



California Regional Water Quality Control Board

San Francisco Bay Region

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Arnold Schwarzenegger
Governor

Linda S. Adams
Secretary for
Environmental Protection

ORDER NO. R2-2008-0062
NPDES NO. CA0030171

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	Allied Defense Recycling
Name of Facility	Mare Island Shipyard
Facility Address	Southeast corner of 9th St. and Nimitz Ave
	Vallejo, CA 94592
	Solano County

The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Mare Island Strait water used to flood dry dock No. 2	38°,05',55"N	122°,16',89"W	Mare Island Strait
002	Mare Island Strait water used to flood dry dock No. 3	38°,05',43"N	122°,15',53"W	Mare Island Strait

This Order was adopted by the Regional Water Board on:	July 9, 2008
This Order shall become effective on:	September 1, 2008
This Order shall expire on:	August 31, 2013
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as a minor discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, <u>not later than 180 days in advance of the Order expiration date</u> as application for issuance of new waste discharge requirements.	

I, Bruce Wolfe, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 9, 2008.

Bruce H. Wolfe, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	Allied Defense Recycling
Name of Facility	Mare Island Shipyard
Facility Address	Southeast corner of 9 th St. and Nimitz Ave Vallejo, CA 94592
Facility Contact, Title, and Phone	Gary Whitney, Manager, (707) 769-7824
Mailing Address	903 Eastman Lane Petaluma, CA 94952
Type of Facility	Ship building and repair, marine wrecking and salvage
Facility Design Flow	Not applicable

II. FINDINGS

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

A. Background. Allied Defense Recycling (hereinafter the Discharger), by application dated December 6, 2007, has applied for issuance of Waste Discharge Requirements (WDRs) and a permit to discharge wastewaters into Mare Island Strait under the National Pollutant Discharge Elimination System (NPDES).

B. Facility Description. The Discharger proposes to operate the facility located on the eastern waterfront of Mare Island immediately adjacent to Mare Island Strait.¹ Facilities on the site include two dry docks, one located northeast of the intersection of Nimitz Avenue and 9th Streets (dry dock #2) and one at Nimitz Avenue and 10th Streets (dry dock #3), several warehouses, and two pump buildings. Untreated wastewater, which would be discharged to Mare Island Strait, a water of the United States, would consist of water from Mare Island Strait that washes over the dry docks when they are flooded to carry in ships for repair or dismantling. The Discharger does not propose to operate dry docks #1 or #4.

While a dry dock is flooded, a ship would be brought into the dry dock and positioned onto support blocks. The dock end would be closed with a caisson (dry dock door) and the dock would be emptied of all water via a sump pump that discharges the water back into Mare Island Strait. The vessel would be left standing freely on the support blocks.

Water that seeps in from gaps in the dry dock walls and caisson, and storm water runoff from the surface of dry docks would be collected in dry dock sumps. This

¹ **Mare Island Strait** is a channel separating Mare Island and the mainland of Vallejo, in Solano County. The strait was formerly used by the Mare Island Naval Base until its closure in 1995. The strait is the mouth of the Napa River and is tributary to Carquinez Strait.

water would not come in contact with the Mare Island Strait water regulated by this Order and would be required to be disposed of in compliance with applicable Federal, State, and local discharge laws and requirements. Storm water from other portions of the facility would be covered under the Statewide Industrial Storm Water Permit (NPDES No. CAS000001) and may be subject to additional requirements established by the local sanitary district that owns and operates the municipal separate storm sewer system.

Attachment B provides a location map of the area around the facility.

Attachment C provides a wastewater flow schematic of the facility.

- C. Legal Authorities.** This Order is issued pursuant to Section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) and California Water Code (CWC) Chapter 5.5, Division 7. It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to CWC Article 4, Chapter 4 division 7 of the Water Code (commencing with Section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application and other available information. The Fact Sheet (**Attachment F**), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. **Attachments A through E, and G** are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under CWC Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100-21177.
- F. Technology-Based Effluent Limitations.** Section 301(b) of the CWA and implementing U.S. EPA permit regulations at section 122.44, Title 40 of the Code of Federal Regulations,² require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Because there are no technology-based effluent limitations or new source performance standards established for the shipyard industry, the Regional Water Board may use best professional judgment (BPJ) pursuant to authority established by CWA Section 402(a)(1)(B) and in accordance with requirements established at 40 CFR 125.3. This Order does not include technology-based effluent limitations; a rationale is included in the Fact Sheet (**Attachment F**).
- G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve

² All further statutory references are to Title 40 of the Code of Federal Regulations (40 CFR) unless otherwise indicated.

applicable water quality standards. This Order does not include water quality-based effluent limitations; a rationale is included in the Fact Sheet (**Attachment F**).

40 CFR 122.44(d)(1)(i) mandates that permits 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 for the pollutant, 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 the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

- H. Best Management Practices.** Best Management Practices (BMPs) are defined by NPDES regulations at 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. The inclusion of BMPs as requirements in discharge permits is authorized by CWA Section 304(e), and in accordance with NPDES regulations at 40 CFR 122.44 (k), BMPs can be used to control or abate the discharge of pollutants in several circumstances, including, when numeric effluent limitations are infeasible.
- I. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board, the Office of Administrative Law, and U.S. EPA, as required. The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes as State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN). Because of the marine influence on San Francisco Bay receiving waters, total dissolved solids levels in the Bay commonly (and often significantly) exceed 3,000 mg/L and thereby meet an exception to State Water Board Resolution No. 88-63. Therefore, the MUN designation is not applicable to Mare Island Strait. Beneficial uses applicable to Mare Island Strait are provided in Table 1.

Table 1. Basin Plan Beneficial Uses of Mare Island Strait

Discharge Point	Receiving Water Name	Beneficial Uses
001 and 002	Mare Island Strait	<ul style="list-style-type: none"> • Industrial Service Supply (IND) • Ocean, Commercial, and Sport Fishing (COMM) • Estuarine Habitat (EST) • Fish Migration (MIGR) • Fish Spawning (SPAWN) • Navigation (NAV) • Preservation of Rare and Endangered Species (RARE) • Water Contact Recreation (REC1) • Non Contact Water Recreation (REC2) • Wildlife Habitat (WILD)

Requirements of this Order implement the Basin Plan.

J. National Toxics Rule (NTR) and California Toxics Rule (CTR). U.S. EPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR apply in California. On May 18, 2000, U.S. EPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that apply in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

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

L. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit under certain conditions. Where permitted by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised

water quality objective. Because this Order does not include effluent limitations but requires implementation of BMPs to control the discharge of pollutants, compliance schedules and interim effluent limitations do not apply and, therefore, are not included in this Order.

- M. Anti-Degradation Policy.** 40 CFR 131.12 requires that State water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's anti-degradation policy in State Board Resolution 68-16, which incorporates the requirements of the federal anti-degradation policy. Resolution 68-16 requires that existing quality of waters 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. As discussed in detail in the Fact Sheet (**Attachment F**), the permitted discharge is consistent with the anti-degradation provision of 40 CFR 131.12 and State Water Board Resolution 68-16.
- N. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Since this is a new permit, there are no previous permit limitations and therefore there is no backsliding.
- O. Endangered Species Act.** 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 sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 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. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- P. Monitoring and Reporting.** 40 CFR 122.48 requires all NPDES permits to specify requirements for recording and reporting monitoring results. CWA Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and state requirements. This Monitoring and Reporting Program is provided in **Attachment E**.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that apply under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions

applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (**Attachment F**).

R. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet (**Attachment F**).

S. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet (**Attachment F**).

IT IS HEREBY ORDERED that, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, provisions of the federal CWA, and the regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of wastewater to waters of the State at a location or in a manner different from that described in this Order is prohibited.
- B.** Discharge of sanitary wastewater to waters of the State is prohibited.
- C.** Discharge of solid materials and solid wastes, spent abrasive and paint residues, and marine fouling organisms to waters of the State is prohibited.
- D.** Discharge of floating oil or other floating material from any activity that may cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
- E.** The discharge of ship bilge or ballast water outside of the dry docks is prohibited.
- F.** Discharge of any pressure washing water, boiler drainage, or any process water that is used or accumulated in the dry dock during repair, building, salvage, or dismantling is prohibited.
- G.** Discharge of seepage water from the dry dock walls or caisson, and storm water runoff from the surface of the dry docks when a vessel is being processed is not authorized by this Order, and is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS—DISCHARGE POINTS 001 AND 002

1. The Discharger shall prevent or minimize the discharge of pollutants from Discharge Points 001 and 002 through implementation of a Best Management

Practices/Pollution Prevention (BMP/PP) Program, as described by provision VI.C.2, below.

2. Prior to flooding any portion of the dry docks, the Discharger shall remove spent abrasives, paint residues, particulates, wastes, and other debris from those portions of the dry dock floors that are reasonably accessible to a degree achievable by scraping, broom cleaning, pressure washing, or other methods that are appropriate for removing these pollutants. This provision shall not apply in cases wherein a vessel must be introduced into the dry dock on an emergency basis, such as to prevent sinking or leakage of oil or other hazardous materials. The Discharger shall notify the Regional Water Board's spill hotline at (510)622-2369, of such emergency circumstances.
3. The Discharger shall perform regular cleaning of the dry dock floor while work is being conducted, to minimize the potential for pollutants to enter the sump via storm water runoff or by accidental ship discharge.

V. RECEIVING WATER LIMITATIONS

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order.

1. The discharge of waste shall not cause the following conditions to exist in receiving waters:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam.
 - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses.
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels.
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin.
 - e. Toxic or other deleterious substances to be present in concentrations or quantities that could cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or that render any of these organisms unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limitations to be exceeded in receiving waters within 1 foot of the water surface:

a. 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, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.
b. Dissolved Sulfide	Natural background levels (0.1 mg/L, maximum)
c. pH	The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.
d. Un-ionized Ammonia	0.025 mg/L as N, annual median, 0.4 mg/L as N, maximum
e. 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.

3. The discharge shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board, State Water Board, or U.S. EPA as required by the CWA and regulations adopted thereunder.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all U.S. EPA Standard Provisions for NPDES permits included in **Attachment D** of this Order.
2. The Discharger shall comply with all applicable items of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (Attachment G)*, including any amendments thereto. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in the Standard Provisions, the specifications of this Order shall prevail. Duplicative requirements in the federal Standard Provisions in VI.A.1 (**Attachment D**) and the regional Standard Provisions (**Attachment G**) are not separate requirements. A violation of a duplicative requirement does not constitute two separate violations.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in **Attachment E** of this Order. The Discharger shall also comply with the requirements contained in *Self-Monitoring Program, Part A, August 1993 (Attachment G)*.

C. Special Provisions

1. Reopener Provisions

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

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

The Discharger may request permit modification based on any of the conditions above. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

2. Best Management Practices/Pollution Prevention Program

The Discharger shall develop and implement a Best Management Practices/Pollution Prevention (BMP/PP) Program, prior to commencement of dry dock activities. No later than 6 months after the effective date of this Order, the Discharger shall submit a BMP Plan that describes implementation of the BMP/PP Program. The Discharger must review and update its BMP Plan at least annually as specified in VI.C.2.d, below.

The purpose of the BMP/PP Program is the pro-active identification of sources of wastes and pollutants associated with dry dock activities, the identification of practices to reduce or prevent the discharge of those wastes and pollutants to surface waters. The BMP Plan shall be consistent with the

general guidance contained in U.S. EPA's *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004) and shall include the following elements:

a. Characterization of Discharges

The BMP Plan shall include a narrative assessment of all industrial activities conducted at the site, potential pollutant sources associated with each activity, and the nature of the pollutants that could be discharged.

b. Identification of Best Management Practices

The BMP Plan shall include a narrative description of the BMPs to be implemented at the site to control the discharge of pollutants. BMPs shall be identified and described, including the anticipated effectiveness of each BMP, for each potential pollutant source.

The Discharger shall consider:

- i. Preventative BMPs - measures to reduce or eliminate the generation of pollutants and waste.
- ii. Control BMPs - measures to control or manage pollutants and waste after they are generated and before they come into contact with water, including measures to prevent leaks and spills and measures to contain dust and particulate material.
- iii. Treatment BMPs - measures to remove pollutants and waste from water released to the dry dock sumps.
- iv. Response BMPs - measures to respond to leaks, spills, and other releases with containment, control, and cleanup measures to prevent or minimize the potential for the discharge of pollutants and to minimize the adverse effects of such discharges.
- v. Response to Sampling Data BMPs - measures that will be taken in response to data collected from the MRP including trigger values for specific response.

The BMP Plan shall include BMPs for the following shipyard activities, if applicable, at the dry dock facility.

- Control of solid materials
- Abrasive blasting
- Oil, grease, and fuel transfers
- Paint and solvent use
- Dust and overspray
- Over water or near-shore activities

- Storm drain inlet protection
- Hose, piping, and fitting use and maintenance
- Segregation of water from debris
- Hydroblasting
- Material and waste storage
- Sewage disposal
- Gray water disposal
- Oily bilge and ballast water disposal
- Graving dock cleanup
- Discharges resulting from wind, tidal action, and site runoff
- Leaks and spills
- Waste characterization and disposal
- Recovery of ship launch grease/wax
- Hull cleaning
- Other activities with potential to result in discharges of wastes or pollutants to the receiving water

c. Site Map

The BMP Plan shall include a site map that includes:

- i. Site boundaries and structures.
- ii. The locations of site runoff collection and conveyance systems and points of discharge.
- iii. Areas of industrial activity where discharges originate. The Site Map shall include the locations of material handling and processing areas; waste treatment, storage, and disposal areas; dust or particulate generating areas; cleaning and rinsing areas; and other areas of industrial activity that are potential pollutant sources.

d. Annual Comprehensive Site Compliance Evaluation

The Discharger shall conduct at least one comprehensive site compliance evaluation per year to determine the effectiveness of the BMP/PP Program. Evaluations shall be conducted not less than 8 or more than 16 months apart. The BMP Plan shall be revised, as appropriate, and any revisions implemented within 30 days of the evaluation. Evaluations shall include the following:

- i. A review of all visual observation records, inspection records, and sampling and analysis results.
- ii. A visual inspection of all potential pollutant sources for evidence of, or the potential for, the discharge of pollutants.

- iii. A review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented, and maintained, or whether additional BMPs are needed.
- iv. An evaluation report that includes (i) identification of personnel performing the evaluation, (ii) date of the evaluation, (iii) necessary program revisions, (iv) incidents of non-compliance and the corrective actions taken, and (v) certification that the Discharger is in compliance with this Order. If the above certification cannot be provided, the evaluation report shall include an explanation as to why the Discharger is not in compliance with this Order. The evaluation report shall be submitted as part of the annual report (as described in the Monitoring and Reporting Program (MRP) (**Attachment E**)), be retained for at least five years, and be signed and certified in accordance with the requirements of this Order.

At least 30 days prior to conducting the Comprehensive Site Compliance Evaluation, the Discharger shall notify the appropriate Regional Water Board NPDES staff person of its intent to conduct the evaluation, so that a representative of the Regional Water Board may accompany the Discharger during its facility inspection and its review of BMPs.

3. Contingency Plan

- a. The Discharger shall maintain a Contingency Plan as required by Regional Water Board Resolution 74-10 (**Attachment G**). Resolution 74-10 requires that measures be taken under such circumstances as power outage, employee strikes, earthquakes, fires, and vandalism to ensure that wastes are not unnecessarily discharged. The discharge of pollutants in violation of this Order, where the Discharger has failed to develop or adequately implement a contingency plan, will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to CWC Section 13387.

As Resolution 74-10 is directed primarily toward dischargers that collect and treat wastewaters before discharging (e.g., municipal wastewater treatment plants), the Discharger shall develop and maintain a Contingency Plan to ensure implementation of BMPs under such circumstances as contemplated by the Resolution. The Contingency Plan must address all applicable requirements of Resolution 74-10, including the potential circumstances of electric power failure, as well as circumstances of potential concern at this site, such as flooding of Mare Island Strait and large storm events. Safeguards shall be described to ensure that, in the event of such circumstances, the Discharger will comply with the terms and conditions of this Order.

- b. The Discharger shall regularly review and update, as necessary, the Contingency Plan so it remains useful and relevant to current equipment and operations. The Discharger shall review the plan annually and update it as necessary.
- c. As part of the Annual Report (as described in the MRP, VIII. Reporting Requirements (**Attachment E**)), the Discharger shall describe the current status of its Contingency Plan review and update. The description should include a list of revisions or a statement that no changes are needed.

4. Storm Water Requirements

- a. To address storm water runoff from the facility and the surface of the dry docks when vessel processing activities are not occurring and after the dry dock has been cleaned in accordance with the BMP Plan, the Discharger shall obtain coverage under the Statewide Industrial Storm Water Permit (NPDES General Permit No. CAS000001) for Discharges of Storm Water Associated with Industrial Facilities.
- b. Storm water runoff from the surface of the dry docks collected in the dry dock sumps when a vessel is being processed in a dry dock, or after a vessel is processed but before the dry dock is cleaned in accordance with the BMP Plan, shall be collected and disposed of in accordance with applicable Federal, State, and local discharge laws and requirements (e.g., discharged to the local sanitary sewer if authorized or stored for disposal off-site in some other authorized manner). This provision applies to dry docks 1-4 because dry docks No. 1 and 2 and dry docks No. 3 and 4 are hydraulically connected (i.e., one system collects and drains all runoff from dry docks 1 and 2, and another system collects and drains all runoff from dry docks No. 3 and No. 4). Therefore, if a vessel is being processed in dry dock No.2 or No. 3 (or the dry dock has not yet been cleaned after vessel processing), runoff from dry dock No. 1 or No. 4, respectively, shall be collected and disposed of in accordance with applicable Federal, State, and local discharge laws and requirements.
- c. As indicated above, the Discharger shall develop a Contingency Plan to describe actions to comply with this Order if and when large storm events occur.

ATTACHMENT A—DEFINITIONS

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

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

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

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

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

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

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

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

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

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

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit is the 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) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load 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 means 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 is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries means 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 shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters include, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Initial Dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges,

turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

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

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) is the 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 is a limited volume of receiving water that is 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) are those sample results less than the laboratory's MDL.

Ocean Waters are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

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

Reporting Level (RL) is the ML (and it's associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. 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 Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. 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 is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ) is a measure of variability that is calculated as follows:

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Storm water is storm water runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

ATTACHMENT B—TOPOGRAPHIC MAP



ATTACHMENT C—FLOW SCHEMATIC



Dotted line = Site boundary

ATTACHMENT D—FEDERAL 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 (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41 (a)].
2. The Discharger shall comply with effluent standards or prohibitions established under CWA Section 307(a) for toxic pollutants and with standards for sewage sludge use or disposal established under CWA Section 405 (d) within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not 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, the 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 [40 CFR §122.41 (i)] [CWC 13383 (c)]:

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)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, 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 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) (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) (B)]; and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision—Permit Compliance I.G.5 below [40 CFR §122.41 (m) (4) (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 [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 permittee. 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 paragraph H.2 of this section 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) (i)];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions—Reporting V.E.2.b [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 CWC [40 CFR §122.41 (l) (3)] [40 CFR §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 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41 (j) (4)] [40 CFR §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 40 CFR 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 U.S. EPA within a reasonable time, any information which the Regional Water Board, SWRCB, 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 CFR §122.41 (h)] [CWC 13267].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below (40 CFR §122.41 (k)).
2. All permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(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 V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board or U.S. EPA 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 paragraph (2) or (3) of this provision 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 in this Order [40 CFR §122.41 (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 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR 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 (I) (6) (i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41 (I) (6) (ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41 (I) (6) (ii) (A)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41 (I) (6) (ii) (B)].
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41 (I) (6) (ii) (C)].
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 (I) (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 (I) (1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29 (b) [40 CFR §122.41 (I) (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 which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42 (a) (1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41 (I) (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 E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision—Reporting V.E [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 U.S. EPA, 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 Order 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 (µg/L) [40 CFR §122.42 (a) (1) (i)];

- b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 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 40 CFR §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 (µg/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 40 CFR §122.44 (f) [40 CFR §122.42 (a) (2) (iv)].

A. Publicly-Owned Treatment Works (POTWs)

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

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E—MONITORING AND REPORTING PROGRAM

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ATTACHMENT E—MONITORING AND REPORTING PROGRAM

40 CFR 122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. The Discharger shall comply with the MRP for this Order as adopted by the Regional Water Board, and with all of Self-Monitoring Program, Part A, adopted August 1993 (SMP). The MRP and SMP may be amended by the Executive Officer pursuant to U.S. EPA regulations 40 CFR 122.62, 122.63, and 124.5. If any discrepancies exist between the MRP and SMP, the MRP prevails.
- B. Sampling is required prior to each flooding of a dry dock, and shall include collection of both wipe and rinseate samples. All analyses shall be conducted using current U.S. EPA methods, methods approved by the U.S. EPA Regional Administrator pursuant to 40 CFR 136.4 and 40 CFR 136.5, or equivalent methods that are commercially and reasonably available and that provide quantification of sampling parameters and constituents sufficient to evaluate compliance with applicable effluent limits and to perform reasonable potential analysis. Equivalent methods must be more sensitive than those specified in 40 CFR 136, must be specified in the permit, and must be approved for use by the Executive Officer, following consultation with the State Water Board's Quality Assurance Program.
- C. *Minimum Levels.* For reasonable potential monitoring, analyses shall be conducted using the commercially available and reasonably achievable detection levels that are lower than applicable water quality objectives or criteria, or the effluent limitations, whichever are lower. The purpose is to provide quantification of constituents sufficient to allow evaluation of observed concentrations with respect to the Minimum Levels (MLs) given below.

MLs are the concentrations 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. All MLs are expressed as µg/L.

Table E-1 lists the test methods the Discharger may use for reasonable potential monitoring.

Table E-1. Test Methods and Minimum Levels for Pollutants to be Monitored

		Water Monitoring					Sediment Monitoring ^[b]	
		Types of Analytical Methods ^[a]					Method	Detection Limit (mg/kg dry wt.)
		Minimum Levels (µg/L)						
		GC	FAA	ICP MS	SPGFAA	CVAA		
1	Antimony			0.5	5		NA	NA
2	Arsenic			2	2		6020	2.0
3	Beryllium			0.5	1		NA	NA
4	Cadmium			0.25	0.5		6020	0.3
5a	Chromium III		5				^[c]	^[c]
5b	Chromium VI		5				6020 ^[c]	5.0 ^[c]
6	Copper			0.5	2		6020	5.0
7	Lead			0.5	2		6020	5.0
8	Mercury			0.5		0.2 ^[d]	7471	0.02
9	Nickel			1	5		6020	5.0
10	Selenium			2	5		7740	0.1
11	Silver			0.25	2		6010	0.2
12	Thallium			1	5		NA	NA
13	Zinc			1	10		6020	1.0
119-125	PCBs	0.5					8082	20 µg/kg
NA	Tributyltin						^[e]	10 µg/kg

NA - Not applicable

^[a] Analytical Methods / Laboratory techniques are defined as follows:

Because receiving water samples will be saline, the Discharger must instruct its analytical laboratory to correct for that matrix so as to avoid positive interference.

GC= Gas Chromatography

FAA = Flame Atomic Absorption

ICPMS= Inductively Coupled Plasma/Mass Spectrometry

SPGFAA= Stabilized Platform Graphite Furnace Atomic Absorption (i.e. EPA 200.9)

CVAA= Cold Vapor Atomic Absorption

^[b] Trace metal analysis shall include the individual concentrations of each individual metal.

Method 3050 shall be used in preparation for all metal analyses except mercury. Preparation procedures for mercury are included in Method 7471.

^[c] Sediment samples shall be analyzed for total recoverable chromium.

^[d] Use ultra-clean sampling (U.S. EPA 1669) to the maximum extent practicable and ultra-clean analytical methods (U.S. EPA 1631) for mercury monitoring.

^[e] Concentrations of tributyltin shall be analyzed using protocol approved by the Regional Water Board or as described in Rice C.D., F.A. Espourteille, and R.J. Huggett. 1987. Analysis of tributyltin in estuarine sediments and oyster tissue, *Crassostrea virginica*. Applied Organometallic Chemistry, 1:541-544.

II. MONITORING LOCATIONS

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

Table E-2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Floor and wall area of dry dock No. 2, that is flooded to bring in vessels for processing
002	M-002	Floor and wall area of dry dock No. 3, that is flooded to bring in vessels for processing
Receiving Water	R-001	Mare Island Strait water in the immediate proximity of the dry dock No. 2 discharge point (where Mare Island Strait water pumped from the dry dock is discharged back to Mare Island Strait)
Receiving Water	R-002	Mare Island Strait water in the immediate proximity of the dry dock No. 3 discharge point (where Mare Island Strait water pumped from the dry dock is discharged back to Mare Island Strait)
Receiving Water	R-003	Mare Island Strait water in the immediate proximity of the dry dock No. 2 entry (caisson)
Receiving Water	R-004	Mare Island Strait water in the immediate proximity of the dry dock No. 3 entry (caisson)

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is not required. Receiving water monitoring requirements will provide data that are representative of receiving water and influent water quality.

IV. MONITORING REQUIREMENTS FOR DRY DOCK SURFACES—LOCATIONS M-001 AND M-002

1. Prior to flooding of any portion of dry dock No. 2 or No. 3, the Discharger shall record the results of a pre-docking inspection noting any conditions requiring correction, such as the presence of waste materials that can be removed with BMPs. If any are noted, the Discharger must correct the condition prior to flooding. Inspection reports shall identify the inspector's name, title, and any corrective actions taken.
2. The Discharger shall collect wipe samples from the wall and floor surfaces of the dry dock prior to flooding. This shall include collection of samples from floor and wall locations of the dry dock selected using a randomized grid procedure. At least 3 samples shall be collected from a representative area, or 6 samples from the entire dry dock.
3. The Discharger shall collect rinseate samples prior to dry dock flooding using a rinseate composite sampling method. This shall include collection of samples from floor and wall locations of the dry dock selected using a

randomized grid procedure. At least 3 samples shall be collected from a representative area, or 6 samples from the entire dry dock. Multiple samples shall be composited into one sample for analysis. Deionized water reconstituted to have a similar hardness and pH as the receiving water, shall be used as the rinseate. Samples shall be representative of the water that washes over the dry dock surfaces and shall be analyzed in accordance with the following schedule.

Table E-3. Monitoring of Wipe and Rinseate Samples

Parameter	Units		Minimum Sampling Frequency
	Wipe	Rinseate (composite samples)	
Total Suspended Solids	NA	mg/L	Prior to flooding of dry dock
Settleable Solids	NA	ml/L	Prior to flooding of dry dock
Oil and Grease	NA	mg/L	Prior to flooding of dry dock
Metals ¹	µg/sq ft	µg/L	Prior to flooding of dry dock
PCBs	µg/sq ft	µg/L	Prior to flooding of dry dock
Tributyltin	µg/sq ft	µg/L	Prior to flooding of dry dock
Remaining CTR priority pollutants	µg/sq ft	µg/L	Once per permit term

¹ Metals are those identified as Compound Nos. 1 – 13 by the California Toxics Rule at 40 CFR 131.38(b) – antimony, arsenic, beryllium, cadmium, chromium (3), chromium (6), copper, lead, mercury, nickel, selenium, silver, thallium, and zinc. Analytical results shall be reported as total recoverable metal.

V. SEDIMENT MONITORING

1. Once during the term of this Order the Discharger shall collect sediment samples at dry dock Nos. 2 and 3, and at a control/background location. The Discharger shall analyze the sediment samples for arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc, PCBs, and tributyltin.
2. Sediment samples shall be collected near the caisson and at the point of discharge. At least 2 surface grab samples shall be collected from each of these areas and composited into one sample for each area (i.e., two samples from the area near the caisson composited into one sample and two samples from the area of the discharge composited into one sample). The composited sediment samples shall be submitted for analysis.
3. Sediment sampling methods shall result in undisturbed samples from the top 2–3 centimeters of sediment. The control/background location shall be selected to be representative of background conditions within Mare Island Strait and in an area where sediment is not affected by activity at the Discharger's facility (i.e., in a location that can be presumed to be free from the effects of the Discharger's activities and other potential impacts). Results

for the control/background location shall be reported with the other analytical results.

4. Specify reporting date or timeframe that clearly describes when the samples were taken.

Table E-4. Sediment Monitoring¹

Parameter	Units	Sample Type	Minimum Sampling Frequency
Metals ^{2,3}	µg/L	grab	Once during permit term
PCBs	µg/L	grab	Once during permit term
Tributyltin	µg/L	grab	Once during permit term

¹For each sample also report:

- Grain size (%)
- Total solids (%)
- Total Organic Carbon (%)
- Dissolved Sulfides (mg/kg)
- Ammonia (mg/kg)

² Metals include arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.

³ Analytical results shall be reported as total recoverable metal.

VI. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Locations R-001 and R-002

Following discharge from discharge point 001 or 002, the Discharger shall collect a receiving water sample at Monitoring Location R-001 or R-002, respectively. The location of Monitoring Location R-001 or R-002 shall be recorded and reported with sample results. Receiving water samples shall be analyzed in accordance with the schedule in Table E-5.

B. Monitoring Locations R-003 and R-004

Prior to flooding dry dock No.2 or No.3, the Discharger shall collect a receiving water sample at either Monitoring Location R-001 or R-002, respectively. The location of Monitoring Location R-001 or R-002 shall be recorded and reported with sample results. Receiving water samples shall be analyzed in accordance with the schedule in Table E-5.

Table E-5. Receiving Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	
			R-001 R-002	R-003 R-004
Total Suspended Solids	mg/L	grab	E	O
Settleable Solids	ml/L	grab	E	O
Oil and Grease	mg/L	grab	E	O
Metals ¹	µg/L	grab	E	O
PCBs	µg/L	grab	E	O
Tributyltin	µg/L	grab	E	O

E = each time wastewater is discharge from discharge point 001 or 002

O= once each year

¹ Metals are those identified as Compound Nos. 1 – 13 by the California Toxics Rule at 40 CFR 131.38(b) – antimony, arsenic, beryllium, cadmium, chromium (3), chromium (6), copper, lead, mercury, nickel, selenium, silver, thallium, and zinc. Analytical results shall be reported as total recoverable metal.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports

1. The Discharger shall submit annual Self Monitoring Reports (SMRs), which shall include the results of all required monitoring as well as the report of the annual Comprehensive Site Compliance Evaluation, and any updates to the BMP Plan and Contingency Plan. Annual reports shall be due on February 1 following each calendar year.

2. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), at the address listed below:

California Regional Water Quality Control Board
 San Francisco Region
 1515 Clay Street, Suite 1400
 Oakland, CA 94612
 Attention: NPDES Wastewater Division

3. Monitoring periods for all required monitoring shall commence upon the effective date of this Order.

4. The Discharger shall report with each dry dock water and receiving water sample result the applicable Minimum Level (ML) and the current laboratory

Method Detection Limit (MDL) as determined by procedures in 40 CFR Part 136.

5. The Discharger shall arrange all reported data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
6. Water quality data shall be reported in the first Self Monitoring Report to be submitted following receipt of the analytical data. The Discharger shall discuss the water quality data as it reflects the effectiveness of the facility's BMP Program.
7. The Discharger shall attach a cover letter to its Self Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
8. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
9. As described above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

ATTACHMENT F—FACT SHEET

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ATTACHMENT F—FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the specific legal requirements and detailed technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility, assuming the Discharger obtains a lease for the property.

CIWQS Place ID	717105
Discharger	Allied Defense Recycling
Name of Facility	Mare Island Shipyard
Facility Address	Southeast corner of 9 th St. and Nimitz Ave Vallejo, CA 94592 Solano County
Facility Contact, Title and Phone	Gary Whitney, Manager, (707) 769-7824
Authorized Person to Sign and Submit Reports	Gary Whitney, Manager
Mailing Address	903 Eastman Lane Petaluma, CA 94952
Billing Address	Same as mailing address
Type of Facility	Dry dock
Classification	Minor
Threat to Water Quality	3
Complexity	C
Ownership Type	Private
Pretreatment Program	No
Reclamation Requirements	No
Baseline Flow	N/A
Design Flow	N/A
Watershed	San Pablo Bay
Receiving Water	Mare Island Strait
Receiving Water Type	Marine

Allied Defense Recycling (Discharger) proposes to operate the Mare Island Shipyard facility at the eastern waterfront of Mare Island immediately adjacent to Mare Island Strait.¹ This facility is owned and managed by Lennar Mare Island, LLC. The Discharger applied for issuance of Waste Discharge Requirements (WDRs) and a permit to discharge wastewaters into the Napa River under the National Pollutant Discharge

¹ **Mare Island Strait** is a channel separating Mare Island and the mainland in Vallejo, in Solano County. The strait was formerly used by the Mare Island Naval Base until its closure in 1995. The strait is the mouth of the Napa River and is tributary to Carquinez Strait.

Elimination System (NPDES) on December 6, 2007. This Order regulates the discharge of wastewaters to Mare Island Strait, a water of the United States, from the Mare Island Shipyard facility.

II. FACILITY DESCRIPTION

A. Treatment Process Description

The United States Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as minor.

The facility has two dry docks, with capacities of up to 17.8 and 19.5 million gallons, which are used to conduct ship repairing, building, salvage, and dismantling operations. Water from Mare Island Strait would be used to flood the dry docks, which would allow vessels to be moved into the dry docks for processing. While the dock is flooded, a ship would be brought into the dry dock and positioned onto support blocks. The dock end would be closed with a caisson (dry dock door) and the dock would be emptied of all water via a sump pump that discharges the water back into Mare Island Strait. The vessel would be left standing freely on the support blocks. Each dry dock would be flooded about six times per year, with each flooding cycle lasting approximately twelve hours.

The Discharger plans to conduct ship repair, building, salvage, and dismantling activities in the dry docks. These activities can involve many sources of pollutants including blast abrasives, paint chips, cutting and welding slag, paper trash, discarded materials, sediment, marine growth, oil, solvents, and plastics. When work on a vessel is complete, the dry dock floor would be swept, and any debris that ends up on the dry dock floor would be removed prior to the next cycling of the dry dock. Any residual particulate matter remaining on the floor of the dry dock after cleanup, has the potential to come in contact with Mare Island Strait water when the dry dock is flooded to accommodate another vessel.

Wastewaters discharged to Mare Island Strait would not receive treatment and would occur through the outfalls described in the following table. Process water used in ship dismantling operations, seepage water from the dry dock walls, seepage water from the caisson, and storm water runoff from the surface of the dry docks as described in section VI.C.4 of this Order, could also be collected in the dry dock sumps. This water would be required to be collected and disposed of in accordance with applicable Federal, State, and local discharge laws and requirements. Storm water runoff from other portions of the facility would be covered under the Statewide Industrial Storm Water Permit (NPDES No. CAS000001) and may be subject to additional requirements established by the local sanitary District responsible for the municipal separate storm sewer system.

B. Discharge Points and Receiving Waters

The locations of the Facility's outfalls and its receiving water are shown in Table F-1.

Table F-1. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Mare Island Strait water used to flood dry dock No. 2	38 °,05 ',55 "N	122 °,16 ',89 "W	Mare Island Strait
002	Mare Island Strait water used to flood dry dock No. 3	38 °,05 ',43 "N	122 °,15 ',53 "W	Mare Island Strait

Attachment B to the Order is a topographic map that shows the regional location of the Mare Island Shipyard facility. **Attachment C** to the Order is a wastewater flow schematic of the facility.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

This is a new permit; therefore, there are no existing requirements.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to Clean Water Act (CWA) Section 402 and implementing regulations adopted by U.S. EPA and California Water Code (CWC) Chapter 5.5, Division 7. It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements pursuant to CWC Article 4, Chapter 4, for discharges not subject to regulation under CWA Section 402.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Region* (Basin Plan) is the Regional Water Board’s master water quality control planning document. It designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to Mare Island Strait are as follows.

Table F-2. Basin Plan Beneficial Uses of Mare Island Strait

Discharge Point	Receiving Water Name	Beneficial Uses
001 and 002	Mare Island Strait	<ul style="list-style-type: none"> • Industrial Service Supply (IND) • Ocean, Commercial, and Sport Fishing (COMM) • Estuarine Habitat (EST) • Fish Migration (MIGR) • Fish Spawning (SPAWN) • Navigation (NAV) • Preservation of Rare and Endangered Species (RARE) • Water Contact Recreation (REC1) • Non Contact Water Recreation (REC2) • Wildlife Habitat (WILD)

Requirements of this Order specifically implement the applicable water quality control plans.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. The CTR was adopted on May 18, 2000, and amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
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 was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP requires that dischargers submit data sufficient to determine which priority pollutants require water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. The SIP includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so.
4. **Anti-Degradation Policy.** 40 CFR 131.12 requires that State water quality standards include an anti-degradation policy consistent with federal policy. The State Water Board established California's anti-degradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal anti-degradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The permitted discharge is consistent with the anti-degradation provision of 40 CFR 131.12 and State Water Board Resolution 68-16.

5. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed.
6. **Monitoring and Reporting Requirements.** 40 CFR 122.48 requires all NPDES permits to specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E to the Order) establishes monitoring and reporting requirements to implement federal and State requirements.

D. Impaired Water Bodies on CWA 303(d) List

On June 6, 2003, the U.S. EPA approved a revised list of impaired water bodies prepared by the State, pursuant to Section 303(d) of the CWA, which requires identification of specific water bodies that are not expected to meet water quality standards after implementation of technology-based effluent limitations on point sources. The pollutants impairing Carquinez Strait include chlordane, DDT, dieldrin, dioxin compounds, exotic species, furan compounds, mercury, nickel, selenium, and dioxin-like and non dioxin-like PCBs.

The SIP requires final effluent limitations for all 303(d)-listed pollutants to be based on total maximum daily loads (TMDLs) and associated wasteload allocations (WLAs). The SIP and U.S. EPA regulations also require that final concentration-based WQBELs be included for all pollutants having reasonable potential to cause or contribute to an exceedence of applicable water quality standards (having reasonable potential or RP). The Order does not include effluent limitations for any 303(d) listed pollutants because there are no existing effluent data for this Discharger upon which to base a reasonable potential analysis.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the NPDES regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may 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 the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

Specific factors affecting the development of limitations and requirements in this Order are discussed in Section IV.C.2 of this Fact Sheet.

A. Discharge Prohibitions

Following are the bases for the discharge prohibitions established by this Order.

1. Prohibition A (no discharges other than as described in the permit): This prohibition is based on CWC section 13260, which requires filing a Report of Waste Discharge before discharges can occur. Discharges not described in the Report of Waste Discharge and subsequently in the Order, are prohibited.
2. Prohibitions B (no discharge of sanitary wastewater): Direct discharge of domestic sanitary waste to Waters of the State is prohibited. This prohibition is in accordance with the Basin Plan's Discharge Prohibition 15 (Basin Plan Table 4-1), which prohibits raw sewage or any waste failing to meet waste discharge requirements to any waters of the Basin.
3. Prohibition C (no discharge of solids and particulates): The direct discharge of particulate and paint residues from the dry dock, ships, or piers, to Waters of the State is prohibited. The placement of spent abrasive and paint residue in areas where the materials may be washed into Waters of the State by storm water runoff or by tide or wave action is prohibited. This prohibition is in accordance with Sections 3.3.13 and 3.3.14 of the Basin Plan.
4. Prohibition D (no discharge of floating materials): The discharge of floating oil or other floating material from any activity that may cause deleterious bottom deposits, turbidity or discoloration in surface waters is prohibited. This is in accordance with Section 3.3.6 of the Basin Plan.
5. Prohibition E (no discharge of residual ship bilge or ballast water, from vessels while they are in dry dock): The ballast water must be in compliance with California regulations (Marine Invasive Species Act). This requires exchange at sea for ocean-going vessels. While the ship is dry-docked, if repairs and maintenance of ship's ballast tanks are necessary, any residual ballast water and all sedimentation that may exist must be removed to on-shore facilities for processing. This prohibition is appropriate as the Discharger has not applied to discharge this waste. Because this discharge is prohibited there are no provisions in the permit to ensure protection of water quality from such discharges.
6. Prohibition F (no discharge of process wastewater): Discharge of pressure washing water, boiler drainage water, or any process water that is used or

accumulated in the dry docks to Waters of the State during the dismantling or repair processes is prohibited. This prohibition is appropriate as such wastes have potential to have pollutants at levels exceeding water quality standards, and so they should not be discharged untreated.

7. Prohibition G (no discharge of storm water or seepage water): Discharge of storm water runoff from the surface of the dry docks as described in Section VI.C.4 of this Order, or seepage water from the dry dock walls or caisson, to Waters of the State is prohibited. This prohibition is appropriate as such wastes have potential to have pollutants at levels exceeding water quality standards, and so they should not be discharged untreated.

B. Technology-Based Effluent Limitations

1. Scope and Authority

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

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

The CWA requires U.S. EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. CWA Section 402(a)(1) and 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or

pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3. No numeric technology-based effluent limitations are established for this Order. Narrative (BMP-based) requirements are based on BPT, BAT, BCT, and BPJ. In setting these limits, the factors specified in section 125.3(d), as shown in the table below, were considered.

Table F-3. Factors Considered Pursuant to 40 CFR 125.3(d)

Factors	Considerations
Cost relative to benefits	The cost of imposing these limits is reasonable given that passive treatments (BMPs) that prevent or reduce discharge of pollutants are relatively low cost alternatives to performing more aggressive wastewater treatment technologies.
Comparison of cost and pollutant reductions from publicly owned treatment works to cost and pollutant reductions from BMPs	The wastewater is Mare Island Strait water that washes over the dry docks that have been cleaned according to the BMP Plan. No additional wastewater treatment to remove pollutants occurs. Therefore, the cost is less than if it were treated at a publicly owned treatment works.
Age of equipment and facilities	Required equipment (brooms, vacuums, shrouding, etc.) can be easily and inexpensively purchased and replaced. BMPs can be planned according to the placement of existing facilities.
Process employed	Proper planning and scheduling of activities are the most important factors when implementing BMPs.
Engineering aspects of various controls	No engineering controls are required.
Process changes	No specific processes are required (proper planning and scheduling of activities is most important).
Non-water quality environmental impacts	No non-water quality impacts are foreseeable.

2. Applicable Technology-Based Effluent Limitations

There are no applicable technology-based ELGs established for the shipyard industry. The Regional Water Board established narrative (BMP-based) limitations because numeric limits are not practicable. The narrative limits in this Order are based on similar facilities and BPJ.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified by the NPDES regulations at 40 CFR 122.44(d)(1)(i), permits must include WQBELs for pollutants, including toxicity, that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any water quality standard. The process for determining

reasonable potential (the reasonable potential analysis) and calculating WQBELs, when necessary, is intended to protect the designated uses of the receiving water as specified in the Basin Plan and achieve applicable water quality objectives and criteria.

2. Reasonable Potential Analysis (RPA)

- a. Water Quality Criteria (WQC) and Objectives (WQOs). The RPA uses Basin Plan WQOs, including narrative toxicity objectives in the Basin Plan, and applicable WQC in the CTR and NTR, or site-specific objectives (SSOs) if available, after adjusting for site-specific hardness and translators, if applicable.
- b. Methodology. The RPA uses the methods and procedures prescribed in Section 1.3 of the SIP. Regional Water Board staff has analyzed available information, including the nature of facility operations and the shipyard industry in general, to determine if the discharges show reasonable potential with respect to the governing WQOs or WQC.
- c. Effluent and Background Data. Because this is a new permit, discharge data are not available.
- d. RPA Determination. For Discharges 001 and 002, based on industry practices and operations at similar facilities, the Regional Water Board has determined that there is reasonable potential for residual material to be washed into the receiving water when dry docks are flooded. The Regional Water Board has also determined that such particulate material may contain metals common to the shipyard industry, PCBs, and tributyltin at concentrations that could cause or contribute to exceedances of applicable WQOs or criteria for metals from the NTR, CTR, and/or the Basin Plan.

This determination of reasonable potential is based, in large part, on monitoring performed at San Francisco Drydock, located on the western waterfront of San Francisco Bay at the foot of 20th Street in San Francisco. Monitoring of water at that facility that washed over the dry docks when the docks were submerged, showed elevated levels of metals being discharged to the Bay, particularly arsenic, copper, lead, nickel, and zinc.

This determination is also based on descriptions by the Oregon Department of Environmental Quality and U.S. EPA Office of Enforcement and Compliance Assurance of the generation of pollutants during vessel maintenance and overhaul work—pollutants that can remain in residual amounts on dry dock surfaces after cleanup (*Best Management Practices for Oregon Shipyards*, Oregon Department of Environmental Quality, 2000; *U.S. EPA Office of Compliance Sector Notebook Project: Profile of the Shipbuilding and Repair Industry*, U.S. EPA Office of Enforcement and Compliance Assurance, 1997), and of the paint and preservative coatings

found on both interior and exterior surfaces of a ship—particularly on older ships, paint may contain toxic compounds, such as PCBs, heavy metals (e.g., lead, barium, cadmium, chromium, and zinc), and pesticides (*A Guide for Ship Scrappers*, U.S. Office of Enforcement and Assurance, 2000, EPA 315-B-00-001).

3. Water Quality Based Effluent Limitations

The RPA shows that discharges from Outfall Nos. 001 and 002 exhibit reasonable potential for metals, PCBs, and tributyltin.

The Regional Water Board has determined that the establishment and enforcement of numeric effluent limitations for Outfall Nos. 001 and 002 is infeasible due to the difficulties of collecting representative effluent samples and of determining and applying concentration and mass emission limitations. The Regional Water Board has further determined that such discharges are most appropriately controlled by Best Management Practices (BMPs) instead of numeric effluent limitations. The inclusion of BMPs as requirements in discharge permits is authorized by CWA Section 304(e), and in accordance with NPDES regulations at 40 CFR 122.44(k), BMPs can be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible.

The Monitoring and Reporting Program, which accompanies this Order as **Attachment E**, requires monitoring for metals, suspended solids, settleable solids, oil and grease, PCBs, and tributyltin in rinsewater samples, and monitoring for metals, PCBs, and tributyltin in dry dock surface wipe samples and sediments, to assess the effectiveness of the required BMP/PP Program. Monitoring of the remaining CTR priority pollutants in rinsewater and wipe samples once during the term of this Order is also required. The Regional Water Board will also review the monitoring data to assess performance. If the data show that BMPs do not adequately control discharges of pollutants, the Order can be reopened to include numeric effluent limitations and/or other conditions, as necessary. Monitoring data will also be considered at the time of permit reissuance.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

Receiving water limitations are based on applicable water quality standards contained in Chapter 3 of the Basin Plan.

VI. MONITORING AND REPORTING REQUIREMENTS

40 CFR 122.48 requires all NPDES permits to specify recording and reporting of monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program, **Attachment E** of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following text provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

A. Influent Monitoring

Influent monitoring will not be required because receiving water monitoring requirements will provide data that is representative of receiving water and influent water quality.

B. Dry Dock Surface Monitoring

This Order requires monitoring of the dry dock surfaces prior to flooding, to evaluate the effectiveness of the BMP/PP Program. Wipe and rinseate samples must be analyzed for thirteen metals (antimony, arsenic, beryllium, cadmium, chromium(III), chromium (VI), copper, lead, mercury, nickel, selenium, silver, thallium, and zinc), PCBs, tributyltin, and other remaining CTR priority pollutants. Rinseate samples must also be analyzed for settleable and total suspended solids, and oil and grease. Monitoring for these constituents is based on the Regional Water Board's RPA, as discussed in Section IV.C. of this Fact Sheet.

When updating the BMP Plan, the Discharger must consider these data to assess the effectiveness of the facility's BMP/PP Program.

C. Sediment Monitoring

This Order requires collection of sediment samples outside of the caisson to evaluate the effectiveness of the BMP/PP Program. Sediment samples must be analyzed for metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc), PCBs, and tributyltin.

When updating the BMP Plan, the Discharger must consider these data to assess the effectiveness of the facility's BMP/PP Program.

D. Receiving Water Monitoring

This Order requires receiving water monitoring to establish background water quality conditions and evaluate the impact of the discharge on the receiving water. Because receiving water quality will remain relatively stable in Mare Island Strait, the frequency of receiving water monitoring for background purposes is limited to once per year. The frequency of monitoring in the vicinity of the discharge points is required each time there is a discharge.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR 122.41 and 40 CFR 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in **Attachment D** to the Order. The Order also includes several provisions that are standard to NPDES permits issued by the Regional Water Board.

B. Special Provisions

1. Reopener Provisions

The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124 to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the U.S. EPA. If a need for additional effluent limitations or permit conditions becomes apparent during the term of the Order, the Order will be reopened to incorporate such limitations and/or conditions.

2. Best Management Practices and Pollution Prevention

The Regional Water Board has determined that all discharges from the Mare Island Shipyard are most appropriately controlled by BMPs and pollution prevention. The inclusion of BMPs as requirements in discharge permits is authorized by CWA Section 304(e), and in accordance with NPDES regulations at 40 CFR 122.44(k), BMPs can be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible.

3. Contingency Plan, Review and Status Reports

This provision is based on the Basin Plan, the requirements of 40 CFR §122. See Section VII.B.3 of this Order for specific requirements. This provision is incorporated to address potential uncontrollable circumstances, such as flooding of Mare Island Strait that may result in flow into the dry docks during vessel processing, and flooding of the dry docks during large storm events.

4. Storm Water Requirements

This provision is required because storm water runoff from the dry docks and other portions of the facility has the potential to have pollutants at levels exceeding water quality standards, and so they should not be discharged untreated.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for Allied Defense Recycling. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the permittee and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them

with an opportunity to submit their written comments and recommendations. Notification was provided through a public notice in the Vallejo Times Herald.

B. Written Comments

Staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to Heather Ottaway at the Regional Water Board at the address above on the cover page of this Order.

To be considered by the Regional Water Board and to receive a written response from the Regional Water Board staff, written comments must be received at the Regional Water Board offices by 5:00 p.m. on June 13, 2008.

C. Public Hearing

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

Date: July 8 and 9, 2008
Time: 9:00 AM
Location: Auditorium, Elihu Harris State Building
1515 Clay Street
Oakland, California 94612

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge and WDRs. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. The Regional Water Board's web address is <http://www.waterboards.ca.gov/sanfranciscobay/>, where the current agenda and any changes in dates and locations will be posted.

D. Waste Discharge Requirements Petitions

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

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

E. Information and Copying

The Report of Waste Discharge, related documents, tentative effluent limitations and special provisions, comments received, and other information on file may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (510)622-2300.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Heather Ottaway at (510)622-2116 or by email at hottaway@waterboards.ca.gov.

**ATTACHMENT G— STANDARD PROVISIONS AND REPORTING
REQUIREMENTS and SELF-MONITORING
PROGRAM**

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

August 1993

STANDARD PROVISIONS AND REPORTING REQUIREMENTS

For

NPDES SURFACE WATER DISCHARGE PERMITS

1. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
2. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order.
3. Duty to Comply
 - a. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in a Board adopted Order, discharger must comply with the new standard or prohibition. The Board will revise or modify the Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
 - b. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the discharger must comply with the new standard. The Board will revise and modify this Order in accordance with such more stringent standards.
 - c. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 122.41(f)]

4. Duty to Mitigate

The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this order and permit which has a reasonable likelihood of adversely affecting public health or the environment, including such accelerated or additional monitoring as requested by the Board or Executive Officer to determine the nature and impact of the violation. [40 CFR 122.41(d)]

5. Pursuant to U.S. Environmental Protection Agency regulations the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the limits specified in 40 CFR 122.42(a).
6. The discharge of any radiological, chemical, or biological warfare agent waste is prohibited.
7. All facilities used for transport, treatment, or disposal of wastes shall be adequately protected against overflow or washout as the result of a 100-year frequency flood.
8. Collection, treatment, storage and disposal systems shall be operated in a manner that precludes public contact with wastewater, except where excluding the public is inappropriate, warning signs shall be posted.

9. Property Rights

This Order and Permit does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state or local laws, nor create a vested right for the discharge to continue the waste discharge or guarantee the discharger a capacity right in the receiving water. [40 CFR 122.41(g)]

10. Inspection and Entry

The Board or its authorized representatives shall be allowed:

- a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the order and permit;
- b. Access to and copy at, reasonable times, any records that must be kept under the conditions of the order and permit;
- c. To inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under the order and permit; and

- d. To photograph, sample, and monitor, at reasonable times for the purpose of assuring compliance with the order and permit or as otherwise authorized by the Clean Water Act, any substances or parameters at any locations. [40 CFR 122.41(i)]

11. Permit Actions

This Order and Permit may be modified, revoked and reissued, or terminated in accordance with applicable State and/or Federal regulations. Cause for taking such action includes, but is not limited to any of the following:

- a. Violation of any term or condition contained in the Order and Permit;
- b. Obtaining the Order and Permit by misrepresentation, or by failure to disclose fully all relevant facts;
- c. Endangerment to public health or environment that can only be regulated to acceptable levels by order and permit modification or termination; and
- d. Any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

12. Duty to Provide Information

The discharger shall furnish, within a reasonable time, any information the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit. The discharger shall also furnish to the Board, upon request, copies of records required to be kept by its permit. [40 CFR 122.41(h)]

13. **Bypass** (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Board may take enforcement action against the discharger for plant bypass unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that 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.);
- 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 down time. 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 which occurred during normal periods of equipment downtime or preventive maintenance; and

- c. The discharger submitted advance notice of the need for a bypass to the Board. 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 discharger shall submit notice of an unanticipated bypass as required by 40 CFR 122.41(l)(6) (24 hour notice), as required in paragraph E.6.d.

The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation.

14. Availability

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

15. Continuation of Expired Permit

This permit continues in force and effect until a new permit is issued or the Board rescinds the permit. Only those dischargers authorized to discharge under the expiring permit are covered by the continued permit.

These provisions apply to facilities which do not direct all storm water flows to the wastewater treatment plant headworks.

- a. to identify pollutant sources that may affect the quality of storm water discharges; and
- b. to identify, assign, and implement control measures and management practices to reduce pollutants in storm water discharges.

The SWPP Plan may be combined with the existing spill prevention plan as required in accordance with Provision E.5. The SWPP Plan shall be retained on-site and made available upon request of a representative of the Board.

2. Source Identification

The SWPP Plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The SWPP Plan shall include, at a minimum, the following items:

- a. A topographical map (or other acceptable map if a topographical map is unavailable), extending one-quarter mile beyond the property boundaries of the facility, showing: the wastewater treatment facility process areas, surface water bodies (including springs and wells), and the discharge point(s) where the facility's storm water discharges to a municipal storm drain system or other points to waters of the State.

The requirements of this paragraph may be included in the site map required under the following paragraph if appropriate.

- b. A site map showing:
 - i. Storm water conveyance, drainage, and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas of pollutant contact with storm water or release to storm water, actual or potential, including but not limited to outdoor storage, and process areas, material loading, unloading, and access areas, and waste treatment, storage, and disposal areas;
 - v. Location of existing storm water structural control measures (i.e., berms, coverings, etc.);
 - vi. Surface water locations, including springs and wetlands;
 - vii. Vehicle service areas.
- c. A narrative description of the following:
 - i. Wastewater treatment process activity areas;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials of concern with storm water discharges;
 - iii. Material storage, loading, unloading, and access areas;
 - iv. Existing structural and non-structural control measures (if any) to reduce pollutants in storm water discharge;
 - v. Methods of on-site storage and disposal of significant materials.
- d. A list of pollutants that have a reasonable potential to be present in storm water discharge in significant quantities.

3. Storm Water Management Controls

The SWPP Plan shall describe the storm water management controls appropriate for the facility and a time schedule for fully implementing such controls. The appropriateness and priorities of controls in the SWPP Plan shall reflect identified potential sources of pollutants. The description of storm water management controls to be implemented shall include, as appropriate:

a. Storm Water Pollution Prevention Personnel

Identify specific individuals (and job titles) who are responsible for developing, implementing, and reviewing the SWPP Plan.

b. Good Housekeeping

Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce potential for pollutants to enter the storm drain conveyance system.

c. Spill Prevention and Response

Identify areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, cleanup equipment and procedures should be identified, as appropriate. The necessary equipment to implement a clean up shall be available and personnel trained in proper response, containment and cleanup of spills. Internal reporting procedures for spills of significant materials shall be established.

d. Source Control

Source controls, such as elimination or reduction of the use of toxic pollutants, covering of pollutant source areas, sweeping of paved areas, containment of potential pollutants, labeling all storm drain inlets with "No Dumping" signs, isolation/separation of industrial from non-industrial pollutant sources so that runoff from these areas does not mix, etc.

e. Storm Water Management Practices

Storm water management practices are practices other than those which control the sources of pollutants. They include treatment/conveyance structures such as drop inlets, channels, retention/detention basins, treatment vaults, infiltration galleries, filters, oil/water separators, etc. Based on assessment of the potential of various sources to contribute pollutants to storm water discharges in significant quantities, additional storm water management practices to remove pollutants from storm water discharges shall be implemented and design criteria shall be described.

f. Sediment and Erosion Control

Measures to minimize erosion around the storm water drainage and discharge points such as riprap, revegetation, slope stabilization, etc. shall be described and implemented.

g. Employee Training

Employee training programs shall inform all personnel responsible for implementing the SWPP Plan. Training should address spill response, good housekeeping, and material management practices. New employee and refresher training schedules should be identified.

h. Inspections

All inspections shall be done by trained personnel. Material handling areas shall be inspected for evidence of, or the potential for, pollutants entering storm water

discharges. A tracking or follow up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorder. Inspection records shall be retained for five years.

i. Records

A tracking and follow-up procedure shall be described to ensure that adequate response and corrective actions have been taken in response to inspections.

4. An annual facility inspection shall be conducted to verify that all elements of the SWPP Plan are accurate and up to date. This results of this review shall be reported in the annual report to the Board on October 1 of each year.

1. When sewage sludge is either sent to a landfill or applied to land as a soil amendment it should be monitored as follows:

- a. Sewage sludge disposal shall be monitored at the following frequency:

Metric tons sludge/365 days	Frequency
0-290	Once per year
290-1500	Quarterly
1500-15,000	Six times per year
Over 15,000	Once per month

(Metric tons are on a dry weight basis)

- b. Sludge shall be monitored for the following constituents:

Land Application: As, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Se, Zn
Municipal Landfill: Paint filter test (pursuant 40 CFR 258)
Sludge-only Landfill: As, Cd, Ni, (if no liner and leachate system)

2. The sludge must meet the following requirements prior to land application. The discharger must either demonstrate compliance or, if it sends the sludge to another party for further treatment and/or distribution, must give the recipient the information necessary to assure compliance.

- a. Exceptional quality sludge: Sludge that meets the pollutant concentration limits in Table III of 40 CFR Part 503.13, Class A pathogen limits, and one of the vector attraction reduction requirements in 503.33(b)(1)-(b)(8) is exceptional quality sludge and does not have to be tracked further for compliance with general requirements (503.12) and management practices (503.14).

- b. Sludge used for agricultural land, forest, or reclamation shall meet the pollutant limits in Table I (ceiling concentrations) and Table II or Table III (cumulative loadings or pollutant concentration limits) of 503.13. It shall also meet the general requirements (503.12) and management practices (503.14) (if not exceptional quality), Class A or Class B pathogen levels with associated access restrictions (503.32) and one of the 10 vector attraction reduction requirements in 503.33(b)(1)-(b)(10).
 - c. Sludge used for lawn or home gardens must meet exceptional quality sludge limits.
 - d. Sludge that is sold or given away in a bag or other container shall meet the pollutant limits in either Table III or Table IV (pollutant concentration limits or annual pollutant loading rate limits) of 503.13. If Table IV is used, a label or information sheet must be attached that explains Table IV (see 503.14). The sludge must also meet the Class A pathogen limits and one of the vector attraction reduction requirements in 503.33(b)(1)-(b)(8).
1. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment disposal and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this order and permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The discharger shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this order and permit. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the Board. [40 CFR 122.41(e)]
 2. Safeguard to electric power failure:
 - a. The discharger shall, within ninety (90) days of the effective date of this permit, submit to the Board for approval a description of the existing safeguards provided to assure that, should there be reduction, loss, or failure of electric power, the discharger shall comply with the terms and conditions of its Order. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past five years on effluent quality and on the capability of the discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Board.
 - b. Should the Board not approve the existing safeguards, the discharger shall, within ninety (90) days of having been advised by the Board that the existing safeguards are inadequate, provide to the Board and the U.S. Environmental Protection Agency a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the permittee shall comply with the terms and

conditions of this permit. The schedule of compliance shall, upon approval of the Board Executive Officer, become a condition of the Order.

- c. If the discharger already has approved plan(s), the plan shall be revised and updated as specified in the plan or whenever there has been a material change in design or operation. A revised plan shall be submitted to the Board within ninety (90) days of the material change.
3. POTW facilities subject to this order and permit shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Division 4, Chapter 14, Title 23 of the California Code of Regulations.

4. Signatory Requirements

- a. All reports required by the order and permit and other information requested by the Board or USEPA Region 9 shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person. [40 CFR 122.22(b)]

b. Certification

All reports signed by a duly authorized representative under Provision E.1.a. shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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)]

5. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall promptly submit the missing or correct information. [40 CFR 122.41(l)(8)]

6. False Reporting

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall be subject to enforcement procedures as identified in Section F of these Provisions.

7. Transfers

- a. This permit is not transferable to any person except after notice to the Board. The Board may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
- b. Transfer of control or ownership of a waste discharge facility under an National Pollutant Discharge Elimination System permit must be preceded by a notice to the Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing discharger and proposed discharger containing specific dates for transfer of responsibility, coverage, and liability between them. Whether an order and permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If order and permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Board's receipt of a complete application for waste discharge requirements and an NPDES permit.

8. Spill Prevention and Contingency Plans

The discharger shall file with the Board, for Executive Officer review and approval within ninety (90) days after the effective date of this Order, a technical report or a statement that the existing plan(s) was reviewed and updated, as appropriate, on preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report or updated revisions should:

- a. Identify the possible sources of accidental loss, untreated or partially treated waste bypass, and polluted drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- b. Evaluate the effectiveness of present facilities and procedures and state when they became operational.
- c. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

This Board, after review of the technical report or updated revisions, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger. If the discharger already has an approved plan(s) he shall update them as specified in the plan(s).

9. Compliance Reporting

a. Planned Changes

The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

b. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final compliance dates contained in any compliance schedule shall be submitted within 10 working days following each scheduled date unless otherwise specified within this order and permit. If reporting noncompliance, the report shall include a description of the reason for failure to comply, a description and schedule of tasks necessary to achieve compliance and an estimated date for achieving full compliance. A final report shall be submitted within 10 working days of achieving full compliance, documenting full compliance

c. Anticipated Non-compliance

All POTWs must provide adequate notice to the Board of:

- i. Any introduction of new pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.
- ii. Any substantial or material change in the volume or character of pollutants being introduced into that POTW by an input source at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of influent 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.

d. Non-compliance Reporting (Twenty-four hour reporting:)

- i. The discharger shall report any noncompliance that may endanger health or the environment. All pertinent 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 working 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.

- ii. The following shall be included as information that must be reported within 24 hours under this paragraph:
 - (1) Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - (2) Any upset that exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed in this permit to be reported within 24 hours.
 - (4) The Board may waive the above-required written report on a case-by-case basis.
1. The provision contained in this enforcement section shall not act as a limitation on the statutory or regulatory authority of the Board.
2. Any violation of the permit constitutes violation of the California Water Code and regulations adopted hereunder and the provisions of the Clean Water Act, and is the basis for enforcement action, permit termination, permit revocation and reissuance, denial of an application for permit reissuance; or a combination thereof.
3. The Board may impose administrative civil liability, may refer a discharger to the State Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code or federal law for violation of Board orders.
4. 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 and permit.
5. A discharger seeking to establish the occurrence of any upset (See Definitions, G. 24) has the burden of proof. A discharger who wishes to establish the affirmative defense of any upset in an action brought for noncompliance shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - a. an upset occurred and that the permittee can identify the cause(s) or the upset;
 - b. the permitted facility was being properly operated at the time of the upset;
 - c. the discharger submitted notice of the upset as required in paragraph E.6.d.; and
 - d. the discharger complied with any remedial measures required under A.4.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

In any enforcement proceeding, the discharger seeking to establish the occurrence of any upset has the burden of proof. [40 CFR 122.41(n)]

6. Bypass means the intentional diversion of waste streams from any portion of treatment facility.
7. Daily discharge means:
 - a. For flow rate measurements, the average flow rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
 - b. For pollutant measurements, the concentration or mass emission rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
8. Daily Maximum Limit means the maximum acceptable daily discharge. For pollutant measurements, unless otherwise specified, the results to be compared to the daily maximum limit are based on composite samples.
9. DDT and Derivatives shall mean the sum of the p,p' and o,p' isomers of DDT, DDD (TDE), and DDE.
10. Duly authorized representative is one whose:
 - a. Authorization is made in writing by a principal executive officer or ranking elected official;
 - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general manager in a partnership, 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.); and
 - c. Written authorization is submitted to the USEPA Region 9. If an authorization becomes no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Board and USEPA Region 9 prior to or together with any reports, information, or applications to be signed by an authorized representative.

11. Hazardous substance means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.
12. HCH shall mean the sum of the alpha, beta, gama (Lindane), and delta isomers of hexachlorocyclohexane.
13. Inadequately Treated Waste is wastewater receiving partial treatment but failing to meet discharge requirements.
14. Incompatible pollutants are:
 - a. Pollutants which create a fire or explosion hazard in the POTW;
 - b. Pollutants which will cause corrosive structural damage to the POTW, or wastewaters with pH lower than 5.0 pH units, unless the facilities are specifically designed to accommodate such wastewater;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
 - d. Any pollutant, including oxygen-demanding pollutants (e.g., BOD) released into the wastewater system at a flow rate and/or pollutant concentration which will cause interference with the POTW.
 - e. Heat in amounts which will inhibit biological activity in the POTW and result in interference, or heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the works is designed to accommodate such heat or the Board approves alternate temperature limits.
15. Indirect discharger means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
16. Initial dilution is the process which results in the rapid and irreversible turbulent mixing of wastewater with receiving water around the point of discharge.
17. 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. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples which may be taken in any calendar day. If a composite sample is taken, 'C₁' is the concentration measured in the composite sample and 'Q₁' is the average flow rate occurring during the period over which samples are composited. The daily concentration measured over any calendar day of all constituents shall be determined from the flow-weighted average of the same constituents 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. 'Q' and 'C' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

18. Maximum allowable mass emission rate, whether for a 24-hour, weekly 7-day, monthly 30-day, or 6-month period, is a limitation expressed as a daily rate determined with the formulas in paragraph above, using the effluent concentration limit specified in the order and permit for the period and the specified allowable flow. (Refer to Section C of Part A of Self-Monitoring Program for definitions of limitation period)
19. Overflow is defined as the intentional or unintentional spilling or forcing out of untreated or partially treated wastes from a transport system (e.g. through manholes, at pump stations, and at collection points) upstream from the plant headworks or from any treatment plant facilities.
20. POTW means Publicly Owned Treatment Works.
21. POTW Removal efficiency is expressed as the percentage of the ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities. Removal efficiencies of a treatment plant shall be determined using monthly averages of pollutant concentration of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

Removal Efficiency (%) = 100 X [1-(**Effluent Conc./Influent Conc.**)]

When preferred, the discharger may substitute mass loadings and mass emissions for the concentrations.
22. Priority pollutants are those constituents referred to in 40 CFR S122, Appendix D and listed in the USEPA NPDES Application Form 2C, (dated 6/80) Items V-3 through V-9.

23. Sludge means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in wastewater by the unit processes of a treatment system. It also includes but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.
24. Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.
25. Toxic pollutant means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act or under 40 CFR S401.15.
26. Total Identifiable Chlorinated hydrocarbons (TICH) shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, PCBs and other identifiable chlorinated hydrocarbons.
27. 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 which can reasonably be expected to occur in the absence of a bypass or overflow. It does not mean economic loss caused by delays in production.
28. Untreated waste is defined as raw wastewater.
29. Upset means an exceptional incident in which there is unintentional temporary noncompliance with effluent technology based permit limitations in the order and permit because of factors beyond the reasonable control of the discharger. It 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.
30. Waste, waste discharge, discharge of waste, and discharge are used interchangeably in this order and permit. The requirements of this order and permit are applicable to the entire volume of water, and the material therein, which is disposed of to surface and ground waters of the State of California.

August 1993

**SELF-MONITORING PROGRAM
PART A**

NPDES PERMITS

A. BASIS AND PURPOSE

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed in accordance with the 40 CFR S136 or other methods approved and specified by the Executive Officer of this Regional Board (See Part B).

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The discharger is required to perform sampling and analyses according to the schedule in Part B in accordance with the following conditions:

1. Influent

Composite samples of influent shall be collected on varying days selected at random and shall not include any plant recirculation or other sides stream wastes. Deviation from this must be approved by the Executive Officer.

2. Effluent

- a. Composite samples of effluent shall be collected on days coincident with influent composite sampling unless otherwise stipulated. At least one sampling day in each seven shall reflect one day of weekend discharge, one day of peak loading and during major unit operation shutdown or startup. The Executive Officer may approve an alternative sampling plan if it is demonstrated to the EO's satisfaction that expected operating conditions for the facility warrant a deviation from the standard sampling plan.
- b. Grab samples of effluent shall be collected during periods of maximum peak flows and shall coincide with effluent composite sample days.
- c. Fish bioassay samples shall be collected on days coincident with effluent composite sampling.
 - 1) Bioassay tests should be performed on effluent samples after chlorination-dechlorination.
 - 2) Total ammonia nitrogen shall be analyzed and un-ionized ammonia calculated whenever fish bioassay test results fail to meet the specified percent survival.
- d. If two consecutive samples of a constituent monitored on a weekly or monthly basis in a 30 day period exceed the monthly average effluent limit for any parameter, (or if the required sampling frequency is once per month and the monthly sample exceeds the monthly average limit), the sampling frequency shall be increased to daily until the additional sampling shows that the most recent 30-day moving average is in compliance with the monthly average limit.
- e. If any maximum daily limit is exceeded, the sampling frequency shall be increased to daily until two samples collected on consecutive days show compliance with the maximum daily limit.
- f. If the final or intermediate results of any single bioassay test indicate a threatened violation (i.e. the percentage of surviving test organisms is less than the required survival percentage), a new test will begin and the discharger shall investigate the cause of the mortalities and report the finding in the next self-monitoring report.

- g. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be collected at least every 30 minutes until compliance is achieved.
- h. When any type of bypass occurs, composite samples shall be collected on a daily basis for all constituents at all affected discharge points which have effluent limits for the duration of the bypass.

3. Storm Water

If all storm water is not directed back to the headworks during the wet season (October 1 to April 30) the discharger shall:

- a. Conduct visual observations of the storm water discharge locations on at least one storm event per month that produces significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor, etc.
- b. Measure (or estimate) the total volume of storm water discharge and collect and analyze grab samples of storm water discharge from at least two storm events that produce significant storm water discharge for: oil and grease, pH, total suspended solids (TSS), specific conductance, and toxic chemicals and other pollutants that have a reasonable potential to be present in storm water discharge in significant quantities.

The grab sample(s) shall be taken during the first thirty minutes of the discharge. If the collection of the grab sample(s) during the first 30 minutes is impracticable, grab sample(s) can be taken during the first hour of the discharge, and the discharger shall explain in the annual monitoring report why the grab sample(s) could not be taken in the first 30 minutes.

- c. Testing for the presence of non-storm water discharges shall be conducted no less than twice during the dry season (May to September) at all storm water discharge locations. Tests may include visual observations of flows, stains, sludges, odors, and other abnormal conditions; dye tests; TV line surveys; and/or analysis and validation of accurate piping schematics. Records shall be maintained of the description of the method used, date of testing, locations observed, and test results.
- d. Samples shall be collected from all locations where storm water is discharged. Samples must represent the quality and quantity of storm water discharged from the facility. If a facility discharges storm water at multiple locations, the discharger may sample a reduced number of locations if it is established and documented in the monitoring program that storm water discharges from different locations are substantially identical.

- e. Records of all storm water monitoring information and copies of all reports required by this permit shall be retained for a period of at least three years from the date of sample, observation, or report.

4. Receiving Waters:

- a. Receiving water samples shall be collected on days coincident with composite sampling of effluent.
- b. Receiving water samples shall be collected at each station on each sampling day during the period within 1 hour following low slack water. Where sampling at lower slack water period is not practical, sampling shall be performed during higher slack water period. Samples shall be collected within the discharge plume and down current of the discharge point so as to be representative, unless otherwise stipulated.
- c. Samples shall be collected within one foot below the surface of the receiving water body, unless otherwise stipulated.

5. Bottom Sediment Samples and Sampling and Reporting Guidelines

- a. Bottom sediment sample means: (1) a separate grab sample taken at each sampling station for the determination of selected physical-chemical parameters, or (2) four grab samples collected from different locations in the immediate vicinity of a sampling station while the boat is anchored and analyzed separately for macroinvertebrates.

Physical-chemical sample analyses include as a minimum:

- 1) pH
- 2) TOC (Total Organic Carbon)
- 3) Grease analysis:
 - (a) Mg grease per kg sediment
 - (b) Percent fraction of hydrocarbon in grease
- 4) Selected metals (depending on industrial input) mg/kg dry wt (and soluble metals in mg/l).
- 5) Particle size distribution, i.e. , % sand, % silt-clay
- 6) Depth of water at sampling station in meters

- 7) Water salinity and temperature in the water column within one meter of the bottom.

D. STANDARD OBSERVATIONS

1. Receiving Water

- a. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter, presence or absence, source, and size of affected area.
- b. Discoloration and turbidity: description of color, source, and size of affected area.
- c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.
- d. Evidence of beneficial water use: presence of water-associated waterfowl or wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
- e. Hydrographic condition:
 - 1) Time and height of corrected high and low tides (corrected to nearest NOAA location for the sampling date and time of sample and collection).
 - 2) Depth of water columns and sampling depths.
- f. Weather conditions:
 - 1) Air temperatures.
 - 2) Wind – direction and estimated velocity.
 - 3) Total precipitation during the previous five days and on the day of observation.

2. Wastewater Effluent

- a. Floating and suspended material of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence
- b. Odor: presence or absence, characterization, source, distance of travel.

3. Beach and Shoreline

- a. Material of waste origin: presence or absence, description of material, estimated size of affected area, and source.
- b. beneficial use: estimate number of people sunbathing, swimming, water-skiing, surfing, etc.

4. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

- a. For each impoundment determine amount of the freeboard at lowest point of dikes confining liquid wastes.
- b. Evidence of leaching liquid from area of confinement and estimated size of affected area. Show affected area on a sketch and volume of flow (gpm, etc.)
- c. Odor: presence or absence, characterization, source, and distance of travel.
- d. Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

5. Periphery of Waste Treatment and/or Disposal Facilities

- a. Odor: presence or absence, characterization, source, and distance of travel.
- b. Weather condition: wind direction and estimated velocity

E. RECORDS TO BE MAINTAINED

1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the discharger and accessible (at the waste treatment plant), and retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the USEPA, Region IX. Such records shall show the following for each sample:
 - a. Identity of sampling and observation stations by number.
 - b. Date and time of sampling and/or observations.
 - c. Method of composite sampling (See Section G -Definition of Terms)
 - d. Type of fish bioassay test (96 hour static or flow-through bioassay)

- e. Date and time that analyses are started and completed, and name of personnel performing the analyses.
 - f. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.
 - g. Calculations of results.
 - h. Results of analyses and/or observations.
2. A tabulation shall be maintained showing the following flow data for influent and effluent stations and disposal areas:
 - a. Total waste flow or volume, for each day.
 - b. Maximum and minimum daily flows for each month.
 3. A tabulation shall be maintained showing the following information for all other plant wastes and disposal areas:
 - a. Total monthly volume of grit, skimming, and undigested sludge (in cubic yards or cubic feet) from each treatment unit and the disposal site location
 - b. Total monthly volume and solids content of dewatered sludge from each treatment unit (in cubic yards or cubic feet) and the disposal site location.
 4. A tabulation reflecting bypassing and accidental waste spills shall be maintained showing information items listed in Sections E -1 and E-2 for each occurrence.
 5. A chronological log for each month shall be maintained of the effluent disinfection and bacterial analyses, showing the following:
 - a. Date and time each sample is collected and waste flow rate at time of collection.
 - b. Chlorine residual, contact time, and dosage (in kilograms per day and parts per million).
 - c. Coliform count for each sample
 - d. Moving median coliform of the number of samples specified by waste discharge requirements.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Spill Reports

A report shall be made of any spill of oil or other hazardous material. Spills shall be reported to this Regional Board, at (510) 286-1255 on weekdays during office hours from 8 AM to 5 PM, and to the Office of Emergency Services at (800) 852-7550 during non office hours, and the U.S. Coast Guard at (415) 437-3091 (if the spill is into navigable waters) by telephone immediately after occurrence . A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to:

- a. nature of waste or pollutant,
- b. quantity involved,
- c. duration of incident,
- d. cause of spill,
- e. SPCC Spill Prevention and Containment Plan in effect, if any,
- f. estimated size of affected area,
- g. nature of effects (i.e., fishkill, discoloration of receiving water, etc.),
- h. corrective measures that have been taken or planned, and a schedule of these activities, and
- i. persons notified.

2. Reports of Plant Bypass, Treatment Unit Bypass and Permit Violation

In the event the discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:

- a. Maintenance work, power failures, or breakdown of waste treatment equipment, or
- b. accidents caused by human error or negligence, or
- c. other causes, such as acts of nature,

the discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 7 working days of the telephone notification . The written report shall include time and date, duration

and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day (Section C.2.h). Such daily analyses shall continue until such time as the effluent limits have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

3. The discharger shall file a written technical report to be received at least 30 days prior to advertising for bid (60 days prior to construction) on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said reports shall describe the nature, cost, and scheduling of all actions necessary to preclude such discharge. In no case will any discharge of wastes in violation of permit and order be permitted unless notification is made to the Executive Officer and approval obtained from the Regional Board.

4. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month (unless specified otherwise) and filed no later than the fifteenth day of the following month. The reports shall be comprised of the following:

- a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- 1) Identification of all violations of waste discharge requirements found during the reporting period,
- 2) Details of the magnitude, frequency, and dates of all violations,
- 3) The cause of the violations, and
- 4) Discussion of the corrective actions taken or planned and the time schedule for completion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.

Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person.

The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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."

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be prepared using the example shown in Part B. The discharger will prepare the format using those parameters and requirement limits for receiving water and effluent constituents specified in his permit.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in **Part B** by date, time, type of sample, detection limit and station, signed by the laboratory director. The report format will be prepared using the examples shown in Part B.

- 1) If the discharger monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this Permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Self-Monitoring Report.
- 2) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

e. Effluent Data Summary

Summary tabulations of the data shall include for each constituent total number of analyses, maximum, minimum, and average values for each period. The report format will be the NPDES Discharge Monitoring Report., EPA Form 3320-1. Flow data shall be included. The original is to be submitted to:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

f. Flow Data

The tabulation pursuant to Section F-2.

5. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain :

- a. Both tabular and graphical summaries of the monitoring data during the previous year.
- b. A comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
- c. List of Approved Analyses
 - 1) Listing of analyses for which the discharger is approved by the State Department of Health Services.
 - 2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).
 - 3) List of "waived" analyses, as approved.
The report format shall be prepared by using the examples shown in Part B.

G. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A composite sample is defined as a sample composed of individual grab samples mixed in proportions varying not more than plus or minus five percent from the

- instantaneous rate (or highest concentration) of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the period of discharge for 8 consecutive or of 24 consecutive hours, whichever is specified in Table 1 of Part B
3. A flow sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.
 4. Duly authorized representative is one whose:
 - a. Authorization is made in writing by a principal executive officer or ranking elected official;
 - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietor in a sole proprietorship, 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.)
 5. Average values for daily and monthly values is obtained by taking the sum of all daily values divided by the number of all daily values measured during the specified period.
 6. Median of an ordered set of values is that value below and above which there is an equal number of values, or which is the arithmetic mean of the two middle values, if there is no one middle value.
 - a. A 5-day median value for coliform bacteria is the third highest count of 5 daily counts obtained from 5 consecutive sampling days. A 7-day median value is the fourth highest of 7 daily counts obtained from 7 consecutive sampling days.
 - b. A 5-day moving median value for coliform bacteria is the median value calculated for each consecutive sampling day based upon the period from the sample day and the previous 4 sampling days.
 - c. A 7-day moving median is calculated for each consecutive sampling day based upon the period from the sample day and the previous 6 sampling days. Moving median values for the beginning of the month shall be calculated using the previous month's counts (i.e. the last four counts for a 5-day moving median and the last seven counts for a 7-day moving median from the previous month).

7. A 6-month median means a moving median of daily values for any 180 day period in which daily values represent flow-weighted average concentrations within a daily or 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.
8. The geometric mean is anti log of log mean. Used for determining compliance with bacteriological standards, the lcg mean is calculated with the following equation:

$$\text{Log Mean} = \frac{1}{N} \sum_{i=1}^N \text{Log } C_i$$

in which "N" is the number of days samples that were analyze during the period and "C_i" is the concentration of bacteria (MPN/100 ml) found on each day of sampling.

9. Daily Maximum limit is the total discharge in a calendar day for pollutants measured by mass or the average measurement obtained for other pollutants.
10. Instantaneous Maximum is defined as the highest measurement obtained for the calendar day, as determined by a grab sample.
11. A depth-integrated sample is defined as a water or waste sample collected by allowing a sampling device to fill during a vertical traverse in the waste or receiving water body being sampled and shall be collected in such a manner that the collected sample will be representative of the waste or water body at that sampling point.
12. Bottom sediment sampling and reporting guidelines mean those guidelines developed by the Regional Board staff to provide for standard bottom sampling, laboratory, and reporting procedures.