

Figure C-10. Boat Rinsing Line Drawing

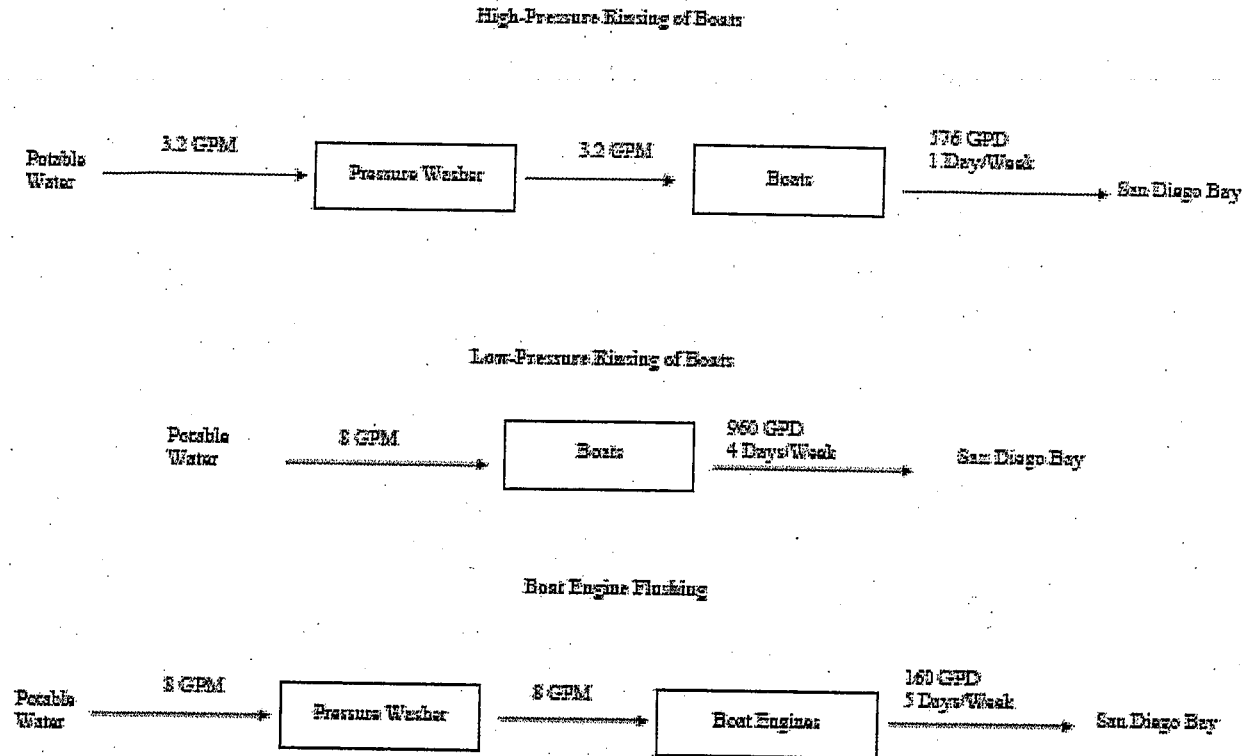


Figure C-11. Swimmer Rinsing Line Drawing

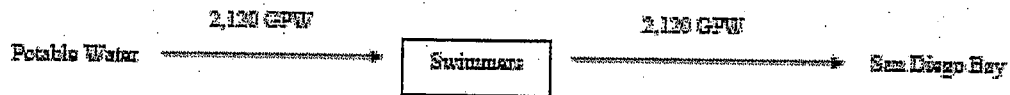
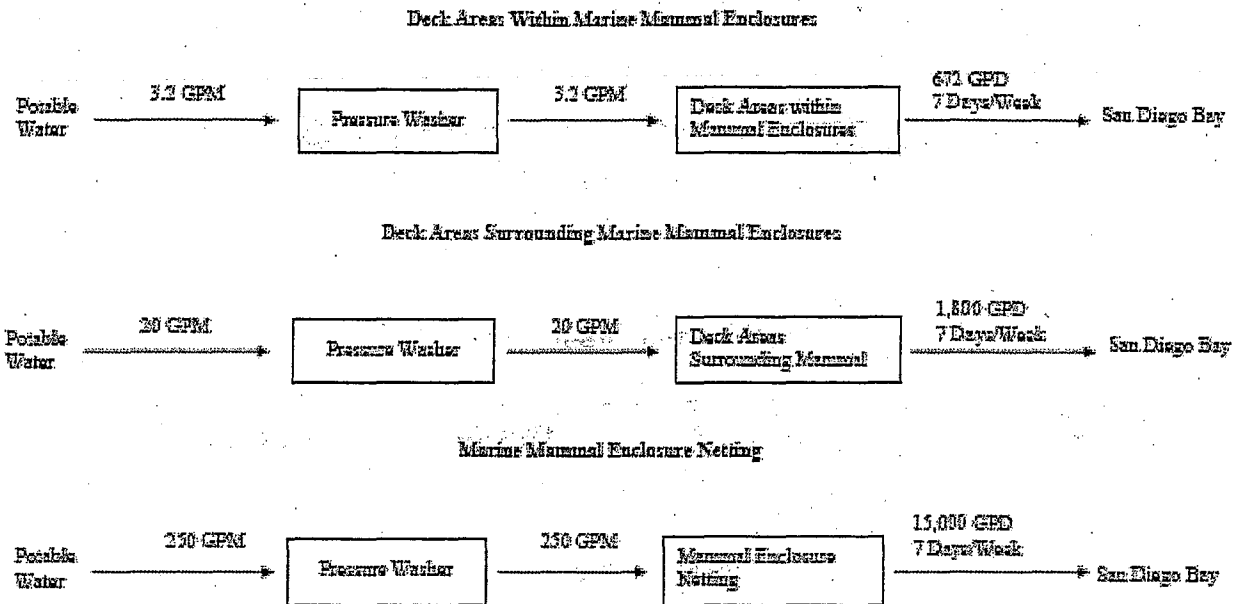


Figure C-12. Marine Mammal Enclosure Cleaning Line Drawing



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA 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 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), 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 (40 CFR § 122.41(i); Wat. Code, § 13383):

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

G. Bypass

1. Definitions

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

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

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)
5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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

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

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

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

- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), 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 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

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

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA 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 USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure

that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 CFR § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission 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. (40 CFR § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):

- a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any

report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** 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, sections 13385, 13386, and 13387

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR § 122.42(a)(1)):
 - a. 100 micrograms per liter ($\mu\text{g/L}$) (40 CFR § 122.42(a)(1)(i));
 - b. 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 CFR § 122.42(a)(1)(ii));
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR § 122.42(a)(1)(iii)); or
 - d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 CFR § 122.42(a)(1)(iv).)
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR § 122.42(a)(2)):
 - a. 500 micrograms per liter ($\mu\text{g/L}$) (40 CFR § 122.42(a)(2)(i));
 - b. 1 milligram per liter (mg/L) for antimony (40 CFR § 122.42(a)(2)(ii));
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR § 122.42(a)(2)(iii)); or
 - d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 CFR § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitoring flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.
- B.** Monitoring must be conducted according to USEPA test procedures approved at 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act as amended, unless other test procedures are specified in this Order and/or this MRP and/or this Regional Water Board
- C.** A copy of the monitoring and reports signed, and certified as required by Attachment D, Standard Provisions V.B, of this Order, shall be submitted to the Regional Water Board at the address listed in section X.B.7.c this MRP.
- D.** 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 this MRP, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. This period may be extended by request of this Regional Water Board or by the USEPA at any time.
- E.** All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or by a laboratory approved by the Regional Water Board.
- F.** The Discharger shall report in its cover letter all instances of noncompliance not reported under Attachment D, section V.H of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Attachment D, section V.E of this Order.
- G.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- H. Monitoring results shall be reported at intervals and in a manner specified in this Order or in this Monitoring and Reporting Program.
- I. This Monitoring and Reporting Program may be modified by this Regional Water Board as appropriate.
- J. This Order may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Regional Harbor Monitoring Program. Minor changes may be made without further public notice.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Location No.	Monitoring Location Name	Monitoring Location Description
SC-001 through SC-066	SC-001 through SC-066	A location where a representative sample of the steam condensate discharge can be obtained.
CW-001 through CW-004	CW-001 through CW-004	A location where a representative sample of the diesel engine cooling water discharge can be obtained.
BW-001	BW-001	A location where a representative sample of the pier boom cleaning discharge can be obtained.
UV-001 through UV-036	UV-001 through UV-036	A location where a representative sample of the utility vault and manhole dewatering discharge can be obtained.
PW-001	PW-001	A location where a representative sample of the pier washing discharge can be obtained.
RO-001	RO-001	A location where a representative sample of the Reverse Osmosis Water Purification Unit (ROWPU) product water discharge can be obtained.
BR-001 and BR-002	BR-001 and BR-002	A location where a representative sample of the boat rinsing discharge can be obtained.
SR-001 and SR-002	SR-001 and SR-002	A location where a representative sample of the swimmer rinsing discharge can be obtained.
ME-001	ME-001	A location where a representative sample of the marine mammal enclosure cleaning discharge can be obtained.
MISC-001	MISC-001	A location where a representative sample of the fire suppression sprinkler system flushing discharge can be obtained.
MISC-002	MISC-002	A location where a representative sample of the emergency eye wash/shower maintenance discharge can be obtained.
MISC-003	MISC-003	A location where a representative sample of the air conditioner condensate discharge can be obtained.
MISC-004	MISC-004	A location where a representative sample of the landscape water discharge can be obtained.

Discharge Location No.	Monitoring Location Name	Monitoring Location Description
NAS-001 through NAS-058 Except NAS-038	NAS-001 through NAS-058 Except NAS-038	A location where a representative sample of the industrial storm water discharge from NASNI can be obtained.
NAB-001 through NAB-052 Except NAB-024	NAB-001 through NAB-052 Except NAB-024	A location where a representative sample of the industrial storm water discharge from NAB can be obtained.
NOLF-001 through NOLF-004	NOLF-001 through NOLF-004	A location where a representative sample of the industrial storm water discharge from NOLF can be obtained.
--	RSW-001	A location where a representative sample of the San Diego Bay can be obtained, outside the influence of ALL Facility discharges.
--	RSW-002	A location where a representative sample of the Pacific Ocean can be obtained, outside the influence of ALL Facility discharges.

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations SC-001 through SC-066

1. The Discharger shall monitor discharges of steam condensate at a minimum of three representative monitoring locations from Monitoring Location Nos. SC-001 through SC-066 as follows:

Table E-2. Effluent Monitoring for Steam Condensate

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Month	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Total Suspended Solids	mg/L	Grab	1/Quarter	1
Priority Pollutants				
Bis (2-ethylhexyl) Phthalate	µg/L	Grab	1/Month	1
Copper, Total Recoverable	µg/L	Grab	1/Month	1,2
Lead, Total Recoverable	µg/L	Grab	1/Month	1
TCDD-Equivalents ³	µg/L	Grab	1/Month	1
Remaining CTR Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	1
Temperature	°F	Grab	1/Quarter	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a list of the chemicals added to the steam boiler.

B. Monitoring Locations CW-001 through CW-004

1. The Discharger shall monitor discharges of diesel engine cooling water at Monitoring Location Nos. CW-001 through CW-004 as follows:

Table E-3. Effluent Monitoring for Diesel Engine Cooling Water

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Total Suspended Solids	mg/L	Grab	1/Month	1
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Month	1
Cadmium, Total Recoverable	µg/L	Grab	1/Month	1
Chromium, Total Recoverable	µg/L	Grab	1/Month	1
Copper, Total Recoverable	µg/L	Grab	1/Month	1,2
DDT ³	µg/L	Grab	1/Month	1
Lead, Total Recoverable	µg/L	Grab	1/Month	1
Mercury, Total Recoverable	µg/L	Grab	1/Month	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nickel, Total Recoverable	µg/L	Grab	1/Month	1
TCDD-Equivalents ⁴	µg/L	Grab	1/Month	1
Zinc, Total Recoverable	µg/L	Grab	1/Month	1
Remaining Priority Pollutants	µg/L	Grab	1/Year	1
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	µg/L	Grab	1/Year	1
Chlorine, Total Residual	µg/L	Grab	1/Year	1
Chlorinated Phenolics	µg/L	Grab	1/Year	1
Phenolic Compounds	µg/L	Grab	1/Year	1
Salinity	ppt	Grab	1/Month	1
Settleable Solids	ml/L	Grab	1/Quarter	1
Temperature	°F	Grab	1/Quarter	1
Total Petroleum Hydrocarbons (Diesel Range)	mg/L	Grab	1/Month	1
Tributyltin	µg/L	Grab	1/Year	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

³ DDT shall include 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

⁴ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Semi-annually, the Discharger shall submit a log of the diesel engine cooling water discharges describing the duration, volume, flow rate, date, and a summary of visual observations of the discharges.

C. Monitoring Location BW-001

1. The Discharger shall monitor the discharge from pier boom cleaning at Monitoring Location No. BW-001 as follows:

Table E-4. Effluent Monitoring for Pier Boom Cleaning

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Priority Pollutants				
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	1
Benzo (k) Fluoranthene	µg/L	Grab	1/Quarter	1
Chrysene	µg/L	Grab	1/Quarter	1
Copper, Total Recoverable	µg/L	Grab	1/Quarter	1,2
TCDD-Equivalents ³	µg/L	Grab	1/Quarter	1
Remaining CTR Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the pier boom cleaning discharges describing the duration, volume, flow rate, date, and a summary of visual observations of the discharges.

D. Monitoring Locations UV-001 through UV-036

- The Discharger shall monitor the discharge from utility vault and manhole dewatering at a minimum of three representative monitoring locations, including at least one electrical vault discharge, manhole discharge, and steam vault discharge, from Monitoring Location Nos. UV-001 through UV-036 as follows:

Table E-5. Effluent Monitoring for Utility Vault and Manhole Dewatering

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Total Suspended Solids	mg/L	Grab	1/Quarter	1
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Quarter	1
Benzo (a) Anthracene	µg/L	Grab	1/Quarter	1
Benzo (a) Pyrene	µg/L	Grab	1/Quarter	1
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	1
Benzo (k) Fluoranthene	µg/L	Grab	1/Quarter	1
Chrysene	µg/L	Grab	1/Quarter	1
Copper, Total Recoverable	µg/L	Grab	1/Quarter	1,2
Dibenzo (a,h) Anthracene	µg/L	Grab	1/Quarter	1
Indeno (1,2,3-cd) Pyrene	µg/L	Grab	1/Quarter	1
Lead, Total Recoverable	µg/L	Grab	1/Quarter	1
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	1
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	1
Silver, Total Recoverable	µg/L	Grab	1/Quarter	1
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	1
TCDD-Equivalents ³	µg/L	Grab	1/Year	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Remaining Priority Pollutants	µg/L	Grab	1/Year	1
Non-Conventional Pollutants				
Electrical Conductivity	µmhos/cm	Grab	1/Quarter	1
Settleable Solids	mL/L	Grab	1/Quarter	1
Total Petroleum Hydrocarbons	mg/L	Grab	1/Quarter	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

- Annually, the Discharger shall submit a log of the utility vault and manhole dewatering discharges describing the volume, flow rate, location of the discharge, date, and receiving water body.

E. Monitoring Location PW-001

- The Discharger shall monitor the discharge from pier washing at Monitoring Location No. PW-001 as follows:

Table E-6. Effluent Monitoring for Pier Washing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Quarter	1
Copper, Total Recoverable	µg/L	Grab	1/Quarter	1,2

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	1
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	1
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	1
TCDD-Equivalents ³	µg/L	Grab	1/Year	1
Remaining Priority Pollutants	µg/L	Grab	1/Year	1
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample analyzed by methods 6010B or 200.7 are known.

³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the pier washing discharges describing the duration, personnel in charge of cleaning, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

F. Monitoring Location RO-001

1. The Discharger shall monitor the discharge of ROWPU product water at Monitoring Location No. RO-001 as follows:

Table E-7. Effluent Monitoring for ROWPU Product Water

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Priority Pollutants				

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
TCDD-Equivalents ²	µg/L	Grab	1 in Year One 1 in Year Five	1
Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1,3
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	µg/L	Grab	1/Year	1
Chlorine, Total Residual	µg/L	Grab	1/Year	1
Chlorinated Phenolics	µg/L	Grab	1/Year	1
Phenolic Compounds	µg/L	Grab	1/Year	1
Settleable Solids	mL/L	Grab	1/Quarter	1
Tributyltin	µg/L	Grab	1/Year	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

³ Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

2. Annually, the Discharger shall submit a log of the ROWPU product water discharges describing the duration, the date, the quantity of product water generated, and a summary of the visual observations of the discharges.

G. Monitoring Locations BR-001 and BR-002

1. The Discharger shall monitor the discharge from boat rinsing at Monitoring Location Nos. BR-001 and BR-002 as follows:

Table E-8. Effluent Monitoring for Boat Rinsing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Priority Pollutants				
Benzo (a) Anthracene	µg/L	Grab	1/Quarter	1
Benzo (a) Pyrene	µg/L	Grab	1/Quarter	1
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	1
Bis (2-ethylhexyl) Phthalate	µg/L	Grab	1/Quarter	1
Chrysene	µg/L	Grab	1/Quarter	1
Copper, Total Recoverable	µg/L	Grab	1/Quarter	1,2
Dibenzo (a,h) Anthracene	µg/L	Grab	1/Quarter	1
Indeno (1,2,3-cd) Pyrene	µg/L	Grab	1/Quarter	1
Lead, Total Recoverable	µg/L	Grab	1/Quarter	1
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	1
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	1
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	1
TCDD-Equivalents ³	µg/L	Grab	1/Year	1
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	1
Temperature	°F	Grab	1/Quarter	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
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- ¹ As specified in 40 CFR 136.
- ² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
- ³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the boat rinsing discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

H. Monitoring Locations SR-001 and SR-002

1. The Discharger shall monitor the discharge from swimmer rinsing at Monitoring Location Nos. SR-001 and SR-002 as follows:

Table E-9. Effluent Monitoring for Swimmer Rinsing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Priority Pollutants				
TCDD-Equivalents ²	µg/L	Grab	1 in Year One 1 in Year Five	1
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1,3
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	1
Turbidity	NTU	Grab	1/Quarter	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

- ¹ As specified in 40 CFR 136.
- ² TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
- ³ Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

2. Annually, the Discharger shall submit a log of the marine mammal enclosure cleaning discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

I. Monitoring Location ME-001

1. The Discharger shall monitor the discharge from marine mammal enclosure cleaning at Monitoring Location No. ME-001 as follows:

Table E-10. Effluent Monitoring for Marine Mammal Enclosure Cleaning

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/year	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/year	1
pH	standard units	Grab	1/year	1
Priority Pollutants				
Copper, Total Recoverable	µg/L	Grab	1/year	1,2
TCDD-Equivalents ³	µg/L	Grab	1 in Year One 1 in Year Five	1
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/year	1
Turbidity	NTU	Grab	1/year	1
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.

² Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample analyzed by methods 6010B or 200.7 are known.

³ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the marine mammal enclosure cleaning discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

J. Monitoring Locations MISC-001 through MISC-004

1. The Discharger shall monitor the miscellaneous discharges at Monitoring Location Nos. MISC-001 through MISC-004 as follows:

Table E-11. Effluent Monitoring for Miscellaneous Discharges

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Year	Meter
Priority Pollutants				
TCDD-Equivalents ²	µg/L	Grab	1 in Year One 1 in Year Five	1
Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1,3
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	1
Chronic Toxicity	TUc	Grab	1/five year permit cycle	1

¹ As specified in 40 CFR 136.
² TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
³ Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

2. Annually, the Discharger shall submit a log identifying any significant changes in the operation of the miscellaneous discharges.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Monitoring Frequency

The Discharger shall analyze a representative sample of the discharge for acute toxicity using a grab effluent sample.

The Discharger must analyze a representative sample from each area at the Facility at which industrial activities are conducted for acute toxicity during at least two storm water discharge events annually on grab effluent samples. If a single representative sample for an industrial area is not feasible, monitoring of individual discharge points for that area is required.

Once each year (July-June), at a different time of year from the previous years, the Discharger shall split a single storm water and a single non-storm water effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species; the

Discharger shall then continue to conduct routine toxicity testing using the single, most sensitive species, including testing for accelerated monitoring, until the next sensitivity testing the following year. The split sample from a storm water location and from a non-storm water location must be from a sample location which most expected toxicity and, if possible, at a different location from previous years.

During years 1 and 5 of the Order, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program. For storm water sampling, sampling shall occur during storm events or if collected, prior to release to receiving water. If there are no storm events in the first year then sampling shall occur as soon as possible, likewise for the fifth year, if conditions for administrative extension are met.

2. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). In a 96-hour static renewal test, the renewal shall be made at 48-hours using the original effluent sample. The Discharger shall conduct 96-hour static renewal toxicity tests with the following vertebrate species:

- The topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (i.e., 96-hour Pass-Fail test)) in the first edition of Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995) (specific to Pacific Coast waters));
- The Inland silverside, *Menidia beryllina*, only if *Atherinops affinis* is not available. (Acute Toxicity Test Method 2006.0)

And the following invertebrate species:

- The West Coast mysid, *Holmesimysis costata* (Table 19 in the acute test methods manual) (specific to Pacific Coast waters);
- The mysid, *Americamysis bahia*, only if *Holmesimysis costata* is not available. (Acute Toxicity Test Method 2007.0).

3. Compliance determination

The determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test shall be determined using a one-tailed hypothesis test (t-test). As specified in Section 11.3 of the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002), the t statistic for the single-effluent concentration acute toxicity test shall be calculated and compared with the critical t set at the 5% level of significance. If the

calculated t does not exceed the critical t , then the mean responses for the single treatment and control are declared "not statistically different" and the Discharger shall report "Pass" on the DMR form. If the calculated t does exceed the critical t , then the mean responses for the single treatment and control are declared "statistically different" and the Discharger shall report "Fail" on the DMR form. This Order requires additional toxicity testing if the effluent limitation for acute toxicity is reported as "Fail".

4. Quality Assurance

- a. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.
- b. This discharge is subject to a determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test using a one-tailed hypothesis test called a t -test. The acute instream waste concentration (IWC) for this discharge is 100% effluent. The 100% effluent concentration and a control shall be tested.
- c. Control water shall be prepared and used as specified in the test methods manual Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002); and/or, for *Atherinops affinis*, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.
- d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).
- e. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Discharger must resample and retest at the next storm event.
- f. Not Applicable - Following Paragraph 12.2.6.2 of the test methods manual, all acute toxicity test results from the multi-concentration tests required by this permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration-response relationships found in Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00/004, 2000).
- g. Within-test variability of individual toxicity tests should be reviewed for acceptability and variability criteria (upper and lower PMSD bounds) should be applied, as directed under Section 12.2.8 - Test Variability of the test methods

manual, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. Under Section 12.2.8, the calculated percent minimum significant difference (PMSD) for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 3-6 - Range of Relative Variability for Endpoints of Promulgated WET Methods, Defined by the 10th and 90th Percentiles from the Data Set of Reference Toxicant Tests, taken from Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program (EPA/833/R-00/003, 2000), following the review criteria in Paragraphs 12.2.8.2.1 and 12.2.8.2 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the Discharger must resample and retest within 14 days.

5. Accelerated Toxicity Testing and TRE/TIE Process

- a. If the results of acute toxicity monitoring are reported as "Fail" and the likely source of toxicity is known (e.g., a temporary plant upset), then the Discharger shall conduct one additional toxicity test using the same species and test method. This test shall begin at the next storm event. If the additional toxicity test does not result in a determination of "Fail", then the Discharger may return to their regular testing frequency. The determination of the likely source of toxicity must be demonstrated by implementing the first two parts of the TRE workplan (VI.C.2.a.i. (a) and (b) of this Order.
- b. If the results of acute toxicity monitoring are reported as "Fail" and the source of toxicity is not known, then the Discharger shall conduct accelerated toxicity testing using the same species and test method. The accelerated toxicity monitoring shall include monitoring of the next 4 storm events. This testing shall begin at the next storm event. If none of the additional toxicity tests result in a determination of "Fail", then the Discharger may return to the regular testing frequency.
- c. If one of the additional toxicity tests (in section V.E.1 or V.E.2) are reported as "Fail" for acute toxicity, then, within 14 days of receipt of this test result, the Discharger shall initiate a TRE as specified in section VI.C.2.a.ii. of the Order.
- d. Any TIE conducted as a part of the TRE as specified in section VI.C.2.a. of this Order shall be based on the same sample that exhibited toxicity and from samples collected during subsequent storm events. Therefore, the discharger shall collect additional sample volume, sufficient for a TIE, when in an accelerated testing phase.

6. Reporting of Acute Toxicity Monitoring Results

- a. A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—for determination of Pass/Fail; reported

according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

- b. The Discharger shall notify the Regional Water Board in writing within 14 days of an acute toxicity test resulting in a determination of "Fail". This notification shall describe actions the Discharger has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this Order; and schedule for actions not yet completed; or reason(s) that no action has been taken.

B. Chronic Toxicity

1. Monitoring Frequency

The permittee shall conduct annual chronic toxicity tests on effluent grab samples. Each year (July-June), at a different time of year from the previous years, the permittee shall split an effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species; the permittee shall then continue to conduct routine toxicity testing using the single, most sensitive species, until the next sensitivity testing the following year.

Chronic toxicity test samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained). During years 1 and 5 of the permit, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program.

2. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and applicable water quality standards; also see 40 CFR Parts 122.41(j)(4) and 122.44(d)(1)(iv) and 40 CFR Part 122.21(j)(5)(viii) for POTWs. The permittee shall conduct a static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (i.e., 7-day LC50, 96-hour LC50, etc.)); a static nonrenewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0); and a toxicity test with one of the following invertebrate species:

- Static renewal toxicity test with the mysid, *Holmesimysis costata* (Survival and Growth Test Method 1007.01);
- Static non-renewal toxicity test with the Pacific oyster, *Crassostrea gigas*, or the mussel, *Mytilus* spp., (Embryo-larval Shell Development Test Method 1005.0);
- Static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method);
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Embryo-larval Development Test Method); or
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0).

If laboratory-held cultures of the topsmelt, *Atherinops affinis*, are not available for testing, then the permittee shall conduct a static renewal toxicity test with the inland silverside, *Menidia beryllina* (Larval Survival and Growth Test Method 1006.0) found in the third edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002; Table IA, 40 CFR Part 136).

3. Quality Assurance

- a. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.
- b. For this discharge, a mixing zone or dilution allowance is not authorized. The chronic instream waste concentrations (IWCs) for this discharge are 100% effluent and 62.5% effluent. A series of at least five effluent dilutions and a control shall be tested. At minimum, the dilution series shall include the IWCs and three dilutions below the IWCs (e.g., 100%, 62.5%, 50%, 25% and 12.5%).
- c. Effluent dilution water and control water should be prepared and used as specified in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and/or *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.

- d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).
- e. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee must resample and retest during the next rain event.
- f. Following Paragraph 10.2.6.2 of the freshwater test methods manual, all chronic toxicity test results from the multi-concentration tests required by this permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00-004, 2000)*.
- g. Because this permit requires sublethal hypothesis testing endpoints from test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995)*, within-test variability must be reviewed for acceptability and a variability criterion (upper %MSD bound) must be applied, as directed under each test method. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the permittee must resample and retest within 14 days.
- h. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.
- i. pH drift during the toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the permittee shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of the test methods manual, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002)*. Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then, following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

4. Reporting of Chronic Toxicity Monitoring Results

- a. A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—in NOEC; TU_c = 100/NOEC; EC25 (or IC25); and TU_c = 100/EC25 (or IC25)—reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

[Not Applicable]

VII. RECLAMATION MONITORING REQUIREMENTS

[Not Applicable]

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001 and RSW-002

1. The Discharger shall monitor the San Diego Bay at RSW-001 and the Pacific Ocean at RSW-002 as follows:

Table E-12. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Priority Pollutants				
TCDD-Equivalents ¹	µg/L	Grab	1/Year	²
Priority Pollutants ³	µg/L	Grab	1/Year	²
Non-Conventional Pollutants				
Temperature	°F	Grab	1/Quarter	²

¹ TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

² As specified in 40 CFR 136.

³ Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water

1. Non-Storm Water Discharge Visual Observations

- a. The Discharger shall visually observe each drainage area for the presence of, or for indications of prior unauthorized non-storm water discharges and their sources.
 - b. The Discharger shall visually observe the Facility's authorized non-storm water discharges and their sources.
 - c. One visual observation shall be conducted quarterly in each of the following periods:
 - i. January – March,
 - ii. April – June,
 - iii. July – September, and
 - iv. October – December.
 - d. The quarterly visual observations shall be conducted no less than 8 weeks apart and no more than 16 weeks apart. Visual observations are only required during daylight hours, on days without precipitation, and during scheduled Facility operating hours¹.
 - e. Visual observations shall document the presence of, or the indication of any non-storm water discharge, pollutant characteristics (floating and suspended material, oil and grease, discoloration, turbidity, odor, etc.), and source. The Discharger shall maintain records of the personnel performing the visual observations, the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment G of this Order.
2. Storm Water Discharge and Other Visual Observations
- a. The Discharger shall visually observe storm water discharges from the first qualifying storm event in each month of the wet season (October 1 through May 31). These visual observations shall occur at all discharge locations during the first hour of discharge. The first qualifying storm event is one that begins producing storm water discharge during daylight scheduled Facility operating hours, and is preceded by at least 7 days without a storm water discharge.
 - b. The Discharger shall visually observe the discharge of stored or contained storm water at the time of discharge during daylight scheduled Facility operating hours. Stored or contained storm water that will likely discharge after daylight scheduled Facility operating hours due to anticipated precipitation shall be observed prior to the discharge during scheduled Facility operating hours.

¹ *Scheduled Facility operating hours* are the time periods when the Facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.