensure that all personnel implementing the various WPPP compliance activities are properly trained to implement WPPP requirements, including but not limited to BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. Appropriate staff shall be trained by a Qualified Industrial Stormwater Practitioner who has completed State Water Board-sponsored or approved training and has registered in the State Water Board's Stormwater Multiple Application and Report Tracking System (SMARTS);
 2. Prepare or acquire appropriate training manuals or training materials;
 3. Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive;
 4. Provide a training schedule; and
 5. Maintain documentation of all completed training classes and the personnel that received training.
- 6.3.5.1.4.1.7. **Quality Assurance and Record Keeping.** The Discharger shall undertake the following:
1. Develop and implement management procedures to ensure that appropriate staff implements all WPPP elements;
 2. Develop a method of tracking and recording the implementation of the BMPs identified in the WPPP; and
 3. Maintain the BMP implementation records, training records, and records related to any spills and cleanup-related response activities for a minimum of five years.
- 6.3.5.1.4.2. **Advanced BMPs.** In addition to implementing the minimum BMPs described above, the Discharger shall, implement and maintain additional advanced BMPs (e.g. pressure wash and capture rinse water at Embarcadero West near the entrance of the Facility to minimize offsite tracking of pollutants) necessary to achieve WPPP objectives and to comply with discharge limitations, including Discharge Prohibition 3.5 of this Order. The Discharger shall do so in a manner that reflects BAT and BCT (i.e., best industry practice considering technological availability and economic practicability and achievability).
- 6.3.5.1.4.3. **BMP Descriptions**

- 6.3.5.1.4.3.1. The WPPP shall describe BMPs being implemented at the Facility, including the following:
1. The pollutants or waste material that 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 or position responsible for implementing the BMP;
 5. The procedures, including maintenance procedures, and instructions to implement the BMP effectively;
 6. The equipment and tools necessary to implement the BMP effectively; and
 7. BMPs that may require more frequent visual observations beyond those described in Provision 6.3.5.1.5.2 below.
- 6.3.5.1.4.3.2. The WPPP shall identify and justify each minimum BMP or applicable advanced BMP not being implemented at the Facility (i.e., because the BMP does not reflect best industry practice considering technological availability and economic practicability and achievability).
- 6.3.5.1.4.3.3. The WPPP shall identify any BMPs implemented in lieu of any of the minimum or applicable advanced BMPs.
- 6.3.5.1.4.4. **BMP Summary Table.** The WPPP shall include a table summarizing each identified area of industrial activity, the associated industrial pollutant sources, the industrial pollutants, and the BMPs being implemented.
- 6.3.5.1.5. **Monitoring Plan.** The WPPP shall contain a Monitoring Plan describing how the Discharger will evaluate the effectiveness of WPPP implementation and determine what changes to the WPPP may be needed, if any. The Monitoring Plan shall contain the following elements: (i) areas to be monitored, (ii) visual observations, (iii) monitoring team, (iv) records and reporting, and (v) WPPP revisions. Provision 6.3.5.1.5.6, below, provides a mechanism for reducing these monitoring requirements if appropriate.
- 6.3.5.1.5.1. **Areas to Be Monitored.** The Monitoring Plan shall include a list of areas to be monitored considering the potential pollutant sources

identified in accordance with Provision 6.3.5.1.3, above. The list shall include the following:

- 6.3.5.1.5.1.1. Onsite drainage areas, including outdoor industrial equipment and storage areas, outdoor industrial activity areas, and other potential industrial pollutant sources;
- 6.3.5.1.5.1.2. Areas associated with ship loading operations;
- 6.3.5.1.5.1.3. Areas where industrial wheel washes are operating; and
- 6.3.5.1.5.1.4. Offsite areas adjacent to the Facility, including Embarcadero West and adjacent neighboring properties. If access to neighboring properties cannot be arranged, monitoring shall be conducted to the extent possible from reasonably accessible areas.
- 6.3.5.1.5.2. **Visual Observations**
 - 6.3.5.1.5.2.1. At least once each calendar month, the Discharger shall visually observe each area listed pursuant to section 6.3.5.1.5.1, above, for the presence or indication of prior, current, or potential unauthorized discharges to waters of the United States.
 - 6.3.5.1.5.2.2. The Discharger shall assess the potential source of any observed prior, current, or potential unauthorized discharge and the effectiveness of related BMPs.
 - 6.3.5.1.5.2.3. The Discharger shall record visual observations, potential sources of unauthorized discharges, and comments regarding BMP effectiveness on a standard form that the Discharger shall develop for this purpose and include within the Monitoring Plan.
 - 6.3.5.1.5.2.4. Visual observations shall be conducted during daylight and during Facility operations.
- 6.3.5.1.5.3. **Monitoring Team.** The Monitoring Plan shall identify team members assigned to conduct the monitoring, describe their roles, and establish training protocols.
- 6.3.5.1.5.4. **Records and Reporting**
 - 6.3.5.1.5.4.1. The Discharger shall summarize visual observations in quarterly SMRs and the WPPP Annual Report (see Provision 6.3.5.1.7 below).
 - 6.3.5.1.5.4.2. The Discharger shall maintain all records throughout the life of this Order and for a minimum of five years. Records shall include the date, approximate time, locations observed or recorded, presence and probable source of any observed pollutants, and any response

action or additional WPPP revisions necessary in response to the visual observations and enhanced monitoring.

- 6.3.5.1.5.5. **Corrective Actions and WPPP Revisions.** The Discharger shall take corrective actions, and review and revise the WPPP as necessary, when visual observations indicate that pollutant sources have not been adequately controlled to prevent unauthorized discharges.
- 6.3.5.1.5.6. **Reduced Monitoring.** With the written concurrence of the Executive Officer, the Discharger may reduce the frequency of visual observations commensurate with reductions in the potential for pollutants to be directly or indirectly discharged to waters of the United States. For example, monitoring may be reduced if there is documented evidence that BMPs are effective and reliably implemented.
- 6.3.5.1.6. **Annual Evaluation.** The WPPP shall commit the Discharger to conduct at least one Annual Evaluation for each reporting year (July 1 through 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 its justification for doing so. Based on each Annual Evaluation, the Discharger shall revise the WPPP as appropriate and implement the revisions within 90 days of completing the Annual Evaluation. At a minimum, each Annual Evaluation shall consist of the following:
- 6.3.5.1.6.1. Review of all visual observation, sampling results, and inspection records for the previous reporting year;
- 6.3.5.1.6.2. Inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants or waste materials travelling offsite;
- 6.3.5.1.6.3. Inspection of all drainage areas previously identified as having no exposure to industrial activities and materials;
- 6.3.5.1.6.4. Inspection of equipment needed to implement BMPs;
- 6.3.5.1.6.5. Inspection of any BMPs; and
- 6.3.5.1.6.6. Review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if BMPs are properly designed, implemented, and effective.
- 6.3.5.1.7. **Annual Report.** The WPPP shall commit the Discharger to certify and submit an Annual Report no later than July 30 following each reporting year (July 1 through June 30). The Discharger shall include the following in each Annual Report:

- 6.3.5.1.7.1. Compliance Checklist that indicates whether the Discharger complies with, and has addressed all applicable requirements of, this Order;
- 6.3.5.1.7.2. Explanation for any non-compliance, as indicated in the Compliance Checklist;
- 6.3.5.1.7.3. Identification, including page numbers or sections, of all revisions made to the WPPP within the reporting year;
- 6.3.5.1.7.4. Date of the Annual Evaluation; and
- 6.3.5.1.7.5. Summary of visual observations

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

Arithmetic Mean (μ)

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

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

Average Monthly Effluent Limitation (AMEL)

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

Average Weekly Effluent Limitation (AWEL)

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

Bioaccumulative

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

Carcinogenic

Known to cause cancer in living organisms.

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

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

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

Sample results less than the laboratory's MDL.

Persistent Pollutants

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

Pollutant Minimization Program

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

Pollution Prevention

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

Reporting Level (RL)

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

Source of Drinking Water

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

Standard Deviation (σ)

Measure of variability calculated as follows:

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

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

Toxicity Reduction Evaluation (TRE)

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

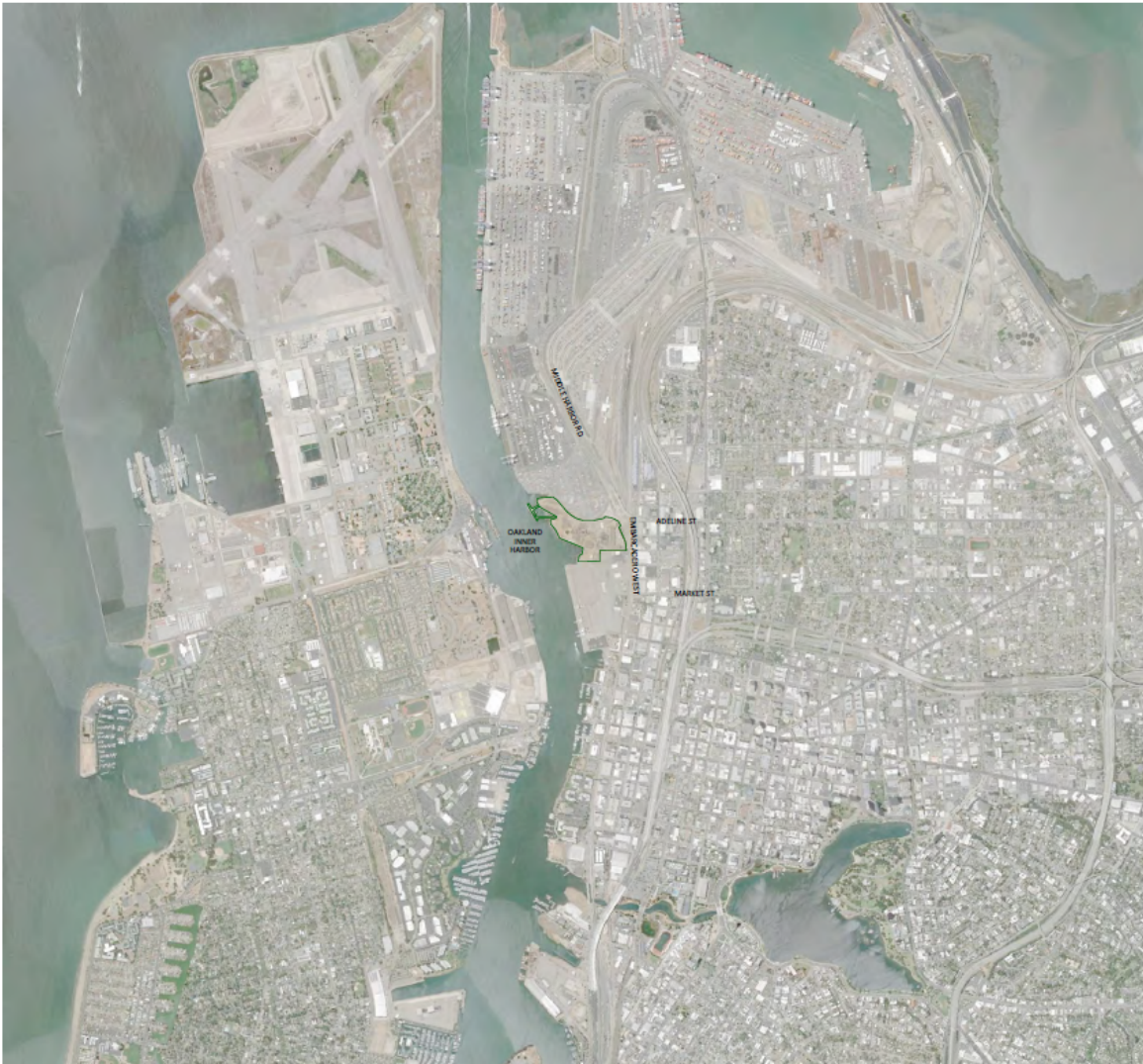
ABBREVIATIONS

%	Percent
°C	degrees Celsius
°F	degrees Fahrenheit
µg/L	Micrograms per liter
1/Blending Event	Once per blending event
1/Day	Once per day
1/Month	Once per month
1/Quarter	Once per quarter
1/Week	Once per week
1/Year	Once per year
1/Event	Once per event
2/Month	Two times per month
2/Week	Twice per week
2/Year	Twice per year
3/Week	Three times per week
4/Week	Four times per week
5/Week	Five times per week
AMEL	Average monthly effluent limitation
AWEL	Average weekly effluent limitation
B	Background concentration
bpd	Barrels per day

C	Water quality criterion or objective
C-24	24-hour composite
CFU/100 mL	Colony forming units per 100 milliliters
Continuous	Measured continuously
Continuous/D	Measured continuously, and recorded and reported daily
Continuous/H	Measured continuously, and recorded and reported hourly
CV	Coefficient of Variation
DNQ	Detected, but not quantified
DL	Detection level
ECA	Effluent Concentration Allowance
gpm	Gallons per minute
Grab	Grab sample
MDEL	Maximum Daily Effluent Limitation
MDL	Method detection limit
MEC	Maximum effluent concentration
MG	Million gallons
mg/L	Milligrams per liter
mg/L as N	Milligrams per liter as nitrogen
MGD	Million gallons per day
ML	Minimum level
MPN/100 mL	Most probable number per 100 milliliters
ND	Not detected
NTU	Nephelometric turbidity units
ppt	Parts per thousand
RL	Reporting level
RPA	Reasonable potential analysis
s.u.	Standard pH units
TIE	Toxicity identification evaluation
TRE	Toxicity reduction evaluation
TUa	Acute toxicity units
TUc	Chronic toxicity units

ATTACHMENT B – MAPS

Figure B-1. Satellite Image of Facility



LEGEND
— APPROXIMATE SITE BOUNDARY

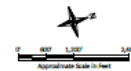
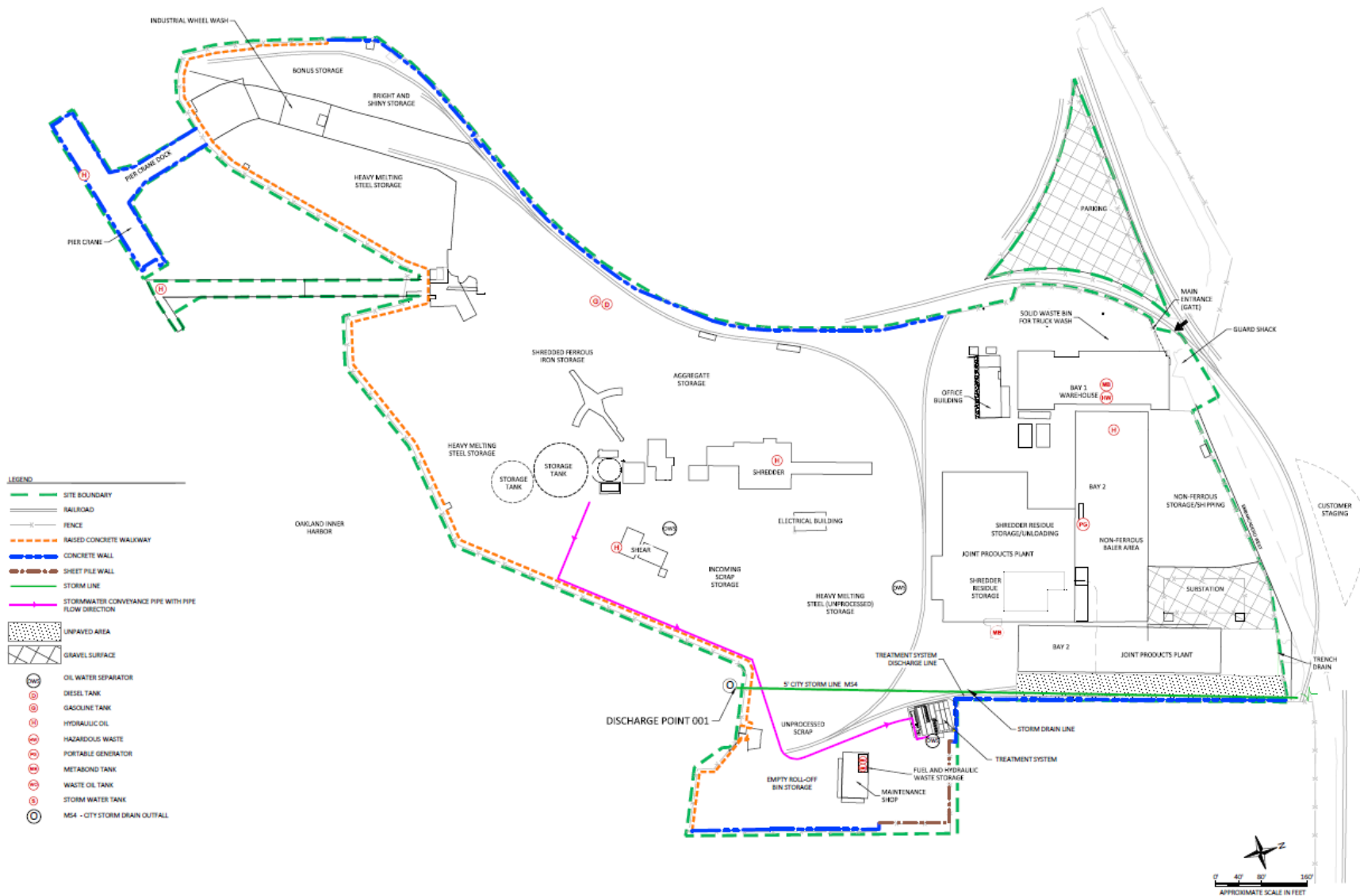
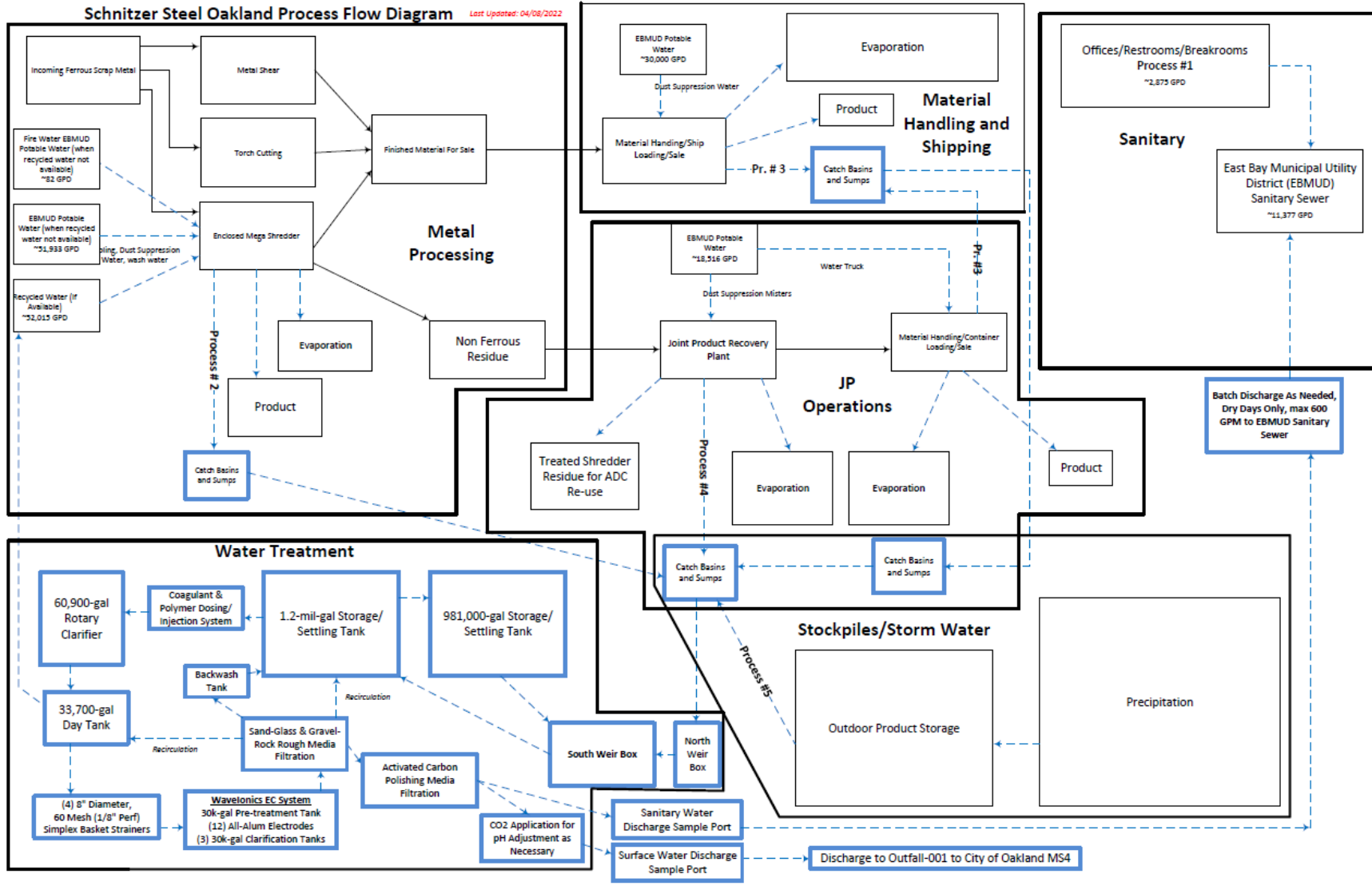


Figure B-2. Facility Map



ATTACHMENT C – FLOW SCHEMATIC

Figure C-1: Wastewater Treatment Flow Diagram



ATTACHMENT D – STANDARD PROVISIONS

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ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

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

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

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

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

1.5. Property Rights

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

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

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

1.7. Bypass

1.7.1. Definitions

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

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

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

- 1.7.3.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
- 1.7.3.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
- 1.7.3.3. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance section 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
- 1.7.4. **Approval.** The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance section 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
- 1.7.5. **Notice**
 - 1.7.5.1. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)
 - 1.7.5.2. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions – Reporting section 5.5 below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)
- 1.8. **Upset.** Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

- 1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance section 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
- 1.8.2. **Conditions necessary for a demonstration of upset.** A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - 1.8.2.1. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - 1.8.2.2. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - 1.8.2.3. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting section 5.5.2.2 below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - 1.8.2.4. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance section 1.3 above. (40 C.F.R. § 122.41(n)(3)(iv).)
- 1.8.3. **Burden of proof.** In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

- 2.1. **General.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)
- 2.2. **Duty to Reapply.** If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)
- 2.3. **Transfers.** This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

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

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

4. STANDARD PROVISIONS – RECORDS

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

- 4.2.2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
 - 4.2.3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
 - 4.2.4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
 - 4.2.5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
 - 4.2.6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- 4.3.** Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):
- 4.3.1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
 - 4.3.2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

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

5.2. Signatory and Certification Requirements

- 5.2.1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting sections 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k).)
- 5.2.2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental

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

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

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

- 5.2.3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting section 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting section 5.2.2 above (40 C.F.R. § 122.22(b)(1));
 - 5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - 5.2.3.3. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
- 5.2.4. If an authorization under Standard Provisions – Reporting section 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting section 5.2.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
- 5.2.5. Any person signing a document under Standard Provisions – Reporting section 5.2.2 or 5.2.3 above shall make the following certification:

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

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

5.3. Monitoring Reports

- 5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)
- 5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
- 5.3.4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

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

5.5. Twenty-Four Hour Reporting

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

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

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

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

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

- 5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
- 5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order unless the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a). (40 C.F.R. § 122.41(l)(1)(ii).) If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions – Notification Levels section 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii).)
- 5.7. Anticipated Noncompliance.** The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order’s requirements. (40 C.F.R. § 122.41(l)(2).)
- 5.8. Other Noncompliance.** The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting sections 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting section 5.5 above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting section 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)
- 5.9. Other Information.** When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)
- 5.10. Initial Recipient for Electronic Reporting Data.** The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. 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. section 127.2(c)]. U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

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

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

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

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

7.1.1.1. 100 micrograms per liter ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(1)(i));

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

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

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

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

7.1.2.1. 500 micrograms per liter ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(2)(i));

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

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

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

7.2 Publicly Owned Treatment Works (POTWs)

7.2.1. All POTWs shall provide adequate notice to the Regional Water Board of any new introduction of pollutants into the POTW from an indirect discharger that

would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)).

- 7.2.2. All POTWs shall provide adequate notice to the Regional Water Board of any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)
- 7.2.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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

1. GENERAL MONITORING PROVISIONS

- 1.1. The Discharger shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 C.F.R. section 122.63. If any discrepancies exist between this MRP and the “Regional Standard Provisions, and Monitoring and Reporting Requirements (Supplement to Attachment D) for NPDES Wastewater Discharge Permits” (Attachment G), this MRP shall prevail.
- 1.2. The Discharger shall conduct all monitoring in accordance with Attachment D section 3, as supplemented by Attachment G. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit.
- 1.3. For the analysis of monitoring samples, the Discharger shall use laboratories certified by the State Water Resources Control Board (State Water Board) in accordance with Water Code section 13176 and shall obtain quality assurance/quality control data with laboratory reports. For any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, conductivity, disinfectant residual) analyzed by a noncertified laboratory, the Discharger shall implement a Quality Assurance-Quality Control Program. The Discharger shall keep a manual onsite containing the steps followed in this program and shall demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.
- 1.4. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board electronically to the DMR-QA Officer via email.

2. MONITORING LOCATIONS

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

Table E-1. Monitoring Locations

Discharge Point	Monitoring Location	Monitoring Location Description
Treated Process Wastewater	EFF-001	A point following all phases of treatment and prior to discharge to the City of Oakland storm sewer at which all waste tributary is present.

3. EFFLUENT MONITORING

When discharging, the Discharger shall monitor treatment plant effluent at Monitoring Location EFF-001 as follows:

Table E-2. Effluent Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow ^[1]	MGD	Continuous	Continuous
Oil and Grease	mg/L	Grab	1/Event
pH ^[2]	standard units	Grab	1/Day
Turbidity	NTU	Grab	1/Day
Total Suspended Solids	mg/L	Grab	1/Event
Total Organic Carbon	mg/L	Grab	1/Event
Aluminum	µg/L	Grab	1/Event
Ammonia	mg/L as N	Grab	1/Event
Copper, Total Recoverable	µg/L	Grab	1/Event
Cyanide, Total	µg/L	Grab	1/Event
Dioxin-TEQ	µg/L	Grab	Once
Iron	µg/L	Grab	1/Event
Lead, Total Recoverable	µg/L	Grab	1/Event
Zinc, Total Recoverable	µg/L	Grab	1/Event
Acute Toxicity ^[3]	% survival	Grab	1/Event
Other Priority Pollutants ^[4]	µg/L	Grab	Once

Footnotes:

- ^[1] Flow shall be monitored continuously during discharge and the average flow (gpm), duration of discharge event (hours), and total flow volume per discharge (gallons) shall be reported in self-monitoring reports:
- ^[2] If pH is monitored continuously, the minimum and maximum pH values for each day shall be reported in self-monitoring reports.
- ^[3] Acute bioassay tests shall be performed in accordance with MRP section 4.1.
- ^[4] The Discharger shall monitor for the pollutants listed in Attachment G, Table B.

4. ACUTE TOXICITY MONITORING

- 4.1. Compliance with the acute toxicity effluent limitations shall be evaluated at Monitoring Location EFF-001 by measuring survival of test organisms exposed to 96-hour static renewal bioassays.
- 4.2. Test organisms shall be fathead minnow (*Pimephales promelas*). Alternatively, the Executive Officer may specify a more sensitive organism or, if testing a particular organism proves unworkable, the most sensitive organism available.

- 4.3. All bioassays shall be performed according to the most up-to-date protocols in 40 C.F.R. part 136, currently *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition (EPA-821-R-02-012). If these protocols prove unworkable, the Executive Officer and the Environmental Laboratory Accreditation Program may grant exceptions in writing upon the Discharger's request with justification.
- 4.4. If the Discharger demonstrates that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limit may be determined after test samples are adjusted to remove the influence of those substances. Written acknowledgement that the Executive Officer concurs with the Discharger's demonstration and that the adjustment will not remove the influence of other substances must be obtained prior to any such adjustment. The Discharger may adjust the pH of acute toxicity samples to minimize ammonia toxicity interference.
- 4.5. Bioassay monitoring shall include, on a daily basis, 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 (e.g., the percentage of surviving test organisms is less than 70 percent), the Discharger shall initiate a new test as soon as practical and shall 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).
- 4.6. Acute Toxicity Reduction Evaluation (TRE)
 - 4.6.1. The Discharger shall prepare a generic acute TRE work plan within 90 days of the effective date of this Order to be ready to respond to toxicity events. The Discharger shall review and update the work plan as necessary so that it remains current and applicable to the discharge and discharge facilities.
 - 4.6.2. Within 30 days of exceeding the acute toxicity limit, the Discharger shall submit and initiate a TRE work plan, which shall be the generic work plan revised as appropriate for this toxicity event after consideration of available discharge data.
 - 4.6.3. The TRE shall be specific to the discharge and be in accordance with current technical guidance and reference materials, including U.S. EPA guidance materials. The Discharger shall conduct the TRE as a tiered evaluation as summarized below:
 - 4.6.3.1. Tier 1 shall consist of basic data collection (routine and accelerated monitoring).

- 4.6.3.2. Tier 2 shall consist of evaluation of treatment process, including operational practices and in-plant process chemicals.
- 4.6.3.3. Tier 3 shall consist of an acute toxicity identification evaluation (TIE).
- 4.6.3.4. Tier 4 shall consist of a toxicity source evaluation.
- 4.6.3.5. Tier 5 shall consist of a toxicity control evaluation, including options for modifications of in-plant treatment processes.
- 4.6.3.6. Tier 6 shall consist of implementation of selected toxicity control measures, and follow-up monitoring and confirmation of implementation success.
- 4.6.4. The Discharger may end the TRE at any stage if monitoring finds compliance with the acute toxicity limit.
- 4.6.5. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity. The Discharger shall employ all reasonable efforts using currently available TIE methodologies.
- 4.6.6. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the toxic substances from the discharge. The Discharger shall take all reasonable steps to reduce toxicity to levels below the acute toxicity limit.

5. RECEIVING WATER MONITORING

The Discharger shall continue to participate in the Regional Monitoring Program, which collects data on pollutants and toxicity in San Francisco Bay water, sediment, and biota.

6. REPORTING REQUIREMENTS

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

6.2. Self-Monitoring Reports (SMRs)

6.2.1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's [California Integrated Water Quality System \(CIWQS\) Program website](https://waterboards.ca.gov/water_issues/programs/ciwqs) (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.

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

- 6.2.2.1. **Quarterly SMRs** — Quarterly SMRs shall be due 30 days after the end of each calendar quarter (January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31), covering that quarter. Each SMR shall contain the applicable items described in Provisions 6.3.2 (Effluent Characterization Study and Report) and 6.3.5 (Water Pollution Prevention Plan) of the Order, Attachment D section 5.2, and Attachment G section 5.3. If the Discharger monitors any pollutant more frequently than required by this Order, the Discharger shall include the results of such monitoring in the calculations and reporting for the SMR.
- 6.2.2.2. **Annual SMR** — Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the applicable items described in Provisions 6.3.2 (Effluent Characterization Study and Report) and 6.3.3 (Pollutant Minimization Program) of the Order, 6.3.5 (Water Pollution Prevention Plan), and Attachment G section 5.3.1.6.
- 6.2.3. **Specifications for Submitting SMRs to CIWQS.** The Discharger shall submit analytical results and other information using one of the following methods:

Table E-3. CIWQS Reporting

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

Footnotes:

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

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.

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

Table E-4. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period
Continuous/D	Order effective date	All times
Continuous/1H	Order effective date	Measured continuously or, if infeasible, at least every hour
1/Hour	Order effective date	Every hour on the hour
1/Day	Order effective date	Any 24-hour period that reasonably represents a calendar day for sampling purposes (e.g., beginning at midnight and continuing through 11:59 p.m.)
1/Week 2/Week	First Sunday following or on Order effective date	Sunday through Saturday
1/Month	First day of calendar month following or on Order effective date	First day of calendar month through last day of calendar month
1/Quarter	Closest January 1, April 1, July 1, or October 1 before or after Order effective date ^[1]	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
1/Year	Closest January 1 before or after Order effective date ^[1]	January 1 through December 31
2/Year	Closest January 1 or July 1 before or after Order effective date ^[1]	January 1 through June 30 July 1 through December 31
1/Event	Any day where a new discharge begins	Once during every discharge at least four hours in duration
Once	Order effective date	Once during the term of the Order within 12 months prior to applying for permit reissuance

Footnote:

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

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

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

6.2.5.2. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The

estimated chemical concentration of the sample shall also be reported.

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

- 6.2.5.3. Sample results less than the laboratory's MDL shall be reported as "Not Detected", or ND.
- 6.2.5.4. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 6.2.6. **Compliance Determination.** Compliance with effluent limitations shall be determined using sample reporting protocols defined above, in the Fact Sheet, and in Attachments A, D, and G. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and, if applicable, greater than or equal to the RL.
- 6.3. Discharge Monitoring Reports (DMRs).** DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or the latest upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the [DMR website](https://waterboards.ca.gov/water_issues/programs/discharge_monitoring) (waterboards.ca.gov/water_issues/programs/discharge_monitoring).

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2 01S0067
CIWQS Place ID	255924
Discharger	Schnitzer Steel Industries, Inc.
Facility Name	Schnitzer Steel Products Company
Facility Address	1101 Embarcadero West Oakland, CA 94607 Alameda County
Facility Contact, Title, and Phone	Pamela Gray, Regional Environmental Manager - West, (510) 839-4714
Authorized Person to Sign and Submit Reports	Daniel Woltmann, Regional General Manager, (510) 452-8896
Mailing Address	P.O. Box 747 Oakland, CA 94604
Billing Address	Same as Mailing Address
Facility Type	Industrial, SIC Code 5093 (Scrap and Waste Materials)
Major or Minor Facility	Minor
Water Quality Threat	2
Complexity	B
Pretreatment Program	No
Recycling Requirements	No
Mercury and PCBs Requirements	NPDES Permit CAS612008
Nutrients Requirements	N/A
Permitted Flow	600 gallons per minute (gpm)
Design Flow	600 gpm (0.86 million gallons per day)
Watershed	South Bay Basin
Receiving Water	Oakland Inner Harbor
Receiving Water Type	Marine

- 1.1.** Schnitzer Steel Industries, Inc. (Discharger) owns and operates the Schnitzer Steel Products Company (Facility), a 26.5-acre scrap metal recycling facility. Attachment B includes a map of the Facility and its surroundings. The Facility is surrounded by approximately 5,000 feet of perimeter walls.

The Facility intermittently discharges treated stormwater and process wastewater to the City of Oakland’s municipal separate storm sewer system, which discharges

to Oakland Inner Harbor, a water of the United States within the South Bay Basin watershed.

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

- 1.2. The Discharger is regulated pursuant to National Pollutant Discharge Elimination System (NPDES) Permit CA0030228. The Discharger was previously subject to Order R2-2016-0045 (previous order). The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on April 5, 2021.

Because the Discharger discharges treated effluent to the City of Oakland storm drain, its Mercury and PCBs discharges are covered under the Alameda County Clean Water Program wasteload allocation, which is implemented through NPDES Permit No. CAS612008, *Municipal Regional Stormwater NPDES Permit*.

- 1.3. The Discharger is authorized to discharge subject to the WDRs in this Order at the discharge location described in Table 1 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, this Order limits the effective period for the discharge authorization. Pursuant to 40 C.F.R. section 122.6(d) and California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all requirements for continuation of expired permits.

2. FACILITY DESCRIPTION

2.1. Wastewater Treatment and Controls

- 2.1.1. **Facility Operations.** Facility operations include shredding light iron products, including automobiles, appliances, and other recyclable light steel materials; shearing and torch cutting heavy recyclable steel products; preparing and sorting ferrous and non-ferrous metal recycling feedstock; treating shredder residue; temporarily storing finished recycled metal products and shredder residue; shipping finished products and treated shredder residue; and maintaining facility equipment. Attachment B shows maps indicating the locations of specific activities, including materials storage.

Bulk scrap metal is delivered to the Facility by rail and truck at the main commercial entrance at Embarcadero West, where it is inspected and designated for unloading according to the following segregated material streams:

- “Bonus” heavy melting steel material to be processed by torch cutting into smaller sizes for shipment;

- Standard grade heavy melting steel to be processed by shear or torch cutting into smaller sizes prior to shipment; and
- Shredder feed material consisting of light iron products, including automobiles, appliances, and other recyclable light steel materials.

At the shedder, light iron products are shredded so ferrous metal can be isolated from nonferrous metal and residual non-metallic materials. The intermediate non-ferrous/non-metallic material stream resulting from shredding operations is known as non-ferrous raw (NFR), which consists of both nonferrous metal and non-metallic materials. NFR is processed further in the Joint Products Plant, where non-ferrous metal is separated, by metal type, from non-metallic materials. Both the shredder and the Joint Products Plant are fully enclosed. Upon completion of the non-ferrous separation processes, the non-metallic shredder residue is treated with cement and silicate, which chemically bind trace remnant metals in the shredder residue to reduce their solubility. The treated shredder residue is transported by truck to landfills for use as alternative daily landfill cover. The processed ferrous scrap is stockpiled at the Facility and loaded into cargo ships at the Facility's dock.

- 2.1.2. **Wastewater Generation.** Wastewater is generated through multiple facility operations, including dust suppression and heat control during ship loading, shredding, and materials handling, wheel washing, oil-water separation, and firefighting. Domestic wastewater is separately discharged to the local sanitary sewer system.
- 2.1.2.1. **Ship Loading.** Ships are loaded directly from trucks on the concrete pier crane dock with a skip pan. Potable water is sprayed on the dock to minimize fugitive dust generated by ship loading operations, which typically occurs twice per month for an average of three to four days per event. Runoff from dust suppression is captured and routed to the wastewater treatment system.
- 2.1.2.1.1. **Concrete Pier Crane Dock.** The pier crane dock has concrete curbs, drain inlets, pipes, and pumps that collect and convey runoff for treatment. It also has splash guards to contain water. The pier crane dock is swept daily during ship loading operations and spilled product, dust, dirt, rubbish, refuse, and debris are removed and disposed of offsite. Runoff from dust suppression and washdown is collected by a sitewide stormwater containment system, transferred upland, and re-used onsite for heat control and dust suppression during shredding.
- 2.1.2.1.2. **Wooden Pier Conveyor System.** The wooden pier conveyor system has been permanently decommissioned. As of September 28, 2020, all ship loading operations are conducted at the concrete pier.
- 2.1.2.2. **Shredding.** Approximately 30,000 to 60,000 gallons per day of onsite recycled water (on rare occasions supplemented by potable water) are

injected into the shredder to control heat and abate dust emissions. Residual water not evaporated by the heat of the shredding process is captured by a series of pumps and sumps and conveyed to a 1.2-million-gallon tank to be recycled.

- 2.1.2.3. **Materials Handling.** Various incoming scrap, processed scrap metal products, and process residues are stored outdoors in large stockpiles. During internal transfer and handling operations, approximately 19,000 gallons per day of potable water are sprayed on internal access roads and the working faces of the stockpiles for dust suppression. The runoff is collected by the stormwater conveyance system and re-used onsite.
- 2.1.2.4. **Wheel Washing.** Two large industrial wheel wash systems are used to clean the wheels and undercarriages of trucks entering the pier crane dock and exiting the Facility. The systems collect, treat, and reuse the wash water in a closed loop system. Periodically, potable water is supplied to the systems and sediment is emptied into a dewatering bin and disposed of offsite.
- 2.1.2.5. **Oil-Water Separation.** Three oil-water separators collect water draining from the shear area, the maintenance shop, and the northern part of the outdoor product storage area. Treated effluent from the oil-water separators is pumped to the onsite water recycling system for reuse in the metal shredding process. Solids are removed from the oil-water separators by vacuum truck and disposed of offsite.
- 2.1.2.6. **Firefighting.** In the event of a fire at the Facility, potable water is used to extinguish the fire. The runoff is captured by the stormwater conveyance system and re-used onsite.
- 2.1.3. **Onsite Water Recycling.** The Discharger retains stormwater and process wastewater onsite for recycling and reuse. Stormwater and process wastewater are collected by means of sheet flow and a collection system consisting of drain inlets, sumps, and pump stations that collect and convey surface drainage to the center of the Facility near the shredder. Portable pumps are also used to convey ponded water to the collection system. The commingled stormwater and process wastewater is directed to a weir pit adjacent to the shredder, where solids are allowed to settle out. From there, the wastewater is pumped to another weir box for further solids settling before flowing through a screening system to remove more solids prior to storage in a 1.2-million-gallon storage tank or a 981,000-gallon storage tank. An injection system adds coagulant solution to the pipe downstream of the 1.2-million-gallon storage tank prior to a pump. After the pump, another injection system and static mixer induce cationic polymer to the water to induce flocculation prior to pumping the water into the 60,900-gallon clarifier for additional solids removal. From the 60,900 gallon clarifier, water flows to a 33,700-gallon day tank that serves as the feed tank for the shredder cooling and dust suppression system. The 33,700-gallon day tank also serves as a surge tank feeding the onsite wastewater treatment system.

Residual solids and sediment are collected, profiled, and disposed of offsite. The Discharger uses potable water only when necessary (on rare occasions, typically during the dry season). During the wet season, when the stormwater and process wastewater exceeds (or could exceed) the combined storage capacity of the Facility's water storage tanks (2,181,000 gallons) and discharge to EBMUD is not permitted (i.e., during and within 24 hours after a storm event), the Discharger discharges treated wastewater to Oakland Inner Harbor via Discharge Point 001.

- 2.1.4. **Wastewater Treatment and Discharge.** The Discharger operates a multistage wastewater treatment system that treats excess wastewater and discharges the effluent to the sanitary sewer under East Bay Municipal Utility District (EBMUD) Wastewater Discharge Permit 77783210. When EBMUD allows discharge to the sanitary sewer, the Discharger may discharge an unlimited volume of water to the sanitary sewer at a maximum flow rate of 600 gallons per minute. Under the terms and conditions of the EBMUD permit, the Discharger may not discharge to the sanitary sewer during a rain event (or within 24 hours after a rain event), which is defined as any precipitation greater than a drizzle. Under such conditions, the Discharger stores the stormwater and treated wastewater onsite until discharge to the sanitary sewer can resume. If rain persists or if substantial additional rain is forecast, then the Discharger routes its treated wastewater to Discharge Point 001. Such discharge occurs only in the event of significant or extended periods of precipitation.

The treatment system is designed to treat up to 600 gallons of wastewater per minute and includes storage and preliminary clarification, electrocoagulation, clarification and filtration, and carbon polishing. Attachment C provides a process flow diagram.

- 2.1.4.1. **Primary Settling and Storage.** Wastewater is stored in the 1.2-million-gallon storage tank or the 981,000-gallon storage tank, and wastewater is transferred between tanks as needed. Wastewater from the 1.2-million-gallon storage tank is pumped through a coagulant and polymer dosing/injection system to induce flocculation. Wastewater is then sent through a 60,900-gallon preliminary clarifier allowing the floc to settle, where a significant portion of solids and metals are removed from the water. From there, the wastewater flows to the 33,700-gallon day tank and then through basket strainers.
- 2.1.4.2. **Basket Straining.** Prior to electrocoagulation, wastewater is sent through four basket strainers operated in parallel for additional solids removal.
- 2.1.4.3. **Pretreatment Tank Adjustments.** Water is collected in the pretreatment tank where pH is adjusted with sodium hydroxide and conductivity is adjusted with brine before entering the electrocoagulation cells.

- 2.1.4.4. **Electrocoagulation.** Wastewater enters the Wavelonics electrocoagulation system from the pretreatment tank. Wastewater from the pretreatment tank is distributed through a series of electrocoagulation treatment cells, where highly charged polymeric metal hydroxides are introduced. This neutralizes the surface charges on metal and other pollutant-containing colloidal and suspended solids to facilitate agglomeration, coagulation, and subsequent separation.
- 2.1.4.5. **Clarification.** When the wastewater leaves the electrocoagulation treatment cells, flocculant is injected to assist in the settling process. In the clear well tanks, coagulated particles are removed by gravity and tank weirs.
- 2.1.4.6. **Media Filtration.** The wastewater then undergoes media (sand and gravel) filtration to further remove particulates. Treated water from the media filtration units is sent back through the treatment plant where the pH and turbidity are measured to determine if the water meets the permit requirements for discharge. If the pH is below 8.5 or the turbidity is below 30.1 NTUs, it is sent to the carbon polishing units. If the water is not acceptable to discharge, it is sent back to the 1.2 million-gallon tank.
- 2.1.4.7. **pH Adjustment.** The pH adjustment system is located downstream of the media filters and upstream of the granular activated carbon units used for carbon polishing. If discharging to the bay, gaseous carbon dioxide may be added as necessary to reduce the pH below 8.5.
- 2.1.4.8. **Carbon Polishing.** Following pH adjustment, wastewater is passed through six granular activated carbon units operated in parallel to remove organics and other trace contaminants prior to discharge to the sanitary sewer under the terms of the EBMUD permit or prior to discharge to Discharge Point 001.
- 2.1.5. **Sludge and Solids Management.** Solids generated from the oil-water separators, and residual solids and sediment generated during ship loading, wheel washing, onsite water recycling, and other housekeeping activities, are periodically removed from their containment systems. Sludge generated by the wastewater treatment system is removed from tanks annually or on an as-needed basis, whichever is more frequent (e.g., when the sludge starts to affect the effluent storage capacity). All solids and sludge are profiled and disposed of offsite at permitted landfills.
- 2.1.6. **Completed Improvements.** During the previous order term, the Discharger satisfied Provisions VI.C.4, 7, 8, and 9 of the previous order by optimizing its treatment, adding an onsite storage tank, decommissioning its wooden pier, and paving its facility.
- 2.2. Discharge Point and Receiving Water.** Fully treated effluent not used onsite or discharged to the sanitary sewer is discharged to a 60-inch diameter storm drain that traverses the eastern side of the Facility. The storm drain discharges from

Discharge Point 001 to the City of Oakland’s municipal separate storm sewer system, which discharges to Oakland Inner Harbor, which is part of Lower San Francisco Bay. Due to the addition of the 981,000-gallon storage tank (completed in December 2019), which can accommodate a 10-year, 24-hour storm, discharges to the Oakland Inner Harbor only occur during extreme weather events.

The Discharger discharged five times during the previous permit term. Twice in January 2017, once in February 2019, once in October 2021, and once in December 2021. The average discharge was 780,000 gallons per discharge event.

2.3. Previous Requirements and Monitoring Data. The tables below present the previous order’s effluent limitations and representative monitoring data from the previous order term (January 1, 2017 – December 2021):

Table F-2. Previous Effluent Limitations and Monitoring Data

Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Other Limits	Average	Highest Daily Discharge
Total Suspended Solids	mg/L	30	45	-	25	41
Oil and Grease	mg/L	10	20	-	1.7	3.0
pH	s.u.	-	-	6.5 – 8.5	-	7.2 – 8.9 ^[1]
Copper	µg/L	6.2	12	-	20	45
Acute Toxicity	percent survival	-	-	70 (instantaneous minimum)	-	0 ^[2]

Footnotes:

^[1] These are the lowest and highest reported pH values.

^[2] Lowest percent survival.

2.4. Compliance Summary. Since January 1, 2017, the Discharger has violated its effluent limits seven times. In 2017, there were four copper violations and one pH violation. The Discharger optimized its treatment system after the violations and had no violations during its 2019 discharge. In 2021, the Discharger violated the acute toxicity effluent limitation. Attachment E section 4.1.6 requires the Discharger to submit a Toxicity Reduction Evaluation (TRE) work plan to address toxicity issues if they continue.

2.5. Sea Level Rise. The Discharger has assessed sea level rise projections under the low risk and medium-high risk aversion scenarios and concluded that its site, which is 12 to 13 feet above sea level, provides adequate buffer under most circumstances. The Discharger plans to reassess conditions as more information and projections become available.

2.6. Planned Changes. The Discharger is not planning any significant Facility changes for this permit term.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

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

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

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

3.3.1. Water Quality Control Plan. The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, this Order implements State Water Board Resolution 88-63, which established State Policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal and domestic supply. Because of the marine influence on Oakland Inner Harbor, total dissolved solids exceed 3,000 mg/L; therefore, Oakland Inner Harbor meets an exception to State Water Board Resolution 88-63. Therefore, the beneficial uses applicable to Oakland Inner Harbor are listed below:

Table F-3. Beneficial Uses

Discharge Points	Receiving Water	Beneficial Uses
001	Oakland Inner Harbor	Estuarine Habitat (EST) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Navigation (NAV)

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

California and incorporated the NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001.

- 3.3.3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established through the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. Requirements of this Order implement the SIP.
- 3.3.4. **Sediment Quality.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* on September 16, 2008, and it became effective on August 25, 2009. The State Water Board adopted amendments to the plan on June 5, 2018, that became effective on March 11, 2019. This plan establishes sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries.
- 3.3.5. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 require that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.
- 3.3.6. **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.
- 3.3.7. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code §§ 2050 to 2097) or

Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including wildlife and estuarine habitat. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

- 3.3.7. **Consideration of Environmental Justice.** The Regional Water Board conducted a screening level evaluation of vulnerabilities in the community posed to residents near the vicinity of the Facility using [EPA's EJSCREEN](#) tool. The purpose of the screening is to identify areas disproportionately burdened by the permitted discharge and to consider demographic characteristics of the population living in the vicinity of the discharge when drafting permit conditions.

Of the 11 environmental indicators screened through EJSCREEN, the area around the Facility had an elevated indicator score relative to the State of California for diesel particulate matter, traffic proximity and volume, lead paint indicator, superfund proximity, and hazardous waste proximity. Although these indicators are not directly or solely attributable to treated wastewater discharges and associated treatment processes covered by this Order, particulate matter from the Facility is regulated by the Bay Area Air Quality Management District and the California Air Resources Control Board and hazardous waste is regulated by the Department of Toxic Substances Control (CAD981634496). The requirements in this permit to implement BMPs to reduce dust emissions and vehicle track-out, as well as to keep equipment in good working order and conduct good housekeeping serve to reduce the air and traffic impacts of the Facility on surrounding areas.

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

Oakland Inner Harbor is listed as impaired by chlordane, DDT, dieldrin, dioxin compounds, furan compounds, invasive species, mercury, PCBs, dioxin-like PCBs, and selenium. On February 12, 2008, U.S. EPA approved a TMDL for mercury in San Francisco Bay. On March 29, 2010, U.S. EPA approved a TMDL for PCBs in San Francisco Bay. As stated in Fact Sheet section 1.2 above, mercury and PCBs discharges are covered under the Alameda County Clean Water Program wasteload allocation, which is implemented through NPDES Permit No. CAS612008, *Municipal Regional Stormwater NPDES Permit*. No TMDLs have been completed yet for the other pollutants on the 303(d) list;

discharge data do not indicate that the Facility discharges those pollutants in quantities above water quality objectives.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

4.1. Discharge Prohibitions

- 4.1.1. **Discharge Prohibition 3.1 (No discharge other than as described):** This prohibition is based on 40 C.F.R. section 122.21(a) and Water Code section 13260, which require filing an application and Report of Waste Discharge before a discharge can occur. Discharges not described in the application and Report of Waste Discharge, and subsequently in this Order, are prohibited.
- 4.1.2. **Discharge Prohibition 3.2 (No discharge at Discharge Point 001 whenever EBMUD accepts wastewater via the sanitary sewer):** Basin Plan Table 4-1, Discharge Prohibition 1, prohibits discharges not receiving a minimum of 10:1 initial dilution. This Order grants an exception to this prohibition based, in part, on the fact that the discharge is intermittent and occurs only during significant storms. Basin Plan section 4.2 provides for exceptions to Basin Plan Discharge Prohibition 1 under certain circumstances:
- An inordinate burden would be placed on the Discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means;
 - A discharge is approved as part of a reclamation project;
 - Net environmental benefits will be derived as a result of the discharge; or
 - A discharge is approved as part of a groundwater cleanup project.

The Basin Plan further states:

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

This Order grants an exception for discharges to the Oakland Inner Harbor for the following reasons:

- 4.1.2.1. An inordinate burden would be placed on the Discharger relative to the beneficial uses protected if this Order were to require the discharge to achieve 10:1 dilution within the Oakland Inner Harbor. Constructing and operating a deepwater outfall would be excessively burdensome since the discharge occurs only during significant storms.
- 4.1.2.2. An equivalent level of environmental protection is provided by various means: (1) the allowance of discharge only when necessary during significant storms (see Prohibition 3.2) when there will also be high diluting flows in the municipal stormwater sewer system and receiving water; (2) the requirement for multistage treatment using electrocoagulation and other technologies, including carbon adsorption (see Prohibitions 3.4 and 3.5, and Fact Sheet section 2.4.1, above); and (3) requirements for standard operation and maintenance procedures and best management practices to ensure the highest quality of discharge (Provision 6.3.4). Moreover, since discharge is allowed only during significant storms, there are high turbulent flows in the municipal stormwater system to rapidly dilute and diffuse the discharge prior to it entering the Oakland Inner Harbor, which achieves the intended purpose of Basin Plan Prohibition 1.
- 4.1.3. **Discharge Prohibition 3.3 (No discharge greater than 600 gallons per minute at Discharge Point No. 001):** This prohibition ensures that wastewater flows do not exceed the design capacity of the wastewater treatment systems. Discharge in excess of the design capacity could compromise treatment performance.
- 4.1.4. **Discharge Prohibition 4 (No bypass of untreated or partially-treated effluent):** This prohibition is based on 40 C.F.R. section 122.41(m). Bypass of treatment is prohibited except in accordance with 40 C.F.R. section 122.41(m) (see Attachment D section 1.7).
- 4.1.5. **Discharge Prohibition 5 (No discharge of untreated stormwater, process wastewater, or waste materials):** This prohibition is based on Basin Plan Discharge Prohibition 7 and ensures that stormwater, process wastewater, and waste materials, such as dust suppression water, wash water, spilled product, fugitive dust, dirt, rubbish, refuse, or debris, are not discharged into the Oakland Inner Harbor or other waters of the United States.

4.2. Technology-Based Effluent Limitations

4.2.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(a) require that permits include applicable technology-based limitations based on several levels of control:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants. Conventional pollutants include biochemical oxygen demand, total suspended solids (TSS), pH, and oil and grease.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional control technology (BCT) represents the control from existing industrial point sources of conventional pollutants. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards for new sources. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines, and standards representing application of BPT, BAT, BCT, and NSPS. U.S. EPA has done so for many types of industries but not scrap metal recycling.

CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis whenever U.S. EPA has not promulgated effluent limitations, guidelines, and standards. When using BPJ to impose technology-based effluent limits based on BPT and BCT control, 40 C.F.R. section 125.3 requires the Regional Water Board to consider the factors set forth in 40 C.F.R. subsections 125.3(c)(2)(i)-(ii) and 125.3(d).

4.2.2. Effluent Limitations

For discharges from Discharge Point 001, this Order imposes the technology-based pH and oil and grease effluent limitations from Basin Plan Table 4-2 because these limitations apply to all industrial treatment facilities. It does not impose the residual chlorine limitation from Basin Plan Table 4-2 because the Discharger’s treatment system does not involve chlorination, and any residual chlorine from potable water used onsite would dissipate before discharge. It does not impose biochemical oxygen demand effluent limitations because the discharge does not contain sewage. Finally, it does not impose settleable matter effluent limitations because the treatment system includes sand filtration

and carbon filtration in addition to sedimentation, and all but the finest suspended particulates are expected to be removed from the wastewater.

Based on best professional judgment, this Order imposes the TSS effluent limitations from Basin Plan Table 4-2 because the treatment system is designed to remove metal and other pollutant-containing particulate matter (electrocoagulation is a key component of the treatment train) and BMPs based on State Water Board Order 2014-0057-DWQ. TSS removal is a good indicator of treatment system performance. TSS is a conventional pollutant and, therefore, subject to BPT and BCT levels of control. BAT controls do not apply because they only apply to toxic and non-conventional pollutants. NSPS controls do not apply because the Facility is not a “new source” (i.e., a source created after U.S. EPA establishes NSPS effluent limitations, guidelines, and standards, which it has not done for scrap metal recycling).

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

Table F-4. Factors Considered Pursuant to 40 C.F.R. Section 125.3(d)

Factors	Considerations
Cost relative to benefits	The Discharger indicates that the treatment system cost more than \$2 million to build. It expects ongoing operations and maintenance to cost approximately \$1,900 per million gallons per year (or about \$1,600 for each operating day). The treatment system and BMPs reduce TSS concentrations from as high as 100 mg/L to an average of 25 mg/L. As such, it reduces pollutant loads delivered to Discharge Point 001 and the sanitary sewer system.
Comparison of cost and level of reduction of such pollutants to that of publicly owned treatment plants	This Order imposes the same TSS effluent limits as the Regional Water Board assigns to publicly-owned treatment works (both based on Basin Plan Table 4-2). The treatment system cost is likely less because the Facility discharges significantly less effluent than a publicly owned treatment works
Age of equipment and facilities	The treatment system was constructed in August 2015.
Process employed	The treatment system employs electrocoagulation and other processes designed primarily to remove solids (e.g., TSS) from scrap metal recycling wastewater (see Fact Sheet section 2.1.4).
Engineering aspects of various controls	Electrocoagulation effectively removes particles ranging from suspended solids to sub-micrometer colloids. It generates less sludge and the sludge is more shear resistant and more readily dewatered when compared to conventional chemical coagulation. It is a common technique used to treat industrial wastewater containing metals.
Process changes	The treatment system is relatively new; minimal process changes are necessary to optimize treatment.

Factors	Considerations
Non-water quality environmental impacts	The operation of the Discharger’s existing treatment system and BMPs will not have new environmental impacts.

Due to the intermittent nature of the discharge, this Order specifies that compliance with the average monthly effluent limits for oil and grease and TSS is to be based on at least two monitoring results collected within the same calendar month. For months during which the Discharger cannot collect a second sample due to lack of additional discharge events, compliance is to be evaluated based only on the maximum daily effluent limits.

Provision 6.3.5 of this Order is a narrative effluent limitation applicable to Discharge Point 001 and any other discharges that comply with Discharge Prohibition 3.5 of this Order. According to State Water Board Order 2014-0057-DWQ, which contains essentially the same requirements, these requirements reflect BAT and BCT to reduce or prevent discharges of pollutants in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. This standard restates the standard U.S. EPA articulated in its 2015 MultiSector General Permit for Stormwater Discharges Associated with Industrial Activity and its accompanying Fact Sheet. This approach is authorized by 40 C.F.R. section 122.44(k), which allows BMPs to be used in lieu of numeric effluent limitations to control or abate pollutant discharges. Because BAT is more stringent than BPT, additional measures to implement BPT are unnecessary.

4.3. Water Quality-Based Effluent Limitations

4.3.1. Scope and Authority

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

4.3.2. Beneficial Uses and Water Quality Criteria and Objectives

Fact Sheet section 3.3.1 identifies the beneficial uses of the receiving waters. Water quality criteria and objectives to protect these beneficial uses are described below.

4.3.2.1. **Basin Plan Objectives.** The Basin Plan specifies numerous water quality objectives, including numeric objectives for 10 priority pollutants, un-ionized ammonia, and narrative objectives for toxicity.

4.3.2.1.1. **Un-ionized Ammonia.** Basin Plan section 3.3.20 contains water quality objectives for un-ionized ammonia of 0.025 mg/L (as nitrogen) as an annual median and 0.16 mg/L (as nitrogen) as a maximum for San Francisco Bay and upstream waters, including Oakland Inner Harbor. Effluent and receiving water data are available for total ammonia, but not un-ionized ammonia because (1) sampling and laboratory methods are unavailable to analyze for un-ionized ammonia, and (2) the fraction of total ammonia that exists in the toxic un-ionized form depends on pH, salinity, and temperature of the receiving water..

To translate the un-ionized ammonia objectives into total ammonia criteria, pH, salinity, and temperature data were obtained from the Pacheco Creek Monitoring Station (BF10). The un-ionized fraction of total ammonia was calculated using on the following equations (U.S. EPA, 1989, Ambient Water Quality Criteria for Ammonia (Saltwater)—1989, EPA Publication 440/5-88-004):

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

Where, for salinity less than 1 ppt:

$$pK = 0.09018 + 2729.92/T$$

T = temperature in Kelvin

Where, for salinity greater than 10 ppt:

$$pK = 9.245 + 0.116*(I) + 0.0324*(298-T) + 0.0415*(P)/T$$

I = molal ionic strength of saltwater = $19.9273*(S)/(1000-1.005109*S)$
S = salinity (parts per thousand)
T = temperature in Kelvin
P = pressure (one atmosphere)

The 90th percentile and median un-ionized ammonia fractions were then used to express the maximum and annual average un-ionized objectives as acute and chronic total ammonia criteria. This approach is consistent with U.S. EPA guidance on translating dissolved metal water quality objectives to total recoverable metal water quality criteria (*The Metals Translator: Guidance for Calculating a Total Recoverable Limit from a Dissolved Criterion*, EPA Publication 823-B96-007, 1996). The equivalent

acute and chronic total ammonia criteria are 4.9 mg/L and 1.3 mg/L (as nitrogen). The acute criteria was used to determine reasonable potential because the Discharger discharges only a few times per year.

- 4.3.2.1.2. **Toxicity.** The narrative toxicity objective (Basin Plan § 3.3.18) states, “All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms... Attainment of this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, or toxicity tests... or other methods selected by the Water Board.”

For this Order, this narrative objective is translated into a numeric criterion of 1.0 chronic toxicity unit (TUc). At 1.0 TUc, there is no observable detrimental effect when the indicator organism is exposed to 100 percent effluent; therefore, 1.0 TUc is a direct translation of the narrative objective into a number. Moreover, in U.S. EPA’s Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001; see section 3.3.3, “Step 3: Decision Criteria for Permit Limit Development”), U.S. EPA recommends that 1.0 TUc be used as a criterion continuous concentration (typically a four-day average). This document applies here as guidance because it directly addresses effluent characterization for toxicity.

- 4.3.2.2. **CTR Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of “water and organisms” and others are for consumption of “organisms only.” The criteria applicable to “organisms only” apply to the Oakland Inner Harbor because it is not a source of drinking water.

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

- 4.3.2.4. **Sediment Quality Objectives.** The *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* contains the following narrative water quality objectives:

- 4.3.2.4.1. “Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California.” This objective is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The policy requires that if the Regional Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this objective, it is to impose the objective as a receiving water limit.

- 4.3.2.4.2. “Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California.” This objective is to be implemented by a three-tiered procedure based on pollutant concentrations in sediment and fish tissue.
- 4.3.2.4.3. “Pollutants shall not be present in sediment at levels that alone or in combination are toxic to wildlife and resident finfish by direct exposure or bioaccumulate in aquatic life at levels that are harmful to wildlife or resident finfish by indirect exposure in bays and estuaries of California.” This objective is to be implemented on a case-by-case basis, based upon an ecological risk assessment.
- 4.3.2.5. **Receiving Water Salinity.** Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water are to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to water with salinities in between these two categories, or tidally-influenced freshwaters that support estuarine beneficial uses, the water quality objectives are the lower of the salt or freshwater criteria (the latter calculated based on ambient hardness) for each substance.

The Oakland Inner Harbor is a marine water body based on salinity data collected through Regional Monitoring Program (RMP). Salinity data collected from 1993 to 2013 at Yerba Buena Island (station BC 10), the RMP monitoring location nearest the discharge point, indicates that the salinity is less than 1 parts per thousand zero percent of the time and greater than 10 parts per thousand in 100 percent of the time. The Oakland Inner Harbor is therefore a marine water, and the marine water quality criteria and objectives apply.

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

site-specific translators the Clean Estuary Partnership developed, as set forth in *North of Dumbarton Bridge Copper and Nickel Development and Selection of Final Translators* report (March 2005): 0.73 and 0.87 (chronic and acute) for copper, and 0.65 and 0.85 (chronic and acute) for nickel.

4.3.3. Reasonable Potential Analysis

4.3.3.1. **Available Information.** The reasonable potential analysis for this Order is based on effluent data the Discharger collected from January 2017 to December 2021. Some of the priority pollutant data is from effluent discharged to EBMUD because the Discharger was unable to sample for all priority pollutants during its limited number of discharges to Oakland Inner Harbor. The ambient monitoring data is from the Yerba Buena monitoring station (BC10) from 1993 through 2015.

4.3.3.2. **Priority Pollutants and Ammonia.** SIP section 1.3 sets forth the methodology used to assess whether priority pollutants have reasonable potential to exceed CTR and NTR water quality objectives. Here, SIP section 1.3 is also used as guidance for ammonia.

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

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

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

Table F-5. Reasonable Potential Analysis

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) ^{[1][5]}	B or Minimum DL (µg/L) ^[1]	RPA Result ^[3]
1	Antimony	4300	4.6	1.8	No
2	Arsenic	36	0.67	2.5	No
3	Beryllium	No Criteria	<0.062	0.22	No
4	Cadmium	9.4	<0.24	0.13	No
5a	Chromium (III) ^[3]	No Criteria	<0.35	4.4	No
5b	Chromium (VI)	50	<0.093	4.4	No
6	Copper	8.2	45	2.5	Yes
7	Lead	8.5	160	0.8	Yes
8	Mercury ^[4]	-	-	-	-
9	Nickel	12.6	0.69	3.7	No
10	Selenium	5.0	<0.17	-	-
11	Silver	2.2	<0.26	0.052	No
12	Thallium	6.3	<0.060	0.023	No
13	Zinc	86	1000	5.1	Yes
14	Cyanide	2.9	1.4	0.52	No ^[5]
15	Asbestos (fibers/L)	No Criteria	-	-	U
16	2,3,7,8-TCDD	1.4E-08	<1.7E-06	2.7E-08	U
17	Acrolein	780	<1.5	<0.5	No
18	Acrylonitrile	0.66	<0.52	0.03	U
19	Benzene	71	<0.036	<0.05	No
20	Bromoform	360	<0.21	<0.15	No
21	Carbon Tetrachloride	4.4	<0.047	0.06	No
22	Chlorobenzene	21000	<0.087	<0.18	No
23	Chlorodibromomethane	34	<0.083	<0.05	No
24	Chloroethane	No Criteria	<0.16	<0.38	U
25	2-Chloroethylvinyl ether	No Criteria	<0.56	<0.28	U
26	Chloroform	No Criteria	<0.085	<0.19	U
27	Dichlorobromomethane	46	<0.027	<0.05	No
28	1,1-Dichloroethane	No Criteria	<0.072	<0.05	No
29	1,2-Dichloroethane	99	<0.018	0.04	No
30	1,1-Dichloroethylene	3.2	<0.015	<0.21	U
31	1,2-Dichloropropane	39	<0.011	<0.05	No
32	1,3-Dichloropropylene	1700	<0.09	<0.16	No
33	Ethylbenzene	29000	<0.081	<0.26	No
34	Methyl Bromide	4000	<0.27	<0.3	No
35	Methyl Chloride	No Criteria	<0.096	<0.3	U
36	Methylene Chloride	1600	<1.0	22	No
37	1,1,2,2-Tetrachloroethane	11	<0.035	<0.05	No
38	Tetrachloroethylene	8.9	<0.079	<0.05	No
39	Toluene	200000	<0.19	<0.19	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) ^{[1][5]}	B or Minimum DL (µg/L) ^[1]	RPA Result ^[3]
40	1,2-Trans-Dichloroethylene	140000	<0.11	<0.22	No
41	1,1,1-Trichloroethane	No Criteria	<0.074	<0.19	No
42	1,1,2-Trichloroethane	42	<0.15	<0.05	No
43	Trichloroethylene	81	<0.19	<0.2	No
44	Vinyl Chloride	525	<0.052	<0.25	No
45	2-Chlorophenol	400	<0.0081	<0.7	No
46	2,4-Dichlorophenol	790	<0.003	<0.9	No
47	2,4-Dimethylphenol	2300	<0.64	<0.8	No
48	2-Methyl- 4,6-Dinitrophenol	765	<2.4	<0.6	No
49	2,4-Dinitrophenol	14000	<0.58	<0.7	No
50	2-Nitrophenol	No Criteria	<0.58	<0.8	U
51	4-Nitrophenol	No Criteria	<1.7	<0.5	U
52	3-Methyl 4-Chlorophenol	No Criteria	<0.16	<0.8	U
53	Pentachlorophenol	7.9	<0.053	<0.6	U
54	Phenol	4600000	<0.021	<0.5	No
55	2,4,6-Trichlorophenol	6.5	<0.0037	<0.97	No
56	Acenaphthene	2700	<0.0029	0.002	No
57	Acenaphthylene	No Criteria	<0.0018	0.001	U
58	Anthracene	110000	0.0048	0.001	No
59	Benzidine	0.00054	<0.61	<0.0003	U
60	Benzo(a)Anthracene	0.049	<0.011	0.005	U
61	Benzo(a)Pyrene	0.049	<0.0026	0.002	U
62	Benzo(b)Fluoranthene	0.049	<0.0053	0.005	U
63	Benzo(ghi)Perylene	No Criteria	<0.0087	0.003	U
64	Benzo(k)Fluoranthene	0.049	<0.0055	0.002	U
65	Bis(2-Chloroethoxy)Methane	No Criteria	<0.19	<0.3	U
66	Bis(2-Chloroethyl)Ether	1.4	<0.003	<0.3	U
67	Bis(2-Chloroisopropyl)Ether	170000	<0.017	<0.6	No
68	Bis(2-Ethylhexyl)Phthalate	5.9	0.059	<0.5	No
69	4-Bromophenyl Phenyl Ether	No Criteria	<0.089	<0.23	U
70	Butylbenzyl Phthalate	5200	0.016	<0.5	No
71	2-Chloronaphthalene	4300	<0.067	<0.3	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	<0.12	<0.3	U
73	Chrysene	0.049	<0.0092	0.002	U
74	Dibenzo(a,h)Anthracene	0.049	<0.0087	0.001	U
75	1,2-Dichlorobenzene	17000	<0.16	<0.27	No
76	1,3-Dichlorobenzene	2600	<0.25	<0.18	No
77	1,4-Dichlorobenzene	2600	<0.36	<0.18	No
78	3,3 Dichlorobenzidine	0.077	<0.003	<0.0002	U
79	Diethyl Phthalate	120000	<0.0097	<0.2	No
80	Dimethyl Phthalate	2900000	<0.005	<0.2	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or Minimum DL (µg/L) ^{[1][5]}	B or Minimum DL (µg/L) ^[1]	RPA Result ^[3]
81	Di-n-Butyl Phthalate	12000	0.031	<0.5	No
82	2,4-Dinitrotoluene	9.1	<0.013	<0.27	U
83	2,6-Dinitrotoluene	No Criteria	<0.005	<0.29	U
84	Di-n-Octyl Phthalate	No Criteria	<0.018	<0.38	U
85	1,2-Diphenylhydrazine	0.54	<0.14	0.004	U
86	Fluoranthene	370	0.0058	0.011	No
87	Fluorene	14000	<0.0047	0.002	No
88	Hexachlorobenzene	0.00077	<0.00077	0.00002	U
89	Hexachlorobutadiene	50	<0.00096	<0.3	U
90	Hexachlorocyclopentadiene	17000	<2.4	<0.3	No
91	Hexachloroethane	8.9	<0.0076	<0.2	No
92	Indeno(1,2,3-cd)Pyrene	0.049	<0.0082	0.004	U
93	Isophorone	600	<1.1	<0.3	No
94	Naphthalene	No Criteria	<0.0058	0.009	U
95	Nitrobenzene	1900	<0.32	<0.25	No
96	N-Nitrosodimethylamine	8.1	<0.78	<0.3	U
97	N-Nitrosodi-n-Propylamine	1.4	<0.34	<0.0002	U
98	N-Nitrosodiphenylamine	16	<0.095	<0.001	No
99	Phenanthrene	No Criteria	<0.0078	0.006	U
100	Pyrene	11000	<0.0044	0.019	No
101	1,2,4-Trichlorobenzene	No Criteria	<0.079	<0.3	No
102	Aldrin	0.00014	<0.00028	<0.0000085	U
103	Alpha-BHC	0.013	<0.00031	0.0005	No
104	Beta-BHC	0.046	<0.00069	0.0004	No
105	Gamma-BHC	0.063	<0.00045	0.001	No
106	Delta-BHC	No Criteria	<0.00014	0.0001	U
107	Chlordane	0.00059	<0.0023	0.0001	U
108	4,4'-DDT	0.00059	<0.00017	0.0002	U
109	4,4'-DDE	0.00059	<0.00018	0.001	U
110	4,4'-DDD	0.00084	<0.00011	0.0003	U
111	Dieldrin	0.00014	<0.00014	0.0003	U
112	Alpha-Endosulfan	0.0087	<0.00011	0.0001	No
113	beta-Endosulfan	0.0087	<0.00046	0.0001	No
114	Endosulfan Sulfate	240	<0.00033	0.0001	No
115	Endrin	0.0023	<0.00018	0.00004	No
116	Endrin Aldehyde	0.81	<0.00053	<0.005	No
117	Heptachlor	0.00021	<0.00041	0.00002	U
118	Heptachlor Epoxide	0.00011	<0.00025	0.0001	U
119-125	PCBs sum ^[4]	-	-	-	-
126	Toxaphene	0.0002	<0.002	<0.0000082	U
	Total Ammonia	4.9	1.9	0.22	No

Footnotes:

- [1] The MEC and ambient background concentration are the actual detected concentrations unless preceded by a “<” sign, in which case the value shown is the minimum detection level (MDL).
- [2] RPA Results = Yes, if MEC \geq WQC, B > WQC and MEC is detected, or Trigger 3
= No, if MEC and B are < WQC or all effluent data are undetected
= Unknown (U) if no criteria have been promulgated or data are insufficient.
- [3] The maximum effluent and ambient background concentrations are the total chromium concentration. The chromium (III) concentrations are unknown but less than these values.
- [4] SIP section 1.3 excludes from its reasonable potential analysis procedure priority pollutants for which a TMDL has been developed. TMDLs have been developed for mercury and PCBs in San Francisco Bay. The urban stormwater runoff wasteload allocations for those TMDLs implicitly include all current and future permitted discharges not otherwise addressed by another allocation and unpermitted discharges within the geographic boundaries of runoff management agencies. Because the Discharger discharges treated effluent to the City of Oakland storm drain, the discharge is covered under the Alameda County Clean Water Program wasteload allocation, which is implemented through NPDES Permit CAS612008, *Municipal Regional Stormwater NPDES Permit*.
- [5] Basin Plan section 4.7.2.2 does not require cyanide WQBELs because the Discharger does not use cyanide in its industrial processes and does not disinfect its effluent.

4.3.3.3. **Chronic Toxicity.** The discharge will occur only during precipitation, when EBMUD does not allow discharge to the sanitary sewer system and when flows exceed the Facility’s storage capacity. As such, discharge durations will likely be shorter than the time needed to test for chronic toxicity. Therefore there is no reasonable potential that the discharge could cause chronic toxicity in the Oakland Inner Harbor.

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

4.3.3.5. **Sediment Quality.** Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. Based on available information, the Regional Water Board cannot draw a conclusion about reasonable potential for this discharge to cause or contribute to exceedances of the sediment quality objectives. Nevertheless, the Discharger continues to participate in the Regional Monitoring Program, which routinely monitors San Francisco Bay sediment and seeks to identify stressors responsible for degraded sediment quality.

4.3.4. **Water Quality-Based Effluent Limitations (WQBELs)**

WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives. Except for acute toxicity (discussed below), the WQBEL calculations are based on the procedures in SIP section 1.4.

This Order does not contain WQBELs for constituents that do not demonstrate any reasonable potential to exceed the water quality objectives; however, Provision 6.3.2 of the Order requires monitoring for such pollutants. If

concentrations are found to have increased significantly, Provision 6.3.2 requires the Discharger to investigate the sources of the increases and implement remedial measures if the increases pose a threat to receiving water quality.

- 4.3.4.1. **WQBEL Expression.** NPDES regulations at 40 C.F.R. section 122.45(d) require that permit limits for industrial dischargers be expressed as maximum daily and average monthly limits, unless impracticable.
- 4.3.4.2. **Copper, Lead, and Zinc.** The following table shows the WQBEL calculations for copper, lead, and zinc in accordance with SIP section 1.4.

Table F-6. WQBEL Calculations

Pollutant	Copper	Lead	Zinc
Units	µg/L	µg/L	µg/L
Basis and Criteria type	Basin Plan and CTR Aquatic Life	Basin Plan and CTR Aquatic Life	Basin Plan and CTR saltwater
CTR Aquatic Life Criteria - Acute	11	210	221
CTR Aquatic Life Criteria - Chronic	8.2	8.1	86
CTR Human Health Criteria - Organisms Only	-	-	-
Site-Specific Objective Criteria - Acute	-	-	-
Site-Specific Objective Criteria - Chronic	-	-	-
Water Effects Ratio (WER)	1	1	1
Lowest WQO	8.2	8.5	86
Site Specific Translator – MDEL	0.87	-	-
Site Specific Translator – AMEL	0.73	-	-
Dilution Factor (D)	0	0	0
No. of samples per month	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y
HH criteria analysis required? (Y/N)	N	Y	N
Applicable Acute WQO	11	221	221
Applicable Chronic WQO	8.2	8.5	86
HH Criteria	-----	-	-
Background (Maximum Conc. for Aquatic Life Calc.)	2.5	0.80	5.1
Background (Average Conc. for Human Health Calc.)	-----	-	-
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	N
ECA Acute	11	221	221

Pollutant	Copper	Lead	Zinc
ECA Chronic	8.2	8.5	86
ECA HH	-	-	-
No. of data points <10 or at least 80% of data reported non-detect? (Y/N)	N	N	N
Avg of effluent data points	-	-	-
Std Dev of effluent data points	-	-	-
CV Calculated	-	-	-
CV (Selected) – Final	0.60	0.60	0.60
ECA Acute Mult99	0.32	0.32	0.32
ECA Chronic Mult99	0.53	0.53	0.53
LTA Acute	3.5	71	31
LTA Chronic	4.3	4.5	45
Minimum of LTAs	3.5	4.5	31
AMEL Mult95	1.6	1.6	1.6
MDEL Mult99	3.1	3.1	3.1
AMEL (Aquatic Life)	5.5	7.0	47
MDEL (Aquatic Life)	11	14	95
MDEL/AMEL Multiplier	2.0	2.0	2.0
AMEL (Human Health)	-	-	-
MDEL (Human Health)	-	-	-
Minimum of AMEL for Aq. Life vs HH	5.5	7.0	47
Minimum of MDEL for Aq. Life vs HH	11	14	95
Previous Order Limit – AMEL	6.2	-	-
Previous Order Limit – MDEL	12	-	-
Final Limit – AMEL	5.5	7.0	47
Final Limit – MDEL	11	14	95

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

4.4. Discharge Requirement Considerations

4.4.1. **Anti-backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4), and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as

those in the previous order. The requirements of this Order are at least as stringent as those in the previous order.

- 4.4.2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. This Order does not allow for an increased volume, increased concentration of pollutants, or reduced level of treatment relative to the previous order.
- 4.4.3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based requirements implement best professional judgement and applicable federal technology-based requirements. In addition, this Order contains more stringent effluent limitations as necessary to meet water quality standards. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement CWA requirements.

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

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

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

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

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

NPDES permits and must be incorporated into permits either expressly or by reference.

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

6.2. Monitoring and Reporting Provisions

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

6.3. Special Provisions

6.3.1. Reopener Provisions

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

6.3.2. Effluent Characterization Study and Report

This Order does not include WQBELs for pollutants that do not demonstrate reasonable potential, but this provision requires the Discharger to evaluate monitoring data to verify that the reasonable potential analysis conclusions of this Order remain valid. This requirement is authorized pursuant to 40 C.F.R. section 122.41(h) and Water Code section 13383, and is necessary to inform the next permit reissuance and to ensure that the Discharger takes timely steps in response to any unanticipated change in effluent quality during the term of this Order.

6.3.3. Pollutant Minimization Program

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

6.3.4. **Storage and Treatment Standard Operation and Maintenance Procedures**

This provision requires the Discharger to update standard procedures to ensure that the Facility personnel operate and maintain the treatment system appropriately and consistently. This requirement is necessary to justify the equivalent protection exception from Basin Plan Prohibition 1.

6.3.5. **Water Pollution Prevention Plan**

The requirements of this provision serve as narrative effluent limitations and facilitate compliance with Discharge Prohibition 3.5 of this Order. In conjunction with the numeric effluent limitations listed in Table 4 of the Order, these requirements constitute technology-based pollutant discharge controls based on best professional judgment (see Fact Sheet section 4.2). These requirements reflect best industry practice considering technological availability and economic practicability and achievability.

The WPPP, including the Best Management Practices (BMPs) requirements, closely follow the corresponding requirements of NPDES Permit CAS000001 (State Water Board Order 2014-0057-DWQ, General Permit for Storm Water Discharges Associated with Industrial Activities), which, in turn, closely follows U.S. EPA's Multi-Sector General NPDES Permit for Stormwater Discharges Associated with Industrial Activity. However, the requirements in this Order more specifically address the nature of the Facility and the potential for pollutants associated with its scrap metal processing operations to reach waters of the United States directly or indirectly (e.g., through vehicle tracking, wind transport, or ship loading or unloading).

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

7.1 **Monitoring Requirements Rationale**

7.1.1. **Effluent Monitoring.** Effluent flow monitoring is necessary to understand Facility operations. Monitoring for other parameters is necessary to evaluate compliance with this Order's effluent limitations and to conduct future reasonable potential analyses.

7.1.3. **Toxicity Monitoring.** Acute toxicity tests are necessary to evaluate compliance with this Order's acute toxicity effluent limitations.

7.1.4. **Receiving Water Monitoring.** The Discharger is required to continue participating in the Regional Monitoring Program, which involves collecting data on pollutants and toxicity in San Francisco Bay water, sediment, and biota. The monitoring is necessary to characterize the receiving water and the effects of the discharge has on it.

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

7.2. Monitoring Requirements Summary. The table below summarizes routine monitoring requirements. This table is for informational purposes only. The actual requirements are specified in the MRP and elsewhere in this Order. In addition to undertaking the monitoring below, the Discharger must also conduct receiving water monitoring by continuing to participate in the Regional Monitoring Program.

Table F-7. Monitoring Requirements Summary

Parameter	EFF-001	Site
Flow	Continuous	-
Oil and Grease	1/Event	-
pH	1/Day	-
Turbidity	1/Day	-
TSS	1/Event	-
Total Organic Carbon	1/Event	-
Aluminum	1/Event	-
Ammonia	1/Event	-
Copper, Total Recoverable	1/Event	-
Cyanide, Total	1/Event	-
Dioxin-TEQ	Once	-
Iron	1/Event	-
Lead	1/Event	-
Nickel, Total Recoverable	1/Event	-
Selenium, Total Recoverable	1/Event	-
Zinc	1/Event	-
Acute Toxicity	1/Event	-
Other Priority Pollutants	Once	-
Visual Observations	-	1/Month

8. PUBLIC PARTICIPATION

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

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

8.2. Written Comments. Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were to be submitted either in person or by mail to the Executive Office at the Regional Water Board at 1515 Clay Street, Suite 1400, Oakland, California 94612, to the attention of Gaurav Mittal.

Written comments were due at the Regional Water Board office by 5:00 p.m. on April 11, 2022.

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

Date: May 11, 2022
Time: 9:00 a.m.
Contact: Gaurav Mittal, (510) 622-2407, Gaurav.mittal@waterboards.ca.gov

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

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

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

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

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

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

- 8.5. Information and Copying.** The Report of Waste Discharge, related supporting documents, and comments received are on file and may be inspected at the Regional Water Board address above at any time online or by making an appointment with the Regional Water Board's custodian of records. Document copying may be arranged by calling (510) 622-2300 or emailing Melinda.Wong@waterboards.ca.gov.
- 8.6. Register of Interested Persons.** Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference the Facility, and provide a name, address, and phone number.
- 8.7. Additional Information.** Requests for additional information or questions regarding this Order should be directed to Gaurav Mittal, (510) 622-2407, gaurav.mittal@waterboards.ca.gov.

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

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

APPLICABILITY

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

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply – Not Supplemented

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

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

1.3.1. Contingency Plan. The Discharger shall maintain a Contingency Plan as prudent in accordance with current facility emergency planning. The Contingency Plan shall describe procedures to ensure that existing facilities remain in, or are rapidly returned to, operation in the event of a process failure or emergency incident, such as employee strike, strike by suppliers of chemicals or maintenance services, power outage, vandalism, earthquake, or fire. The Discharger may combine the Contingency Plan and Spill Prevention Plan (see Provision 1.3.2, below) into one document. In accordance with Regional Water Board Resolution No. 74-10, discharge in violation of the permit where the Discharger has failed to develop and implement a Contingency Plan as described below may be the basis for considering the discharge a willful and negligent violation of the permit pursuant to California Water Code section 13387. The Contingency Plan shall, at a minimum, provide for the following:

- 1.3.1.1. Sufficient personnel for continued facility operation and maintenance during employee strikes or strikes against contractors providing services;
- 1.3.1.2. Maintenance of adequate chemicals or other supplies, and spare parts necessary for continued facility operations;
- 1.3.1.3. Emergency standby power;
- 1.3.1.4. Protection against vandalism;
- 1.3.1.5. Expedient action to repair failures of, or damage to, equipment, including any sewer lines;

- 1.3.1.6. Reporting of spills and discharges of untreated or inadequately treated wastes, including measures taken to clean up the effects of such discharges; and
- 1.3.1.7. Maintenance, replacement, and surveillance of physical condition of equipment and facilities, including any sewer lines.
- 1.3.2. **Spill Prevention Plan.** The Discharger shall maintain a Spill Prevention Plan to prevent accidental discharges and to minimize the effects of any such discharges. The Spill Prevention Plan shall do the following:
 - 1.3.2.1. Identify the possible sources of accidental discharge, untreated or partially-treated waste bypass, and polluted drainage;
 - 1.3.2.2. State when current facilities and procedures became operational and evaluate their effectiveness; and
 - 1.3.2.3. Predict the effectiveness of any proposed facilities and procedures and provide an implementation schedule with interim and final dates when the proposed facilities and procedures will be constructed, implemented, or operational.
- 1.4. **Proper Operation and Maintenance** – Supplement to Attachment D, Provision 1.4
 - 1.4.1. **Operation and Maintenance Manual.** The Discharger shall maintain an Operation and Maintenance Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain a useful and relevant document, the Operation and Maintenance Manual shall be kept updated to reflect significant changes in treatment facility equipment and operational practices. The Operation and Maintenance Manual shall be maintained in usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.
 - 1.4.2. **Wastewater Facilities Status Report.** The Discharger shall maintain a Wastewater Facilities Status Report and regularly review, revise, or update it, as necessary. This report shall document how the Discharger operates and maintains its wastewater collection, treatment, and disposal facilities to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
 - 1.4.3. **Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs).** POTWs shall be supervised and operated by persons possessing

certificates of appropriate grade pursuant to Title 23, section 3680, of the California Code of Regulations.

1.5. Property Rights – Not Supplemented

1.6. Inspection and Entry – Not Supplemented

1.7. Bypass – Not Supplemented

1.8. Upset – Not Supplemented

1.9. Other – Addition to Attachment D

- 1.9.1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.
- 1.9.2. Collection, treatment, storage, and disposal systems shall be operated in a manner that precludes public contact with wastewater. If public contact with wastewater could reasonably occur on public property, warning signs shall be posted.
- 1.9.3. If the Discharger submits a timely and complete Report of Waste Discharge for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

2. STANDARD PROVISIONS – PERMIT ACTION – NOT SUPPLEMENTED

3. STANDARD PROVISIONS – MONITORING

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

- 3.1.1. **Certified Laboratories.** Water and waste analyses shall be performed by a laboratory certified for these analyses in accordance with California Water Code section 13176.
- 3.1.2. **Minimum Levels.** For the 126 priority pollutants, the Discharger should use the analytical methods listed in Table B unless the Monitoring and Reporting Program (MRP, Attachment E) requires a particular method or minimum level (ML). All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.
- 3.1.3. **Monitoring Frequency.** The MRP specifies the minimum sampling and analysis schedule.
 - 3.1.3.1. **Sample Collection Timing**
 - 3.1.3.1.1. The Discharger shall collect influent samples on varying days selected at random and shall not include any plant recirculation or other sidestream wastes, unless otherwise stipulated in the MRP. The Executive Officer

may approve an alternative influent sampling plan if it is representative of plant influent and complies with all other permit requirements.

- 3.1.3.1.2. The Discharger shall collect effluent samples on days coincident with influent sampling, unless otherwise stipulated by the MRP. If influent sampling is not required, the Discharger shall collect effluent samples on varying days selected at random, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative effluent sampling plan if it is representative of plant discharge and in compliance with all other permit requirements.
- 3.1.3.1.3. The Discharger shall collect effluent grab samples during periods of daytime maximum peak flows (or peak flows through secondary treatment units for facilities that recycle effluent).
- 3.1.3.1.4. Effluent sampling for conventional pollutants shall occur on at least one day of any multiple-day bioassay the MRP requires. During the course of the bioassay, on at least one day, the Discharger shall collect and retain samples of the discharge. In the event that a bioassay result does not comply with effluent limitations, the Discharger shall analyze the retained samples for pollutants that could be toxic to aquatic life and for which it has effluent limitations.
 - 3.1.3.1.4.1. The Discharger shall perform bioassays on final effluent samples; when chlorine is used for disinfection, bioassays shall be performed on effluent after chlorination and dechlorination; and
 - 3.1.3.1.4.2. The Discharger shall analyze for total ammonia nitrogen and calculate the amount of un-ionized ammonia whenever test results fail to meet effluent limitations.
- 3.1.3.2. **Conditions Triggering Accelerated Monitoring**
 - 3.1.3.2.1. **Average Monthly Effluent Limitation Exceedance.** If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter (or if the required sampling frequency is once per month or less and the monthly sample exceeds the average monthly effluent limitation), the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling show that the parameter complies with the average monthly effluent limitation.
 - 3.1.3.2.2. **Maximum Daily Effluent Limitation Exceedance.** If a sample result exceeds a maximum daily effluent limitation, the Discharger shall, within 24 hours after the result is received, increase its sampling frequency to daily until the results from two samples collected on consecutive days show compliance with the maximum daily effluent limitation.

- 3.1.3.2.3. **Acute Toxicity.** If final or intermediate results of an acute bioassay indicate a violation or threatened violation (e.g., the percentage of surviving test organisms of any single acute bioassay is less than 70 percent), the Discharger shall initiate a new test as soon as practical or as described in applicable State Water Board plan provisions that become effective after adoption of these Regional Standard Provisions. The Discharger shall investigate the cause of the mortalities and report its findings in the next self-monitoring report.
- 3.1.3.2.4. **Chlorine.** The Discharger shall calibrate chlorine residual analyzers against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, the Discharger shall collect grab samples at least every 30 minutes until compliance with the limitation is achieved, unless the Discharger monitors chlorine residual continuously. In such cases, the Discharger shall continue to conduct continuous monitoring.
- 3.1.3.2.5. **Bypass.** Except as indicated below, if a Discharger bypasses any portion of its treatment facility, it shall monitor flows and collect samples at affected discharge points and analyze samples for all constituents with effluent limitations on a daily basis for the duration of the bypass. The Discharger need not accelerate chronic toxicity monitoring. The Discharger also need not collect and analyze samples for mercury, dioxin-TEQ, and PCBs after the first day of the bypass. The Discharger may satisfy the accelerated acute toxicity monitoring requirement by conducting a flow-through test or static renewal test that captures the duration of the bypass (regardless of the method specified in the MRP). If bypassing disinfection units only, the Discharger shall only monitor bacteria indicators daily.
- 3.1.3.2.5.1. **Bypass for Essential Maintenance.** If a Discharger bypasses a treatment unit for essential maintenance pursuant to Attachment D section 1.7.2, the Executive Officer may reduce the accelerated monitoring requirements above if the Discharger (i) monitors effluent at affected discharge points on the first day of the bypass for all constituents with effluent limitations, except chronic toxicity; and (ii) identifies and implements measures to ensure that the bypass will continue to comply with effluent limitations.
- 3.1.3.2.5.2. **Approved Wet Weather Bypasses.** If a Discharger bypasses a treatment unit or permitted outfall during wet weather with Executive Officer approval pursuant to Attachment D section 1.7.4, the Discharger shall monitor flows and collect and retain samples for affected discharge points on a daily basis for the duration of the bypass. The Discharger shall analyze daily for TSS using 24 hour composites (or more frequent increments) and for bacteria indicators with effluent limitations using grab samples. If TSS exceeds 45 mg/L in any

composite sample, the Discharger shall also analyze daily the retained samples for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. Additionally, at least once each year, the Discharger shall analyze the retained samples for one approved bypass for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. This monitoring shall be in addition to the minimum monitoring specified in the MRP.

3.2. Standard Observations – Addition to Attachment D

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

- 3.2.3.1. **Material of Wastewater Origin** — presence or absence, description of material, estimated size of affected area, and source.
- 3.2.3.2. **Beneficial Use** — estimate of number of people participating in recreational water contact, non-water contact, and fishing activities.
- 3.2.4. **Waste Treatment and/or Disposal Facility Periphery Observations.**
The following requirements only apply when the MRP requires standard observations of the periphery of waste treatment or disposal facilities. Standard observations shall include the following:
 - 3.2.4.1. **Odor** — presence or absence, characterization, source, and distance of travel.
 - 3.2.4.2. **Weather Conditions** — wind direction and estimated velocity.

4. STANDARD PROVISIONS – RECORDS

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

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

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

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

Monitoring records shall include the following:

- 4.2.1. **Analytical Information.** Records shall include analytical method detection limits, minimum levels, reporting levels, and related quantification parameters.
- 4.2.2. **Disinfection Process.** For the disinfection process, records shall include the following:
 - 4.2.2.1. For bacteriological analyses:
 - 4.2.2.1.1. Wastewater flow rate at the time of sample collection; and
 - 4.2.2.1.2. Required statistical parameters for cumulative bacterial values (e.g., moving median or geometric mean for the number of samples or sampling period identified in the MRP).

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

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

4.2.2.2.2. Chlorine dosage (kg/day); and

4.2.2.2.3. Dechlorination chemical dosage (kg/day).

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

4.2.3.1. Total volume or mass of solids removed from each collection unit (e.g., grit, skimmings, undigested biosolids, or combination) for each calendar month or other time period as appropriate, but not to exceed annually; and

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

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

4.2.4.1. Chronological log of treatment process bypasses;

4.2.4.2. Identification of treatment processes bypassed;

4.2.4.3. Beginning and ending dates and times of bypasses;

4.2.4.4. Bypass durations;

4.2.4.5. Estimated bypass volumes; and

4.2.4.6. Description of, or reference to other reports describing, the bypasses, their cause, the corrective actions taken (except for wet weather blending explicitly approved within the permit and in compliance with any related permit conditions), and any additional monitoring conducted.

4.2.5. **Treatment Plant Overflows.** The Discharger shall retain a chronological log of overflows at the treatment plant, including the headworks and all units and appurtenances downstream, and records supporting the information provided in accordance with Provision 5.5.2, below.

4.3. Claims of Confidentiality – Not Supplemented

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information – Not Supplemented

5.2. Signatory and Certification Requirements – Not Supplemented

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

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

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

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

- 5.3.1.1.7. Description of other bypasses, if any. If the Discharger bypasses any treatment units (other than blending), it shall describe the duration of the bypasses and effluent quality during those times; and
- 5.3.1.1.8. Signature. The transmittal letter shall be signed in accordance with Attachment D, Provision 5.2.
- 5.3.1.2. **Compliance Evaluation Summary.** Each self-monitoring report shall include a compliance evaluation summary that addresses each parameter for which the permit specifies effluent limitations, the number of samples taken during the monitoring period, and the number of samples that exceed the effluent limitations.
- 5.3.1.3. **More Frequent Monitoring.** If the Discharger monitors any pollutant more frequently than required by the MRP, the Discharger shall include the results of such monitoring in the calculation and reporting of the data submitted in the self-monitoring report.
- 5.3.1.4. **Analysis Results**
- 5.3.1.4.1. **Tabulation.** Each self-monitoring report shall include tabulations of all required analyses and observations, including parameters, dates, times, sample stations, types of samples, test results, method detection limits, method minimum levels, and method reporting levels (if applicable), signed by the laboratory director or other responsible official.
- 5.3.1.4.2. **Multiple Samples.** Unless the MRP specifies otherwise, when determining compliance with effluent limitations (other than instantaneous effluent limitations) and more than one sample result is available, the Discharger shall compute the arithmetic mean. If the data set contains one or more results that are “Detected, but Not Quantified (DNQ) or “Not Detected” (ND), the Discharger shall instead compute the median in accordance with the following procedure:
- 5.3.1.4.2.1. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- 5.3.1.4.2.2. The median of the data set shall be determined. If the data set has an odd number of data points, the median is the middle value. If the data set has an even number of data points, the median is the average of the two values around the middle, unless one or both of these values is ND or DNQ, in which case the median shall be the lower of the two results (where DNQ is lower than a quantified value and ND is lower than DNQ).

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

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

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

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

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

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

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

5.3.1.6.2. List of approved analyses, including the following:

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

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

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

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

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

5.4. Compliance Schedules – Not supplemented

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

5.5.1. Oil or Other Hazardous Material Spills

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

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

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

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

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

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

5.5.1.2.3. Nature of material spilled;

5.5.1.2.4. Quantity of material spilled;

5.5.1.2.5. Receiving water body affected, if any;

5.5.1.2.6. Cause of spill;

5.5.1.2.7. Estimated size of affected area;

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

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

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

5.5.1.2.11. Persons or agencies notified.

5.5.2. **Unauthorized Municipal Wastewater Treatment Plant Discharges**¹

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

- 5.5.2.1.1. Incident description and cause;
- 5.5.2.1.2. Location of threatened or involved waterways or storm drains;
- 5.5.2.1.3. Date and time that the unauthorized discharge started;
- 5.5.2.1.4. Estimated quantity and duration of the unauthorized discharge (to the extent known), and estimated amount recovered;
- 5.5.2.1.5. Level of treatment prior to discharge (e.g., raw wastewater, primary-treated wastewater, or undisinfected secondary-treated wastewater); and
- 5.5.2.1.6. Identity of person reporting the unauthorized discharge.

5.5.2.2. **Five-Day Written Report.** Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision 5.5.2.1, above, the following:

- 5.5.2.2.1. Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;
- 5.5.2.2.2. Efforts implemented to minimize public exposure to the unauthorized discharge;
- 5.5.2.2.3. Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;
- 5.5.2.2.4. Corrective measures taken to minimize the impact of the unauthorized discharge;

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

- 5.5.2.2.5. Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;
- 5.5.2.2.6. Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and
- 5.5.2.2.7. Quantity and duration of the unauthorized discharge, and the amount recovered.

5.6. Planned Changes – Not supplemented

5.7. Anticipated Noncompliance – Not supplemented

5.8. Other Noncompliance – Not supplemented

5.9. Other Information – Not supplemented

6. STANDARD PROVISIONS – ENFORCEMENT – NOT SUPPLEMENTED

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – NOT SUPPLEMENTED

8. DEFINITIONS – ADDITION TO ATTACHMENT D

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

8.1. Arithmetic Calculations

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

$$\text{Geometric Mean} = \text{Anti log} (1/N \sum \text{Log } C_i)$$

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.

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

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

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

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

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

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

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

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

- 8.2. **Blending** – the practice of bypassing biological treatment units and recombining the bypass wastewater with biologically-treated wastewater.
- 8.3. **Composite Sample** – a sample composed of individual grab samples collected manually or by an automatic sampling device on the basis of time or flow as specified in the MRP. For flow-based composites, the proportion of each grab sample included in the composite sample shall be within plus or minus five percent (+/-5%) of the representative flow of the waste stream being measured at the time of grab sample collection. Alternatively, equal volume grab samples may be individually analyzed with the flow-weighted average calculated by averaging flow-weighted ratios of each grab sample analytical result. Grab samples comprising time-based composite samples shall be collected at intervals not greater than those specified in the MRP. The quantity of each grab sample comprising a time-based composite sample shall be a set of flow proportional volumes as specified in

the MRP. If a particular time-based or flow-based composite sampling protocol is not specified in the MRP, the Discharger shall determine and implement the most representative protocol.

- 8.4. Duplicate Sample** – a second sample taken from the same source and at the same time as an initial sample (such samples are typically analyzed identically to measure analytical variability).
- 8.5. Grab Sample** – an individual sample collected during a short period not exceeding 15 minutes. Grab samples represent only the condition that exists at the time the sample is collected.
- 8.6. Overflow** – the intentional or unintentional spilling or forcing out of untreated or partially-treated waste from a transport system (e.g., through manholes, at pump stations, or at collection points) upstream of the treatment plant headworks or from any part of a treatment plant.
- 8.7. Priority Pollutants** – those constituents referred to in 40 C.F.R. part 122 as promulgated in the Federal Register, Vol. 65, No. 97, Thursday, May 18, 2000, also known as the California Toxics Rule.
- 8.8. Untreated waste** – raw wastewater.

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

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
1	Antimony	204.2	-	-	-	-	10	5	50	0.5	5	0.5	-	1000
2	Arsenic	206.3	-	-	-	20	-	2	10	2	2	1	-	1000
3	Beryllium	-	-	-	-	-	20	0.5	2	0.5	1	-	-	1000
4	Cadmium	200 or 213	-	-	-	-	10	0.5	10	0.25	0.5	-	-	1000
5a	Chromium (III)	SM 3500	-	-	-	-	-	-	-	-	-	-	-	-
5b	Chromium (VI)	SM 3500	-	-	-	10	5	-	-	-	-	-	-	1000
	Chromium (total) ^[3]	SM 3500	-	-	-	-	50	2	10	0.5	1	-	-	1000
6	Copper	200.9	-	-	-	-	25	5	10	0.5	2	-	-	1000
7	Lead	200.9	-	-	-	-	20	5	5	0.5	2	-	-	10,000
8	Mercury	1631 ^[4]	-	-	-	-	-	-	-	-	-	-	-	-
9	Nickel	249.2	-	-	-	-	50	5	20	1	5	-	-	1000
10	Selenium	200.8 or SM 3114B or C	-	-	-	-	-	5	10	2	5	1	-	1000
11	Silver	272.2	-	-	-	-	10	1	10	0.25	2	-	-	1000
12	Thallium	279.2	-	-	-	-	10	2	10	1	5	-	-	1000
13	Zinc	200 or 289	-	-	-	-	20	-	20	1	10	-	-	-
14	Cyanide	SM 4500 CN ⁻ C or I	-	-	-	5	-	-	-	-	-	-	-	-
15	Asbestos (only required for dischargers to MUN waters) ^[5]	0100.2 ^[6]	-	-	-	-	-	-	-	-	-	-	-	-
16	2,3,7,8-TCDD and 17 congeners (Dioxin)	1613	-	-	-	-	-	-	-	-	-	-	-	-
17	Acrolein	603	2.0	5	-	-	-	-	-	-	-	-	-	-
18	Acrylonitrile	603	2.0	2	-	-	-	-	-	-	-	-	-	-
19	Benzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
33	Ethylbenzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
39	Toluene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
20	Bromoform	601	0.5	2	-	-	-	-	-	-	-	-	-	-
21	Carbon Tetrachloride	601	0.5	2	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
22	Chlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
23	Chlorodibromomethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
24	Chloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
25	2-Chloroethylvinyl Ether	601	1	1	-	-	-	-	-	-	-	-	-	-
26	Chloroform	601	0.5	2	-	-	-	-	-	-	-	-	-	-
75	1,2-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
76	1,3-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
77	1,4-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
27	Dichlorobromomethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
28	1,1-Dichloroethane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
29	1,2-Dichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
30	1,1-Dichloroethylene or 1,1-Dichloroethene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
31	1,2-Dichloropropane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
32	1,3-Dichloropropylene or 1,3-Dichloropropene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
34	Methyl Bromide or Bromomethane	601	1.0	2	-	-	-	-	-	-	-	-	-	-
35	Methyl Chloride or Chloromethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
36	Methylene Chloride or Dichloromethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
37	1,1,2,2-Tetrachloroethane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
38	Tetrachloroethylene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
40	1,2-Trans-Dichloroethylene	601	0.5	1	-	-	-	-	-	-	-	-	-	-
41	1,1,1-Trichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
42	1,1,2-Trichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
43	Trichloroethene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
44	Vinyl Chloride	601	0.5	2	-	-	-	-	-	-	-	-	-	-
45	2-Chlorophenol	604	2	5	-	-	-	-	-	-	-	-	-	-
46	2,4-Dichlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
47	2,4-Dimethylphenol	604	1	2	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
48	2-Methyl-4,6-Dinitrophenol or Dinitro-2-methylphenol	604	10	5	-	-	-	-	-	-	-	-	-	-
49	2,4-Dinitrophenol	604	5	5	-	-	-	-	-	-	-	-	-	-
50	2-Nitrophenol	604	-	10	-	-	-	-	-	-	-	-	-	-
51	4-Nitrophenol	604	5	10	-	-	-	-	-	-	-	-	-	-
52	3-Methyl-4-Chlorophenol	604	5	1	-	-	-	-	-	-	-	-	-	-
53	Pentachlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
54	Phenol	604	1	1	-	50	-	-	-	-	-	-	-	-
55	2,4,6-Trichlorophenol	604	10	10	-	-	-	-	-	-	-	-	-	-
56	Acenaphthene	610 HPLC	1	1	0.5	-	-	-	-	-	-	-	-	-
57	Acenaphthylene	610 HPLC	-	10	0.2	-	-	-	-	-	-	-	-	-
58	Anthracene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
60	Benzo(a)Anthracene or 1,2 Benzanthracene	610 HPLC	10	5	-	-	-	-	-	-	-	-	-	-
61	Benzo(a)Pyrene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
62	Benzo(b) Fluoranthene or 3,4 Benzofluoranthene	610 HPLC	-	10	10	-	-	-	-	-	-	-	-	-
63	Benzo(ghi)Perylene	610 HPLC	-	5	0.1	-	-	-	-	-	-	-	-	-
64	Benzo(k)Fluoranthene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
74	Dibenzo(a,h)Anthracene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
86	Fluoranthene	610 HPLC	10	1	0.05	-	-	-	-	-	-	-	-	-
87	Fluorene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
92	Indeno(1,2,3-cd)Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
100	Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
68	Bis(2-Ethylhexyl)Phthalate	606 or 625	10	5	-	-	-	-	-	-	-	-	-	-
70	Butylbenzyl Phthalate	606 or 625	10	10	-	-	-	-	-	-	-	-	-	-
79	Diethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
80	Dimethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
81	Di-n-Butyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
84	Di-n-Octyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
59	Benzidine	625	-	5	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
65	Bis(2-Chloroethoxy)Methane	625	-	5	-	-	-	-	-	-	-	-	-	-
66	Bis(2-Chloroethyl)Ether	625	10	1	-	-	-	-	-	-	-	-	-	-
67	Bis(2-Chloroisopropyl) Ether	625	10	2	-	-	-	-	-	-	-	-	-	-
69	4-Bromophenyl Phenyl Ether	625	10	5	-	-	-	-	-	-	-	-	-	-
71	2-Chloronaphthalene	625	-	10	-	-	-	-	-	-	-	-	-	-
72	4-Chlorophenyl Phenyl Ether	625	-	5	-	-	-	-	-	-	-	-	-	-
73	Chrysene	625	-	10	5	-	-	-	-	-	-	-	-	-
78	3,3'-Dichlorobenzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
82	2,4-Dinitrotoluene	625	10	5	-	-	-	-	-	-	-	-	-	-
83	2,6-Dinitrotoluene	625	-	5	-	-	-	-	-	-	-	-	-	-
85	1,2-Diphenylhydrazine ^[7]	625	-	1	-	-	-	-	-	-	-	-	-	-
88	Hexachlorobenzene	625	5	1	-	-	-	-	-	-	-	-	-	-
89	Hexachlorobutadiene	625	5	1	-	-	-	-	-	-	-	-	-	-
90	Hexachlorocyclopentadiene	625	5	5	-	-	-	-	-	-	-	-	-	-
91	Hexachloroethane	625	5	1	-	-	-	-	-	-	-	-	-	-
93	Isophorone	625	10	1	-	-	-	-	-	-	-	-	-	-
94	Naphthalene	625	10	1	0.2	-	-	-	-	-	-	-	-	-
95	Nitrobenzene	625	10	1	-	-	-	-	-	-	-	-	-	-
96	N-Nitrosodimethylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
97	N-Nitrosodi-n-Propylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
98	N-Nitrosodiphenylamine	625	10	1	-	-	-	-	-	-	-	-	-	-
99	Phenanthrene	625	-	5	0.05	-	-	-	-	-	-	-	-	-
101	1,2,4-Trichlorobenzene	625	1	5	-	-	-	-	-	-	-	-	-	-
102	Aldrin	608	0.005	-	-	-	-	-	-	-	-	-	-	-
103	α-BHC	608	0.01	-	-	-	-	-	-	-	-	-	-	-
104	β-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-
105	γ-BHC (Lindane)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
106	δ-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-
107	Chlordane	608	0.1	-	-	-	-	-	-	-	-	-	-	-
108	4,4'-DDT	608	0.01	-	-	-	-	-	-	-	-	-	-	-
109	4,4'-DDE	608	0.05	-	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
110	4,4'-DDD	608	0.05	-	-	-	-	-	-	-	-	-	-	-
111	Dieldrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
112	Endosulfan (alpha)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
113	Endosulfan (beta)	608	0.01	-	-	-	-	-	-	-	-	-	-	-
114	Endosulfan Sulfate	608	0.05	-	-	-	-	-	-	-	-	-	-	-
115	Endrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
116	Endrin Aldehyde	608	0.01	-	-	-	-	-	-	-	-	-	-	-
117	Heptachlor	608	0.01	-	-	-	-	-	-	-	-	-	-	-
118	Heptachlor Epoxide	608	0.01	-	-	-	-	-	-	-	-	-	-	-
119-125	PCBs: Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260	608	0.5	-	-	-	-	-	-	-	-	-	-	-
126	Toxaphene	608	0.5	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

- ^[1] Minimum levels are from the *State Implementation Policy*. They are the concentration of the lowest calibration standard for that technique based on a survey of contract laboratories. Laboratory techniques are defined as follows: GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; LC = High Pressure Liquid Chromatography; Color = Colorimetric; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; ICP = Inductively Coupled Plasma; ICPMS = Inductively Coupled Plasma/Mass Spectrometry; SPGF AA = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., U.S. EPA 200.9); Hydride = Gaseous Hydride Atomic Absorption; CVAA = Cold Vapor Atomic Absorption; DCP = Direct Current Plasma.
- ^[2] The suggested method is the U.S. EPA Method unless otherwise specified (SM = Standard Methods). The Discharger may use another U.S. EPA-approved or recognized method if that method has a level of quantification below the applicable water quality objective. Where no method is suggested, the Discharger has the discretion to use any standard method.
- ^[3] Analysis for total chromium may be substituted for analysis of chromium (III) and chromium (VI) if the concentration measured is below the lowest hexavalent chromium criterion (11 ug/l).
- ^[4] The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring. The minimum level for mercury is 2 ng/l (or 0.002 ug/l).
- ^[5] MUN = Municipal and Domestic Supply. This designation, if applicable, is in the Findings of the permit.
- ^[6] Determination of Asbestos Structures over 10 [micrometers] in Length in Drinking Water Using MCE Filters, U.S. EPA 600/R-94-134, June 1994.
- ^[7] Detected as azobenzene.