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 legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

A. The United States Department of the Navy (hereinafter Discharger) is the owner and operator of Naval Base San Diego Complex (hereinafter Facility), a U.S. naval base. The Naval Base San Diego Complex is comprised of the following four installations: Naval Base San Diego – main base (NBSD), Broadway Complex, Mission Gorge Recreational Facility (MGRF; also known as Admiral Baker Field), and the Naval Medical Center, San Diego (NMCSD). These four installations are described in Section II and are hereinafter jointly referred to as the "Facility".

For the purposes of this Order, references to the "discharger" or "Discharger" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	9 000000497
Discharger	United States Department of the Navy
Name of Facility	Naval Base San Diego Complex
Facility Address	3455 Senn Road, Building 72
	San Diego, CA 91236-5084
	San Diego County
Facility Contact, Title and Phone	Mark Edson, Installation Environmental Program Director, (619) 556-1532
Authorized Person to Sign and Submit Reports	Installation Environmental Program Manager or Water Program Manager
Mailing Address	Same as Facility Address
Billing Address	Same as Facility Address
Type of Facility	Naval Base
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable

Facility Permitted Flow	Not Applicable
Facility Design Flow	Not Applicable
Watershed	San Diego Bay, San Diego River
Receiving Water	San Diego Bay, Chollas Creek, Paleta Creek (Seventh Street Channel), the San Diego River, and surface water in the Lindberg Hydrologic Subarea.
Receiving Water Type	Enclosed Bay and Inland Surface Waters

B. The Facility is currently regulated by Order Nos. R9-2002-0169 and R9-2003-0365 for discharges from multiple discharge points to San Diego Bay and San Diego River, waters of the United States (US).

Order No. R9-2002-0169, National Pollutant Discharge Elimination System (NPDES) No. CA0109169, currently regulates several types of wastewater discharges at numerous discharge locations within the Facility including industrial storm water; steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; and miscellaneous discharges associated with facility maintenance. Order No. R9-2003-0265, NPDES No. CA0107867, regulates the discharge of saltwater supply system water, graving dock flood dewater, graving dock caisson gate ballast water, and industrial storm water from several discharge locations from the US Navy Graving Dock (Graving Dock), which is located within the Naval Base San Diego main base portion of the Facility.

Order No. R9-2002-0169, an NPDES permit for the Facility, was adopted on November 13, 2002 and expired on November 13, 2007. Order No. R9-2003-0365 for the Graving Dock was adopted on August 13, 2003 and expired on August 13, 2008. The terms and conditions of these Orders have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and NPDES permits are adopted pursuant to this Order.

In 1976, the San Diego Unified Port District was issued an NPDES permit for the United States Navy (USN) Graving Dock. The NPDES permit was reissued in 1981. During this time the surrounding NBSD installation did not have an NPDES permit. In 1986, the USN Graving Dock permit was amended to transfer responsibility for compliance with the NPDES permit from San Diego Unified Port District to the Discharger. A year later, in 1987, the NPDES permit for the USN Graving Dock was reissued to the Discharger.

In 1992, the Discharger enrolled in the State Water Resource Control Board's (State Water Board's) General Permit to Discharge Storm Water Associated with Industrial Activity Order No. 91-13-DWQ for the Facility. The enrollment in the Industrial Stormwater General Permit did not include the USN Graving Dock because the Discharger had an individual NPDES permit for the USN Graving Dock.

In 1997, the State Water Board reissued the Industrial Stormwater General NPDES Permit Order No. 97-03-DWQ, and the Discharger continued enrollment in the Industrial Stormwater General Permit.

In 1998, the individual NPDES permit for the USN Graving Dock was reissued to the Discharger.

In 2002, an individual NPDES permit for the NBSD Complex (Order No. R9-2002-0169) was issued for storm water and additional industrial wastewater discharges from the Facility; this individual permit did not include the USN Graving Dock. In 2003, the individual NPDES permit for the USN Graving Dock was reissued again as a separate permit (current Graving Dock Order; Order No. R9-2003-0365 for the Graving Dock).

Order No. R9-2002-0169 for the Naval Base San Diego (NBSD) Complex expired in 2007. Order No. R9-2003-0365 for the USN Graving Dock expired in 2008. Both NPDES permits have been automatically continued and remain in effect.

While, historically the Discharger was initially issued a NPDES permit for the USN Graving Dock, and then a separate permit for the remainder of the Facility, it is appropriate for the USN Graving Dock to be combined with the remainder of the Facility for NPDES coverage because the USN Graving Dock is located within the geographical boundaries of NBSD and is owned and operated by the same Discharger. The coverage of Order Nos. R9-2002-0169 for NBSD and R9-2003-0365 for the USN Graving Dock is incorporated into this Order to achieve maximum efficiency and economy of resources, and minimize redundancy to the Discharger and the San Diego Water Board. All applicable requirements for the USN Graving Dock and Naval Base San Diego Complex have been incorporated directly into this Order or revised as necessary. Municipal storm water requirements have also been incorporated into this Order.

The San Diego Water Board recently concluded proceedings to issue a Cleanup and Abatement Order (CAO) for discharges of metals and other pollutant wastes to San Diego Bay marine sediment and waters located along the eastern shore of central San Diego Bay extending approximately from the Sampson Street Extension to the northwest and Chollas Creek to the southeast, and from the shoreline out to the San Diego Bay main shipping channel to the west. This area is collectively referred to as the “Shipyard Sediment Site.” The CAO finds that the Discharger, along with National Steel and Shipbuilding Company (NASSCO); BAE Systems San Diego Ship Repair, Inc.; City of San Diego; Campbell Industries, Inc.; San Diego Gas and Electric and the San Diego Unified Port District are responsible for the sediment impairment and accountable for the cleanup of contaminated sediments in San Diego Bay at the Shipyard Sediment Site.

C. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for reissuance of its WDRs and NPDES permit for the Naval Base San Diego Complex (Order No. R9-2002-0169) on June 18, 2007. The Discharger also filed a ROWD and submitted an application for renewal of its WDRs and NPDES permit for the USN Graving Dock on July 2, 2008. Additional information to support the NPDES permit reissuance was provided by the Discharger on February 25, 2010 and March 2, 2010. Site visits were conducted by the United States Environmental Protection Agency's (USEPA's) consultant, PG Environmental, LLC, on April 26, 2010 and June 7, 2011, and to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Discharger manages several military installations in the San Diego area. These installations are aligned into three major naval bases, including the Naval Base San Diego Complex (referred to as the Facility in this Order), Naval Base Coronado (NBC), and Naval Base Point Loma (NBPL). NBSD Complex is the largest of the three major naval base complexes operated by the Discharger. The mission of NBSD Complex is to provide logistical support for the operating forces of the U.S. Navy and for dependent activities and other commands as assigned. NBSD Complex forms the major West Coast logistics base for the surface operating forces of the U.S. Navy and for dependent activities and other commands. The Facility known as Naval Base San Diego Complex is comprised of the following installations:

- Naval Base San Diego – main base (NBSD; formerly known as Naval Station San Diego or NAVSTA),
- Broadway Complex,
- Mission Gorge Recreational Facility (MGRF; also known as Admiral Baker Field), and
- The Naval Medical Center, San Diego (NMCSD).

Of the four installations comprising the Facility, only NBSD has industrial process wastewater and industrial storm water discharges subject to regulation under an NPDES permit. All four installations have discharges of storm water from Small (Phase II) Municipal Separate Storm Sewer Systems (MS4s) subject to regulation under this NPDES permit.

Naval Base San Diego — main base: NBSD is located at 32nd Street and Harbor Drive approximately 3 miles southeast of downtown San Diego on the eastern edge of San Diego Bay. It is bordered by the City of San Diego to the north and east and National City to the south and east and San Diego Bay to the west. NBSD includes over 45 tenant activities, including the following major commands: Fleet Training Center

(FTC), Naval Facilities Engineering Command Southwest (NAVFAC SW), Southwest Regional Maintenance Center (SWRMC), and Naval Supply Center (NSC). Personnel support activities at NBSD include Regional Commissary Store, Naval Dental and Medical Clinics, Naval Legal Service Office Trial Judiciary, Environmental Preventative Medicine Unit Five, Personnel Support Detachment, and Navy Resale and Service Support Office.

NBSD is homeport to approximately 55 Pacific Fleet ships and provides in-port berthing services for 56 surface force ships and 51 service craft.

NBSD occupies 1,049 acres of land and 326 water acres at a site lying east and west of Harbor Drive. The wet side consists of the Bay front area west of Harbor Drive, while the dry side consists of the community facilities east of Harbor Drive.

The wet side is intensively developed and supports waterfront operations, ship berthing and maintenance, station maintenance, training, administration, and logistics functions. Operational facilities include piers, quay walls, small craft berthing facilities, fueling facilities, armories, and waterfront operations buildings. The straight-line map measurement of the shoreline at NBSD is 1.6 miles. NBSD contains 12 berthing piers, a mole pier, two channels, and various quay walls that have a total shoreline measurement of approximately 5 miles. Also included is the USN Graving Dock.

The 12 piers at NBSD are used to berth surface ships, support vessels, and barges. Supplies and equipment are loaded onto the vessels at these piers, and berth-side ship maintenance is also performed (i.e., maintenance while vessels are docked at the pier). Berth-side ship maintenance may include abrasive blasting, hydroblasting, metal grinding, painting tank cleaning, removal of bilge and ballast water, removal of anti-fouling paint, sheet metal work, electrical work, mechanical repair, engine repair, hull repair, and sewage disposal. Berth-side ship repair activities are generally less complex than those conducted at commercial shipyards or at the Discharger's USN Graving Dock.

Ship maintenance may also be conducted on the piers. Boats, ship sections, or parts can be placed on the piers or adjacent lands for repairs. The ship maintenance activities on piers, land, or berth side may be conducted by Naval personnel, civil service personnel, or by civilian contractors. The breadth of work performed by the civilian contractors is typically greater than the work performed by Naval personnel. The most complex ship repair work at the NBSD-mainbase is performed at Pier 13. Typically, civilian contractors will store materials and supplies on the piers while working aboard the ships.

The USN Graving Dock is used to conduct repair and maintenance activity which cannot normally be conducted while the vessel is waterborne. These activities generally include exterior: hull repair; wielding; grinding; abrasive blasting; hydroblasting; and painting; the repair or replacement of shafts, propellers, and rudders; and the repair or replacement of valves and fittings below the waterline. Utility services

provided to a docked vessel may include electrical, steam, fresh (potable) water, salt water (from the Bay), and sewage disposal. Wastes generated during ship repair include spent abrasives, paint, rust, petroleum products, marine growth and general refuse and debris.

NBSD also has several shore-side industrial maintenance repair shops onsite. Personnel at these shops repair various vessel parts such as antenna or ship mechanics.

Two land parcels within the NBSD perimeter are not under the direct control of the Commander Navy Region Southwest (CNRSW) or Executive Officers at the NBSD. A 25.8-acre compound is owned by the Naval Supply Center and 40 acres of railroad right-of-way is owned by the Burlington Northern and Santa Fe Railway (BNSF) and the Metropolitan Transit Development Board (MTDB). Finally, 54.51 acres of the NBSD parcel are occupied under easement or permit and contain Interstate 5, Harbor Drive, and various public utilities.

Industrial activities at NBSD are classified as fuel storage and dispensing, hazardous substance storage, material handling/loading docks, materials storage, metal fabrication, painting, recycling collection center, repair and maintenance (general), sandblasting, scrap yard, ship support services, and fleet vehicle repair and maintenance.

Wastewaters and storm water discharged from NBSD to waters of the United States include:

Table F-2. Discharges from the Facility

Types of Discharge	Discharge Point Nos.
Steam Condensate	SC-001 through SC-175
Pier Boom, Fender, and Mooring Cleaning Wastewater	BC-001
Utility Vault and Manhole Dewatering	UV-001 through UV-012
Graving Dock Deflooding Water/Salt Water Rinse	NGD-001 through NGD-002
Caisson Ballast Dewatering	NGD-003
Emergency Fire Suppression/Saltwater Supply	NGD-004
Weight Test Water	At any Pier
Seawater Cooling Overboard Discharges	NGD-005
Miscellaneous Dischargers	Various Locations
Storm Water	[1]

[1] Various locations as discussed in section II.A.1 of this Fact Sheet.

The Discharger discharges storm water through numerous storm water conveyance systems and outfalls located throughout NBSD. This Order regulates the discharge of storm water from NBSD to waters of the US pursuant to Clean Water Act (CWA) section 402(p) as a Phase II MS4. In addition, storm water discharges from areas of NBSD

associated with industrial activity are regulated pursuant to CWA section 402(p)(3)(A). Industrial storm water discharges from areas classified as "Industrial High Risk" under this Order, including drydocks and piers where ship maintenance/repair activities are expected to occur, are subject to effluent limitations for acute toxicity. All industrial storm water discharges, regardless of the risk classification under this Order, are subject to continued coverage under a Storm Water Pollution Prevention Plan.

Order No. R9-2002-0169 for NBSD regulated the salt water system as a point source discharge. This Order, no longer regulates the salt water system point source discharge. The Discharger has installed a separate salt water system pumping station at the USN Graving Dock which enabled it to deactivate the pumps that produced discharges at Pier 13 and the Mole Pier.

Broadway Complex: The Broadway Complex is located in downtown San Diego at 937 North Harbor Drive on the comer of North Harbor Drive and Broadway. The Broadway Complex is within the Lindbergh Hydrologic Subarea (908.21) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The commands located at this installation include the offices of CNRSW, Personnel Support Activity, Navy Computer & Telecommunications Station, Reserve Readiness Command, and Fleet and Industrial Supply Center. Historically this installation served as a supply depot, but it has operated only minimally in that capacity since the middle 1990s. The site on which the Broadway Complex is located is slated for redevelopment. It is anticipated the Broadway Complex will be demolished and redeveloped within the permit period. The Navy will obtain a permit for and comply with the California General Construction Storm Water Permit for this work as a separate permit. Broadway Complex has Phase II MS4 storm water discharges.

Mission Gorge Recreational Facility (MGRF; also known as Admiral Baker Field): MGRF also referred to locally as Admiral Baker Field, is located in the city of San Diego along the San Diego River and is within the Mission San Diego Hydrologic Subarea (907.11) of the Lower San Diego Hydrologic Area (907.10) of the San Diego Hydrologic Unit (907.00). The 440-acre installation is located east of Interstate 15, north of Friars Road, and west of Mission Gorge Road. The installation primarily consists of cultivated or landscaped habitat with various ornamental trees and shrubs planted on the golf course and surrounding areas. Natural habitat onsite includes riparian woodland along the San Diego River and coastal sage scrub adjacent to the golf course on the north and northwestern edges of the property. Most of the natural habitat onsite either occurs within the San Diego River or along very steep slopes (25-50 percent or greater).

The majority of the land use at MGRF consists of two 18-hole golf courses and a driving range. Support facilities include a dance pavilion, snack bar, and coffee shop. Other recreational facilities include tennis courts, volleyball courts, a swimming pool, baseball fields, and a recreation vehicle (RV) camping area located on the southwestern edge of MGRF. The primary mission of MGRF is to provide for maximum participation in programs that are designed to enhance physical, mental, and social health of all active

duty personnel and their dependents. Both planned and spontaneous sports programs receive priority compensation within this department.

MGRF has Phase II MS4 storm water discharges and no industrial storm water discharges.

The Naval Medical Center, San Diego (NMCSD): NMCSD is located within Balboa Park and occupies 79 acres in Florida Canyon. NMCSD is within the Lindbergh Hydrologic Subarea (908.21) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The hospital complex is approximately 500,000 square feet and provides service to approximately 3,800 patients on an average day.

NMCSD provides medical care to active duty personnel, their dependents, and retirees. The hospital is one of only two teaching hospitals in the Navy. It provides training for enlisted hospital corpsmen and junior medical officers and nurses. The Medical Center Commander is also responsible for all Navy and Marine Corps medical facilities in California, Nevada, and Arizona.

NMCSD has Phase II MS4 storm water discharges and no industrial storm water discharges.

A. Description of Wastewater

Discharges at the Facility consist of the following:

1. Storm Water Discharges

A total of 157 known storm water discharge points drain storm water runoff from NBSD. In a May 12, 2011 submittal, the Discharger indicated that there are 58 known industrial storm water outfalls and 99 non-industrial storm water outfalls identified throughout NBSD. The Discharger identified 33 outfalls as receiving storm water flows from Industrial High Risk Areas, or areas associated with outdoor ship maintenance.

This Order establishes requirements for storm water discharges from industrial and non-industrial areas of the Facility (including Industrial High Risk Areas, Industrial Low Risk Areas, Industrial No Exposure Areas, and Small MS4 Areas).

a. Small MS4s

Section 402(p) of the CWA establishes a framework for regulating storm water discharges under the NPDES Program. In 1990, USEPA promulgated regulations for permitting storm water discharges from industrial sites and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm

water permits. On December 8, 1999, USEPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s.

As defined by 40 CFR 122.26(b)(8), a MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying storm water; (ii) which is not a combined sewer; and (iii) which is not part of a publicly owned treatment works (POTW).

A Small MS4 is an MS4 that is not permitted under the municipal Phase I regulations, and which is owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes. Small MS4s include systems similar to separate storm sewer systems in large municipalities, such as systems at military bases. In this Order, Small MS4s are also referred to as Small (Military Base) MS4s or Phase II MS4s.

The Facility has a number of storm water outfalls, storm water collection systems, and varying types of activities at the Facility. Storm water runoff from non-industrial portions of the Facility such as administrative buildings, roads, parking lots, and other municipal type discharges will be regulated under Phase II MS4 requirements.

This Order establishes requirements for Small MS4 storm water discharges from the Facility based on Phase II MS4 requirements, similar to those established in the California Waste Discharge Requirements for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems General Permit (State Water Board Order No. 2013-0001-DWQ), adopted by the State Water Board on February 5, 2013.

b. Industrial Storm Water

Order No. R9-2002-0169 for NBSD regulated industrial storm water runoff from “Industrial High Risk Areas” through the implementation of a storm water pollution prevention plan (SWPPP), copper and zinc bench mark values, a toxicity effluent limitation, and first flush diversion requirements.

High risk areas are defined in Attachment A as, *“All areas where wastes or pollutants of significant quantities from ship construction, modification, repair, and maintenance activities (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleansers, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances of water quality significance) are subject to precipitation, run-on, and/or runoff. ”*

This Order establishes requirements for the discharge of storm water runoff from “Industrial High Risk Areas”.

This Order also establishes requirements for storm water runoff from industrial areas not associated with ship construction, modification, repair, and maintenance activities, designated as “Industrial Low Risk Areas”, and from “Industrial No Exposure Areas” where all industrial materials and activities are protected from contact with storm water.

Section IV.B.1 of the Order defines Small MS4 Areas, Industrial No Exposure Areas, Industrial Low Risk Areas, and Industrial High Risk Areas. Section IV.B.2 of this Order requires that the risk level of storm water discharges shall be categorized annually by the Discharger based on the drainage area for each outfall.

Pollutants that may be present in the discharge include pollutants that storm water is likely to contact, including, but not limited to sediment, solids, oil and grease, and metals.

2. Non-Storm Water

A list of authorized non-storm water discharges is in section IV.G.1 of this Order including diverted stream flows, rising ground water, uncontaminated ground water, springs, drinking fountain water, emergency eye wash water, condensate, and several others. These discharges are authorized unless they are a significant source of pollutants and if they meet the conditions in section IV.G.2 of the Order. Best Management Practices (BMPs) are required for these discharges.

3. Seawater Cooling Overboard Discharge Water

The seawater cooling system draws water directly from San Diego Bay to cool ship engines. Water is pumped through heat exchangers where it absorbs heat and is then discharged to San Diego Bay at higher temperatures. While on the water, this discharge is regulated by the Uniform Naval Discharge System. This Order authorizes this discharge while a ship is in dry dock, unless they are a significant source of pollutants and if they meet the conditions in section IV.G.7 of the Order. BMPs are required for this discharge.

4. Utility Vault and Manhole Dewatering

NBSD has electrical and steam utility vaults and manholes, and discharges may occur from these point sources to surface waters. Utility companies, or agencies, such as the NAVFAC SW Public Works (formerly known as the Public Works Center or PWC) for the Discharger, supplies resources, as necessary, for day-to-

day living and operations. This includes, but is not limited to, supplies of natural gas, electricity, and telephone service. Electrical and steam utilities are owned and maintained by the NAVFAC SW. Discharges from the utility vaults and manholes are short-term and intermittent.

Typically, utility companies must dewater the vaults and underground structures prior to performing any repair, maintenance, and/or installation of equipment when the volume of water interferes with safety or quality of the work to be done. The volume of discharge could vary from a few gallons to thousands of gallons. The duration of discharge and pump rates for the discharge could also vary greatly.

NBSD requires electrical power for both its shore and afloat operations. On-base electrical power is carried through an extensive underground conduit system. Electrical utility vaults and manholes contain high voltage electrical equipment, transformers, switchgear, and/or below grade cables. NBSD had 15 electrical vaults identified under Order No. R9-2002-0169. The Discharger has reported that only 12 of the 15 electrical vaults are subject to flooding and have the potential to discharge wastewater. Two (2) of the 12 vaults are located under Pier 2 and are subject to Bay water intrusion and storm water. Automatic sump pumps are installed in each vault and discharge the accumulated water directly to San Diego Bay.

The remaining 10 vaults are located on land, inside buildings, and are associated with electrical switching or substations. Similar to the pier vaults, the vaults on land can accumulate ground water and storm water, and they are dewatered using automatic sump pumps. The sump pumps discharge the water onto the ground surface around the vault buildings. These discharges have the potential to reach a storm drain inlet and discharge to San Diego Bay, depending on the volume of the discharge.

The 12 utility vaults that have been identified as having the potential to discharge include: Pier 2, Vault 2 West (UV-001); Pier 2, Vault 1 East (UV-002); B Substation, Pier 2 (UV-003); F Substation, Bldg. 3403 (UV-004); Harbor Drive Substation, Bldg. P184A, near Bldg. 121 (UV-005); Vesta Substation (UV-006); McCandless Substation (UV-007); G Substation, Pier 6 (UV-008); P7 Substation, Pier 7, Bldg. 3420 (UV-009); J Substation, Pier 8 (UV-010); Mole Substation, Bldg. 3361, P414W (UV-011); and South Cummings Substation, Bldg. P405 (UV-012).

In addition to the vaults, electrical and steam utility manholes are located at all Facility installations, except at MGRF. These manholes can accumulate groundwater and storm water. They can also accumulate steam condensate water. High-pressure steam lines are located in underground conduit systems and are accessed through utility manholes. Water in the manholes must be

removed when maintenance or emergency work on the utility services to NBSD is required.

All manholes at NBSD are manually dewatered using a portable pump or pump truck. The Discharger has implemented procedures to eliminate dewatering discharges to surface waters from vaults without sump pumps and manholes. The Discharger either pumps the water into an adjacent utility manhole or transfers the water to the sanitary sewer system. However, there could be rare emergency situations that would require dewatering vaults without sump pumps or manholes onto the ground surface.

Prior to the adoption of Order No. R9-2002-0169 for NBSD, discharges from utility vaults and manholes were regulated by the statewide General Order for Discharges from Utility Vaults and Underground Structures to Surface Waters (Order No. 96-12-DWQ, NPDES No. CAG990002). At the time of adoption of Order No. R9-2002-0169, the State Water Board was awaiting USEPA approval of the re-issued General Order (Order No. 2001-11-DWQ). In order to regulate all of the discharges at the Facility under one order, the San Diego Water Board incorporated the pertinent specifications, limitations, and monitoring requirements of Order No. 2001-11-DWQ into Order No. R9-2002-0169. The State Water Board has since re-issued the General Order again, the most recent version being Order No. 2006-0008-DWQ *General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters.* To be consistent with the requirements applied to other discharges from utility vaults in the San Diego region, the monitoring requirements in the Order are identical to the monitoring requirements in State Water Board Order R9-2006-0008-DWQ.

Pollutants that may be found in the discharge include contaminants in the San Diego Bay water that accumulates in pier vaults, contaminants in groundwater that accumulates in shore side vaults and manholes, pollutants in storm water that accumulates in the utility vaults and manholes, and pollutants from electrical and steam equipment (e.g., oils, grease, metals) located in the vaults and manholes. A map of the utility vault and manhole dewatering discharge locations at NBSD is shown in Attachment B (Figure B-7). A line drawing for the utility vault and manhole dewatering discharges is shown in Attachment C (Figure C-3).

5. Industrial Process Wastewater

a. Steam Condensate

The Discharger uses a pressurized steam system for its shore and afloat operations. The steam is produced at an on-site cogeneration plant operated by Sithe Energy, a contractor. Chemicals are injected into the boiler feed water and directly into the boilers. The chemicals that may be present in the

steam condensate as a result of the additives include cyclohexylamine (20%), diethylaminoethanol, diethylhydroxylamine, hydroquinone, and morpholine.

The produced steam is distributed to buildings and surface ships through a system made up of high and low pressure steam lines, pressure reducing valve stations, and expansion joints. The system traps steam condensate to ensure that the steam supplied meets user quality assurance specifications. When water collects in the steam lines, it is essential for the system to remove the water as soon as possible.

Order No. R9-2002-0169 regulated steam condensate from 190 discharge points with an approximate discharge volume of 2,150 gallons per day (GPD). During the term of Order No. R9-2002-0169, the Discharger demolished Piers 10 and 11, which were replaced with a new replacement Pier 10. Additionally, the Discharger is in the process of demolishing Pier 12 in order to construct a replacement pier. These activities have resulted in the elimination of outfalls P10ST1 through P10ST11 and P11ST1 through P11ST5 (as identified in Order No. R9-2002-0169) and the addition of Discharge Point Nos. SC-150 through SC-153. This Order regulates 175 steam condensate discharge points, as identified in the Discharger's application. All but two of these points are located along the piers or quay walls. The pier discharge points, in addition to releasing steam, drip small amounts of water to the Bay between steam discharges. The estimated discharge rate for the steam lines is 1 ounce per minute. The estimated total discharge volume per day is 2,000 gallons per day (GPD).

The steam condensate discharges are typically from the traps. The discharges consist of steam clouds, with temperatures in excess of 100°C. A portion of the steam evaporates prior to condensing and discharging to San Diego Bay or ground surface, depending on the location of the steam trap, through Discharge Point Nos. SC-001 through SC-175.

Pollutants that may be found in the discharge include contaminants in the potable water supplied to the steam boilers, chemical additives injected into the boiler feed water, and any contaminants that the steam condensate comes into contact with as it circulates steam distribution. A map of the steam condensate discharge locations at NBSD is shown in Attachment B (Figure B-4 and B-5). A line drawing flow schematic for the steam condensate discharges is shown in Attachment C (Figure C-1).

b. USN Graving Dock Deflooding Water.

The discharge of dry dock deflooding water through Discharge Point Nos. NGD-001 and NDG-002 occurs during vessel docking and undocking. San Diego Bay water captured in the dry dock is pumped back into the San Diego

Bay. Approximately 20.2 million gallons of graving dock deflooding water and salt water rinse is discharged per event.

Pollutants that may be found in the discharge include any contaminants that the water from San Diego Bay comes into contact with as it enters the dry dock.

c. USN Graving Dock Caisson Ballast Dewatering.

To dock and undock a vessel, the caisson is raised approximately 4 feet by pumping a portion of the caisson ballast water to the San Diego Bay through Discharge Point No. NGD-003. Approximately 0.050 million gallons of caisson ballast water is discharged per event.

d. Emergency Fire Suppression Water and Salt Water Supply Water.

Water from the San Diego Bay is supplied to an emergency fire suppression system and saltwater supply system at the dry dock. Relief water from the systems is discharged through Discharge Point No. NGD-004.

e. Pier Boom, Fender, and Mooring Cleaning

Security booms, oil containment booms, moorings, and fender systems are placed around vessels and piers at NBSD. The security and oil containment boom placed around the vessels and piers, and the pier mooring and fender systems accumulate marine growth and bird guano over time. The marine growth can cause the booms, moorings, and fender systems to sink, and the accumulated bird guano presents a potential human health hazard. The marine growth and bird guano is washed off with high-pressure potable water or seawater. The booms, moorings, and fender systems are usually removed from the water during the cleaning process.

Typically, the booms, moorings, and fenders are cleaned twice per year on a quarterly rotational basis. The high-pressure washer discharges 5 gallons per minute (GPM) and operates 6 hours per day for 2 to 3 weeks per quarter for a total annual discharge of approximately 108,000 gallons.

After a response to an oil spill, the oily booms are removed from the San Diego Bay by barge and transported to a designated cleaning area on Paleta Creek, north of Pier 8, at NBSD for cleaning. The cleaning water from the designated cleaning area discharges to the bilge and oily water treatment system (BOWTS) and then to the sanitary sewer system.

Boom, mooring, and fender cleaning discharges at NBSD can occur at any pier where these are installed. However, cleaning typically occurs along the quay wall in front of the Waterfront Operations facility.

Pollutants that may be found in the discharge include contaminants in the potable water or San Diego Bay water used in the pressure wash, any contaminants that the water comes into contact with as it passes through the pressure-wash equipment, and contaminants washed from the surfaces of the pier booms. A map of the pier boom, fender, and mooring cleaning discharge locations at NBSD is shown in Attachment B (Figure B-6). A line drawing for the pier boom, fender, and mooring cleaning discharges is shown in Attachment C (Figure C-2).

f. Weight Test Water

Weight testing is performed on shipboard cranes and rigging to ensure they are operating properly and safely. Testing is typically performed after new systems are installed; repairs are performed on existing systems, or as part of recurring maintenance. The testing ensures cranes and rigging can safely perform their essential functions such as loading supplies and equipment, or on and off loading life rafts. The testing is performed by placing a pre-determined load on the cranes using water filled bags. After testing is completed, the bags are drained to San Diego Bay.

The weight test bags are filled utilizing the ship's salt water system. Discharges associated with the salt water system are incidental to the normal operations of the ship and are regulated under the Uniform National Discharge Standards (UNDS) program. This system takes in ambient water where it passes through pumps, pipes, and heat exchangers before being discharged. Use of the ships salt water system to fill the bags does not result in a new discharge, but one that would occur with or without weight testing. The bags are thoroughly cleaned after every use so no contaminants are added and the only discharge is the same water as the ship's salt water system which is regulated by the UNDS program. This Order requires the implementation of BMPs to ensure that no pollutants are added by the weight test bags.

6. Ship Repair and Maintenance Activities

The diverse discharges from ship repair and maintenance activities could occur at several locations, including aboard ship when docked, on the piers, or on shore locations. Ship repair and maintenance activities include abrasive blasting, hydroblasting, metal grinding, painting, tank cleaning, removal of bilge and ballast water, removal of anti-fouling paint, sheet metal work, electrical work, mechanical repair, engine repair, hull repair, and sewage disposal. Discharges associated with these activities include water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum; hydroblast water; tank cleaning water from tank cleaning to remove sludge and/or dirt; clarified water from oil/water separator; steam cleaning water; demineralizer and reverse osmosis brine; oily bilge water; vessel wash-down water; pipe and tank

hydrostatic test water; miscellaneous low-volume water; saltbox water; paint chips; paint over spray; paint spills; hydraulic oil leaks and spills; fuel leaks and spills; abrasive blast materials; trash; miscellaneous refuse and rubbish; fiberglass dust; swept materials; and ship repair and maintenance activity debris. This Order prohibits discharges from ship repair and maintenance activities.

B. Discharge Points and Receiving Waters

1. A Facility Map is provided in Attachment B (Figure B-1).

2. NBSD is located on the eastern edge of the San Diego Bay, bordered by the cities of San Diego to the north and east and National City to the south and east. NBSD is about three miles southeast of downtown San Diego and 10 miles north of the international border with Mexico. NBSD is a large facility located within three hydrologic subareas: the *Chollas Hydrologic Subarea* (908.22) *of the San Diego Mesa Hydrologic Area* (908.20), the *El Toyan Hydrologic Subarea* (908.31) and the *Paradise Hydrologic Subarea* (908.32) of the *National City Hydrologic Area* (908.30). The three hydrologic subareas are in the *Pueblo San Diego Hydrologic Unit* (908.00).

3. Broadway Complex is located on the north eastern edge of San Diego Bay in downtown San Diego at 937 North Harbor Drive on the comer of North Harbor Drive and Broadway. The Broadway Complex is within the Lindbergh Hydrologic Subarea (908.21) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00).

4. MGRF, also referred to locally as Admiral Baker Field, is located in the city of San Diego along the San Diego River and is within the Mission San Diego Hydrologic Subarea (907.11) of the Lower San Diego Hydrologic Area (907.10) of the San Diego Hydrologic Unit (907.00).

5. Naval Medical Center, San Diego is located within Balboa Park and occupies 79 acres in Florida Canyon within the Lindbergh Hydrologic Subarea (908.21) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00).

6. Industrial wastewater is discharged into the San Diego Bay as summarized below:

Table F-3. Discharge Locations

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P1ST1	SC-001	Steam Condensate	32° 41’ 9” N	-117° 7’ 57” W	San Diego Bay
P1ST2	SC-002	Steam Condensate	32° 41’ 8” N	-117° 7’ 59” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P1ST3	SC-003	Steam Condensate	32° 41’ 7” N	-117° 8’, 1” W	San Diego Bay
P1ST4	SC-004	Steam Condensate	32° 41’ 7” N	-117° 8’ 2” W	San Diego Bay
P1ST5	SC-005	Steam Condensate	32° 41’ 5” N	-117° 8’ 3” W	San Diego Bay
P1ST6	SC-006	Steam Condensate	32° 41’ 5” N	-117° 8’ 5” W	San Diego Bay
P1ST7	SC-007	Steam Condensate	32° 41’ 4” N	-117° 8’ 5” W	San Diego Bay
P1ST8	SC-008	Steam Condensate	32° 41’ 3” N	-117° 8’ 6” W	San Diego Bay
P1ST9	SC-009	Steam Condensate	32° 41’ 4” N	-117° 8’ 5” W	San Diego Bay
P1ST10	SC-010	Steam Condensate	32° 41’ 5” N	-117° 8’ 4” W	San Diego Bay
P1ST11	SC-011	Steam Condensate	32° 41’ 5” N	-117° 8’ 3” W	San Diego Bay
P1ST12	SC-012	Steam Condensate	32° 41’ 6” N	-117° 8’ 1” W	San Diego Bay
P1ST13	SC-013	Steam Condensate	32° 41’ 7” N	-117° 8’ 0” W	San Diego Bay
P1ST14	SC-014	Steam Condensate	32° 41’ 8” N	-117° 7’ 59” W	San Diego Bay
P1ST15	SC-015	Steam Condensate	32° 41’ 9” N	-117° 7’ 57” W	San Diego Bay
QW1 2ST1	SC-016	Steam Condensate	32° 41’ 7” N	-117° 7’ 55” W	San Diego Bay
QW1 2ST2	SC-017	Steam Condensate	32° 41’ 4” N	-117° 7’ 51” W	San Diego Bay
QW1 2ST3	SC-018	Steam Condensate	32° 41’ 2” N	-117° 7’ 50” W	San Diego Bay
P2ST1	SC-019	Steam Condensate	32° 41’ 1” N	-117° 7’ 51” W	San Diego Bay
P2ST2	SC-020	Steam Condensate	32° 41’ 1” N	-117° 7’ 51” W	San Diego Bay
P2ST3	SC-021	Steam Condensate	32° 41’ 0” N	-117° 7’ 53” W	San Diego Bay
P2ST4	SC-022	Steam Condensate	32° 40’ 58” N	-117° 7’ 56” W	San Diego Bay
P2ST5	SC-023	Steam Condensate	32° 40’ 58” N	-117° 7’ 56” W	San Diego Bay
P2ST6	SC-024	Steam Condensate	32° 40’ 56” N	-117° 7’ 59” W	San Diego Bay
P2ST7	SC-025	Steam Condensate	32° 40’ 56” N	-117° 7’ 59” W	San Diego Bay
P2ST8	SC-026	Steam Condensate	32° 40’ 57” N	-117° 7’ 57” W	San Diego Bay
P2ST9	SC-027	Steam Condensate	32° 40’ 57” N	-117° 7’ 57” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P2ST10	SC-028	Steam Condensate	32° 40’ 59” N	-117° 7’ 54” W	San Diego Bay
P2ST11	SC-029	Steam Condensate	32° 40’ 59” N	-117° 7’ 54” W	San Diego Bay
P2ST12	SC-030	Steam Condensate	32° 41’ 0” N	-117° 7’ 51” W	San Diego Bay
P2ST13	SC-031	Steam Condensate	32° 41’ 2” N	-117° 7’ 48” W	San Diego Bay
P2ST14	SC-032	Steam Condensate	32° 41’ 2” N	-117° 7’ 48” W	San Diego Bay
P2ST15	SC-033	Steam Condensate	32° 41’ 3” N	-117° 7’ 47” W	San Diego Bay
QW2 3ST1	SC-034	Steam Condensate	32° 41’ 1” N	-117° 7’ 41” W	San Diego Bay
P3ST1	SC-035	Steam Condensate	32° 40’ 58” N	-117° 7’ 42” W	San Diego Bay
P3ST2	SC-036	Steam Condensate	32° 40’ 56” N	-117° 7’ 44” W	San Diego Bay
P3ST3	SC-037	Steam Condensate	32° 40’ 56” N	-117° 7’ 45” W	San Diego Bay
P3ST4	SC-038	Steam Condensate	32° 40’ 55” N	-117° 7’ 47” W	San Diego Bay
P3ST5	SC-039	Steam Condensate	32° 40’ 53” N	-117° 7’ 49” W	San Diego Bay
P3ST6	SC-040	Steam Condensate	32° 40’ 52” N	-117° 7’ 51” W	San Diego Bay
P3ST7	SC-041	Steam Condensate	32° 40’ 51” N	-117° 7’ 53” W	San Diego Bay
P3ST8	SC-042	Steam Condensate	32° 40’ 52” N	-117° 7’ 51” W	San Diego Bay
P3ST9	SC-043	Steam Condensate	32° 40’ 53” N	-117° 7’ 49” W	San Diego Bay
P3ST10	SC-044	Steam Condensate	32° 40’ 54” N	-117° 7’ 46” W	San Diego Bay
P3ST11	SC-045	Steam Condensate	32° 40’ 56” N	-117° 7’ 44” W	San Diego Bay
P3ST12	SC-046	Steam Condensate	32° 40’ 57” N	-117° 7’ 42” W	San Diego Bay
P3ST13	SC-047	Steam Condensate	32° 40’ 58” N	-117° 7’ 40” W	San Diego Bay
QW3 4ST1	SC-048	Steam Condensate	32° 40’ 57” N	-117° 7’ 38” W	San Diego Bay
QW3 4ST2	SC-049	Steam Condensate	32° 40’ 55” N	-117° 7’ 36” W	San Diego Bay
P4ST1	SC-050	Steam Condensate	32° 40’ 53” N	-117° 7’ 35” W	San Diego Bay
P4ST2	SC-051	Steam Condensate	32° 40’ 52” N	-117° 7’ 36” W	San Diego Bay
P4ST3	SC-052	Steam Condensate	32° 40’ 51” N	-117° 7’ 38” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P4ST4	SC-053	Steam Condensate	32° 40’ 50” N	-117° 7’ 39” W	San Diego Bay
P4ST5	SC-054	Steam Condensate	32° 40’ 49” N	-117° 7’ 40” W	San Diego Bay
P4ST6	SC-055	Steam Condensate	32° 40’ 49” N	-117° 7’ 41” W	San Diego Bay
P4ST7	SC-056	Steam Condensate	32° 40’ 48” N	-117° 7’ 42” W	San Diego Bay
P4ST8	SC-057	Steam Condensate	32° 40’ 48” N	-117° 7’ 43” W	San Diego Bay
P4ST9	SC-058	Steam Condensate	32° 40’ 47” N	-117° 7’ 44” W	San Diego Bay
P4ST10	SC-059	Steam Condensate	32° 40’ 46” N	-117° 7’ 45” W	San Diego Bay
P4ST11	SC-060	Steam Condensate	32° 40’ 46” N	-117° 7’46” W	San Diego Bay
P4ST12	SC-061	Steam Condensate	32° 40’ 45” N	-117° 7’ 46” W	San Diego Bay
P4ST13	SC-062	Steam Condensate	32° 40’ 46” N	-117° 7’ 45” W	San Diego Bay
P4ST14	SC-063	Steam Condensate	32° 40’ 47” N	-117° 7’ 44” W	San Diego Bay
P4ST15	SC-064	Steam Condensate	32° 40’ 48” N	-117° 7’ 41” W	San Diego Bay
P4ST16	SC-065	Steam Condensate	32° 40’ 49” N	-117° 7’ 40” W	San Diego Bay
P4ST17	SC-066	Steam Condensate	32° 40’ 50” N	-117° 7’ 39” W	San Diego Bay
P4ST18	SC-067	Steam Condensate	32° 40’ 50” N	-117° 7’ 38” W	San Diego Bay
P4ST19	SC-068	Steam Condensate	32° 40’ 52” N	-117° 7’ 35” W	San Diego Bay
P4ST20	SC-069	Steam Condensate	32° 40’ 52” N	-117° 7’ 35” W	San Diego Bay
P4ST21	SC-070	Steam Condensate	32° 40’ 52” N	-117° 7’ 35” W	San Diego Bay
QW4 5ST1	SC-071	Steam Condensate	32° 40’ 51” N	-117° 7’ 33” W	San Diego Bay
QW4 5ST2	SC-072	Steam Condensate	32° 40’ 51” N	-117° 7’ 33” W	San Diego Bay
QW4 5ST3	SC-073	Steam Condensate	32° 40’ 49” N	-117° 7’ 31” W	San Diego Bay
QW4 5ST4	SC-074	Steam Condensate	32° 40’ 47” N	-117° 7’ 30” W	San Diego Bay
P5ST1	SC-075	Steam Condensate	32° 40’ 46” N	-117° 7’ 31” W	San Diego Bay
P5ST2	SC-076	Steam Condensate	32° 40’ 45” N	-117° 7’ 33” W	San Diego Bay
P5ST3	SC-077	Steam Condensate	32° 40’ 44” N	-117° 7’ 34” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P5ST4	SC-078	Steam Condensate	32° 40' 43" N	-117° 7' 35" W	San Diego Bay
P5ST5	SC-079	Steam Condensate	32° 40' 42" N	-117° 7' 37" W	San Diego Bay
P5ST6	SC-080	Steam Condensate	32° 40' 41" N	-117° 7' 36" W	San Diego Bay
P5ST7	SC-081	Steam Condensate	32° 40' 40" N	-117° 7' 40" W	San Diego Bay
P5ST8	SC-082	Steam Condensate	32° 40' 40" N	-117° 7' 40" W	San Diego Bay
P5ST9	SC-083	Steam Condensate	32° 40' 41" N	-117° 7' 38" W	San Diego Bay
P5ST10	SC-084	Steam Condensate	32° 40' 42" N	-117° 7' 36" W	San Diego Bay
P5ST11	SC-085	Steam Condensate	32° 40' 43" N	-117° 7' 35" W	San Diego Bay
P5ST12	SC-086	Steam Condensate	32° 40' 44" N	-117° 7' 34" W	San Diego Bay
P5ST13	SC-087	Steam Condensate	32° 40' 44" N	-117° 7' 32" W	San Diego Bay
P5ST14	SC-088	Steam Condensate	32° 40' 45" N	-117° 7' 31" W	San Diego Bay
QW5 6ST1	SC-089	Steam Condensate	32° 40' 41" N	-117° 7' 24" W	San Diego Bay
P6ST1	SC-090	Steam Condensate	32° 40' 40" N	-117° 7' 26" W	San Diego Bay
P6ST2	SC-091	Steam Condensate	32° 40' 38" N	-117° 7' 28" W	San Diego Bay
P6ST3	SC-092	Steam Condensate	32° 40' 36" N	-117° 7' 32" W	San Diego Bay
P6ST4	SC-093	Steam Condensate	32° 40' 35" N	-117° 7' 34" W	San Diego Bay
P6ST5	SC-094	Steam Condensate	32° 40' 34" N	-117° 7' 36" W	San Diego Bay
P6ST6	SC-095	Steam Condensate	32° 40' 35" N	-117° 7' 33" W	San Diego Bay
P6ST7	SC-096	Steam Condensate	32° 40' 36" N	-117° 7' 31" W	San Diego Bay
P6ST8	SC-097	Steam Condensate	32° 40' 38" N	-117° 7' 28" W	San Diego Bay
P6ST9	SC-098	Steam Condensate	32° 40' 39" N	-117° 7' 26" W	San Diego Bay
P6ST10	SC-099	Steam Condensate	32° 40' 40" N	-117° 7' 24" W	San Diego Bay
QW6 7ST1	SC-100	Steam Condensate	32° 40' 36" N	-117° 7' 21" W	San Diego Bay
QW6 7ST2	SC-101	Steam Condensate	32° 40' 35" N	-117° 7' 19" W	San Diego Bay
P7ST1	SC-102	Steam Condensate	32° 40' 34" N	-117° 7' 19" W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P7ST2	SC-103	Steam Condensate	32° 40’ 34” N	-117° 7’ 19” W	San Diego Bay
P7ST3	SC-104	Steam Condensate	32° 40’ 33” N	-117° 7’ 22” W	San Diego Bay
P7ST4	SC-105	Steam Condensate	32° 40’ 32” N	-117° 7’ 24” W	San Diego Bay
P7ST5	SC-106	Steam Condensate	32° 40’ 31” N	-117° 7’ 25” W	San Diego Bay
P7ST6	SC-107	Steam Condensate	32° 40’ 30” N	-117° 7’ 27” W	San Diego Bay
P7ST7	SC-108	Steam Condensate	32° 40’ 29” N	-117° 7’ 28” W	San Diego Bay
P7ST8	SC-109	Steam Condensate	32° 40’ 28” N	-117° 7’ 29” W	San Diego Bay
P7ST9	SC-110	Steam Condensate	32° 40’ 27” N	-117° 7’ 31” W	San Diego Bay
P7ST10	SC-111	Steam Condensate	32° 40’ 27” N	-117° 7’ 32” W	San Diego Bay
P7ST11	SC-112	Steam Condensate	32° 40’ 26” N	-117° 7’ 33” W	San Diego Bay
P7ST12	SC-113	Steam Condensate	32° 40’ 25” N	-117° 7’ 33” W	San Diego Bay
P7ST13	SC-114	Steam Condensate	32° 40’ 26” N	-117° 7’ 32” W	San Diego Bay
P7ST15	SC-115	Steam Condensate	32° 40’ 28” N	-117° 7’ 29” W	San Diego Bay
P7ST16	SC-116	Steam Condensate	32° 40’ 29” N	-117° 7’ 28” W	San Diego Bay
P7ST18	SC-117	Steam Condensate	32° 40’ 30” N	-117° 7’ 25” W	San Diego Bay
P7ST19	SC-118	Steam Condensate	32° 40’ 31” N	-117° 7’ 23” W	San Diego Bay
P7ST20	SC-119	Steam Condensate	32° 40’ 32” N	-117° 7’ 22” W	San Diego Bay
P7ST21	SC-120	Steam Condensate	32° 40’ 34” N	-117° 7’ 19” W	San Diego Bay
P7ST22	SC-121	Steam Condensate	32° 40’ 34” N	-117° 7’ 19” W	San Diego Bay
QW7 8ST1	SC-122	Steam Condensate	32° 40’ 30” N	-117° 7’ 15” W	San Diego Bay
P8ST1	SC-123	Steam Condensate	32° 40’ 28” N	-117° 7’ 14” W	San Diego Bay
P8ST2	SC-124	Steam Condensate	32° 40’ 28” N	-117° 7’ 15” W	San Diego Bay
P8ST3	SC-125	Steam Condensate	32° 40’ 26” N	-117° 7’ 17” W	San Diego Bay
P8ST4	SC-126	Steam Condensate	32° 40’ 25” N	-117° 7’ 19” W	San Diego Bay
P8ST5	SC-127	Steam Condensate	32° 40’ 24” N	-117° 7’ 21” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P8ST6	SC-128	Steam Condensate	32° 40’ 23” N	-117° 7’ 22” W	San Diego Bay
P8ST7	SC-129	Steam Condensate	32° 40’ 22” N	-117° 7’ 25” W	San Diego Bay
P8ST8	SC-130	Steam Condensate	32° 40’ 20” N	-117° 7’ 27” W	San Diego Bay
P8ST9	SC-131	Steam Condensate	32° 40’ 20” N	-117° 7’ 27” W	San Diego Bay
P8ST10	SC-132	Steam Condensate	32° 40’ 21” N	-117° 7’ 25” W	San Diego Bay
P8ST11	SC-133	Steam Condensate	32° 40’ 23” N	-117° 7’ 22” W	San Diego Bay
P8ST12	SC-134	Steam Condensate	32° 40’ 24” N	-117° 7’ 21” W	San Diego Bay
P8ST13	SC-135	Steam Condensate	32° 40’ 25” N	-117° 7’ 19” W	San Diego Bay
P8ST14	SC-136	Steam Condensate	32° 40’ 26” N	-117° 7’ 17” W	San Diego Bay
QW8 9ST1	SC-137	Steam Condensate	32° 40’ 27” N	-117° 7’ 14” W	San Diego Bay
QW8 9ST2	SC-138	Steam Condensate	32° 40’ 26” N	-117° 7’ 13” W	San Diego Bay
QW8 9ST3	SC-139	Steam Condensate	32° 40’ 24” N	-117° 7’ 11” W	San Diego Bay
P9ST1	SC-140	Steam Condensate	32° 40’ 11” N	-117° 7’ 19” W	San Diego Bay
P9ST2	SC-141	Steam Condensate	32° 40’ 11” N	-117° 7’ 22” W	San Diego Bay
P9ST3	SC-142	Steam Condensate	32° 40’ 9” N	-117° 7’ 23” W	San Diego Bay
QW9 10ST1	SC-143	Steam Condensate	32° 40’ 4” N	-117° 7’ 10” W	San Diego Bay
P10ST1	SC-144	Steam Condensate	32° 40’ 4” N	-117° 7’ 10” W	San Diego Bay
P10ST11	SC-145	Steam Condensate	32° 40’ 4” N	-117° 7’ 10” W	San Diego Bay
QW10 11ST1	SC-146	Steam Condensate	32° 40’ 4” N	-117° 7’ 10” W	San Diego Bay
QW10 11ST2	SC-147	Steam Condensate	32° 40’ 2” N	-117° 7’ 10” W	San Diego Bay
QW10 11ST3	SC-148	Steam Condensate	32° 39’ 58” N	-117° 7’ 9” W	San Diego Bay
P11ST5	SC-149	Steam Condensate	32° 39’ 58” N	-117° 7’ 9” W	San Diego Bay
Q11 12ST2	SC-150	Steam Condensate	32° 39’ 58” N	-117° 7’ 9” W	San Diego Bay
P12ST1	SC-151	Steam Condensate	32° 39’ 52” N	-117° 7’ 11” W	San Diego Bay
P12ST2	SC-152	Steam Condensate	32° 39’ 50” N	-117° 7’ 23” W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
P12ST3	SC-153	Steam Condensate	32° 39' 52" N	-117° 7' 11" W	San Diego Bay
QW12 13ST1	SC-154	Steam Condensate	32° 39' 48" N	-117° 7' 8" W	San Diego Bay
QW12 13ST2	SC-155	Steam Condensate	32° 39' 46" N	-117° 7' 7" W	San Diego Bay
P13ST1	SC-156	Steam Condensate	32° 39' 45" N	-117° 7' 9" W	San Diego Bay
P13ST2	SC-157	Steam Condensate	32° 39' 45" N	-117° 7' 10" W	San Diego Bay
P13ST3	SC-158	Steam Condensate	32° 39' 45" N	-117° 7' 13" W	San Diego Bay
P13ST4	SC-159	Steam Condensate	32° 39' 45" N	-117° 7' 15" W	San Diego Bay
P13ST5	SC-160	Steam Condensate	32° 39' 45" N	-117° 7' 17" W	San Diego Bay
P13ST6	SC-161	Steam Condensate	32° 39' 45" N	-117° 7' 19" W	San Diego Bay
P13ST7	SC-162	Steam Condensate	32° 39' 44" N	-117° 7' 20" W	San Diego Bay
P13ST8	SC-163	Steam Condensate	32° 39' 44" N	-117° 7' 22" W	San Diego Bay
P13ST9	SC-164	Steam Condensate	32° 39' 43" N	-117° 7' 24" W	San Diego Bay
P13ST10	SC-165	Steam Condensate	32° 39' 43" N	-117° 7' 22" W	San Diego Bay
P13ST11	SC-167	Steam Condensate	32° 39' 43" N	-117° 7' 20" W	San Diego Bay
P13ST12	SC-168	Steam Condensate	32° 39' 43" N	-117° 7' 19" W	San Diego Bay
P13ST13	SC-169	Steam Condensate	32° 39' 44" N	-117° 7' 17" W	San Diego Bay
P13ST14	SC-170	Steam Condensate	32° 39' 44" N	-117° 7' 15" W	San Diego Bay
P13ST15	SC-171	Steam Condensate	32° 39' 44" N	-117° 7' 13" W	San Diego Bay
P13ST16	SC-172	Steam Condensate	32° 39' 44" N	-117° 7' 10" W	San Diego Bay
P13ST17	SC-173	Steam Condensate	32° 39' 44" N	-117° 7' 9" W	San Diego Bay
P13ST18	SC-174	Steam Condensate	32° 39' 44" N	-117° 7' 7" W	San Diego Bay
IL01	SC-175	Steam Condensate	32° 40 49" N	-117° 7' 31" W	San Diego Bay
Boom Cleaning	BC-001	Boom Cleaning[1]	32° 40' 24" N	-117° 7' 1" W	San Diego Bay
Pier 2, Vault 2 West	UV-001	Utility Vault & Manhole Dewatering[2]	32° 40' 59" N	-117° 7' 55" W	San Diego Bay
Pier 2, Vault 1 East	UV-002	Utility Vault & Manhole Dewatering[2]	32° 40' 59" N	-117° 7' 52" W	San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
B Substation, Pier 2	UV-003	Utility Vault & Manhole Dewatering[2]	32° 41' 2" N	-117° 7' 48" W	San Diego Bay
F Substation, Bldg. 3403	UV-004	Utility Vault & Manhole Dewatering[2]	32° 40' 59" N	-117° 7' 37" W	San Diego Bay
Harbor Drive Substation, Bldg. P184A near Bldg. 121	UV-005	Utility Vault & Manhole Dewatering[2]	32° 40' 59" N	-117° 7' 30" W	San Diego Bay
Vesta Substation	UV-006	Utility Vault & Manhole Dewatering[2]	32° 40' 52" N	-117° 7' 12" W	San Diego Bay
McCandless Substation	UV-007	Utility Vault & Manhole Dewatering[2]	32° 40' 55" N	-117° 7' 8" W	Paleta Creek
G Substation, Pier 6	UV-008	Utility Vault & Manhole Dewatering[2]	32° 40' 41" N	-117° 7' 23" W	San Diego Bay
P7 Substation, Pier 7, Bldg. 3420	UV-009	Utility Vault & Manhole Dewatering[2]	32° 40' 37" N	-117° 7' 19" W	San Diego Bay
J Substation, Pier 8	UV-010	Utility Vault & Manhole Dewatering[2]	32° 40' 30" N	-117° 7' 12" W	San Diego Bay
Mole Substation, Bldg. 3361, P414W	UV-011	Utility Vault & Manhole Dewatering[2]	32° 40' 10" N	-117° 7' 14" W	San Diego Bay
South Cummings Substation, Bldg. P405	UV-012	Utility Vault & Manhole Dewatering[2]	32° 40' 16" N	-117° 6' 54" W	Paleta Creek
001	NGD-001	Deflooding water/Salt water rinse	32° 40’ 45” N	-117° 7’ 30” W	San Diego Bay
002	NGD-002	Deflooding water/Salt Water Rinse	32° 40’ 45” N	-117° 7’ 30” W	San Diego Bay
003	NGD-003	Caisson ballast dewatering	32° 40’ 45” N	-117° 7’ 30” W	San Diego Bay
004	NGD-004	Emergency fire suppression/Saltwater supply	32° 40’ 45” N	-117° 7’ 30” W	San Diego Bay
005	NGD-005	Seawater Cooling Overboard Water	32° 40’ 45” N	-117° 7’ 30” W	San Diego Bay
Weight Test Water	Various Locations	Weight Test Water	Various	Various	San Diego Bay
Small Municipal Separate Storm Sewer System (MS4) Discharges					
--	See Attachment M to this Order for NBSD[3]	Storm Water (wet weather) and Non-Storm Water (dry weather)	See Attachment M to this Order for NBSD[3]	See Attachment M to this Order for NBSD[3]	Chollas Creek, San Diego River, or San Diego Bay

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Industrial No Exposure Area Storm Water Discharges					
--	See Attachment M to this Order	Industrial No Exposure Area Storm Water (wet weather) and Non-Storm Water (dry weather)	See Attachment M to this Order	See Attachment M to this Order	Chollas Creek, Paleta Creek or San Diego Bay
Industrial Low Risk Area Storm Water Discharges					
--	See Attachment M to this Order	Industrial Low Risk Area Storm Water (wet weather) and Non-Storm Water (dry weather)	See Attachment M to this Order	See Attachment M to this Order	Chollas Creek, Paleta Creek, or San Diego Bay
Industrial High Risk Area Storm Water Discharges					
--	See Attachment M to this Order	Industrial Low Risk Area Storm Water (wet weather) and Non-Storm Water (dry weather)	See Attachment M to this Order	See Attachment M to this Order	San Diego Bay

[1] Boom, mooring, and fender cleaning discharges can occur at any pier where booms are installed. However, boom cleaning typically occurs along the quay wall in front of the Waterfront Operations facility. The discharge point identified in the table is located at the Waterfront Operations facility. Oil booms contaminated with oil or fuel are removed from water for cleaning with no discharge to receiving waters. Security boom cleaning to remove marine growth is most often performed at the location where the boom is installed.

[2] The discharge points identified in the table represent electrical utility vaults that could potentially discharge to San Diego Bay and Paleta Creek. Manhole dewatering is performed with manual pumps or pumper trucks and the water is discharged to the sanitary sewer or to adjacent manholes. A manhole dewatering discharge to a storm drain or receiving water would be very infrequent and only during emergencies. Discharge locations could occur at numerous locations within the Facility.

[3] The MS4 discharge points identified in Attachment M are in NBSD. Other MS4 discharge points are located in Broadway Complex, Mission Gorge Recreational Facility, and the Naval Medical Center San Diego

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

1. Order No. R9-2002-0169 for NBSD and Order No. R9-2003-0265 for the Graving Dock prohibited the discharge of the following:

a. paint chips;
b. blasting materials
c. paint over spray;
d. paint spills;
e. water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
f. hydro-blast water;
g. tank cleaning water from tank cleaning to remove sludge and/or dirt;

h. clarified water from oil and water separator, except for storm water discharges treated by an oil and water separator and reported by the Discharger to the San Diego Water Board;
i. steam cleaning water;
j. pipe and tank hydrostatic test water, unless regulated by an NPDES permit;
k. saltbox water;
l. hydraulic oil leaks and spills;
m. fuel leaks and spills;
n. trash;
o. refuse and rubbish;
p. fiberglass dust;
q. swept materials;
r. ship repair and maintenance activity debris;
s. waste zinc plates;
t. marine fouling organisms;
u. demineralizer and reverse osmosis brine; and
v. oily bilge water.

2. Compliance with the waste discharge prohibitions contained in the Basin Plan and as listed in Attachment C to Order No. R9-2002-0169 for NBSD and Order No. R9-2003-0265 for the USN Graving Dock was required as a condition of the Orders.

3. The waste discharge prohibitions contained in the Bays and Estuary Policy were included in Order Nos. R9-2002-0169 and R9-2003-0265.

4. Discharges of wastes that have not been described in the ROWD and Fact Sheet for Order No. R9-2002-0169 for NBSD, and discharges of waste in a manner or to a location that had not been specifically described in the ROWD and Fact Sheet for Order No. R9-2002-0169 for NBSD were prohibited unless regulated by applicable waste discharge requirements.

5. Except as allowed in the SWPPP requirements of Order No. R9-2002-0169 for NBSD, non-storm water discharges that discharge either directly or indirectly to waters of the US were prohibited. Prohibited non-storm water discharges were required to be either eliminated or permitted by a separate NPDES permit.

6. Order No. R9-2003-0265 for the USN Graving Dock prohibited the discharge of wastes and pollutants from underwater operations, such as underwater paint and/or coating removal and underwater hull cleaning (e.g. “scamping”). This prohibition did not apply to the discharge of marine fouling organisms removed from unpainted and uncoated surfaces by underwater operations, or to discharges that result from the cleaning of floating booms that were installed for “Force Protection” purposes.

7. First Flush of Storm Water

a. Order No. R9-2002-0169 for NBSD required the Discharger to terminate the first flush (first ¼ inch of storm water runoff) from all Industrial High Risk Areas within 2 years of the adoption of the Order.

Addendum No. 1 to Order No. R9-2002-0169 for NBSD was adopted on November 10, 2004 to specify that the Discharger may develop and implement storm water treatment technology that provides equivalent or greater water quality protection as an alternative to diversion. A storm water treatment system using filter-absorption technology is installed at one facility, the Navy Regional Recycling Center. All storm water runoff at this facility drains through the treatment unit before discharge. Pollutants such as metals and sediment are removed as storm water flows through a multi-media filter treatment unit comprised of gravel, bone char, and activated alumina. The maximum design flow rate through the system is 250 GPM

Effective 4 years after the adoption of Order No. R9-2002-0169 for NBSD, compliance with an acute toxicity effluent limitation was required for the discharge of storm water. The acute toxicity effluent limitation provided that in a 96-hour static or continuous flow bioassay (toxicity) test, undiluted storm water runoff associated with industrial activity shall not produce less than 90 percent survival, 50 percent of the time, and not less than 70 percent, ten percent of the time.

b. Order No. R9-2003-0265 for the USN Graving Dock prohibited the discharge of the first flush of storm water runoff from Industrial High Risk Areas, except if the pollutants in the discharge were reduced to the extent that compliance with acute toxicity effluent limitations were achieved. The acute toxicity effluent limitations were the same as those established in Order No. R9-2002-0169 for NBSD discussed above.

8. Order No. R9-2002-0169 for NBSD required that whenever the analyses of industrial storm water discharge from any industrial activity contains a copper concentration greater than 63.6 µg/L or a zinc concentration greater than 117 µg/L, the Discharger shall perform the following task:

a. Review and modify the SWPPP as necessary to reduce the concentrations of copper and zinc;
b. After modifying the SWPPP, sample and analyze the next two storm water runoff events;
c. Document the review and the modifications to the SWPPP, and document the sampling analysis.

9. Provisions D.1 and D.2 contained in Order No. R9-2002-0169 for NBSD required the Discharger to do the following:

The Discharger shall reduce or prevent pollutants associated with industrial activity in storm water discharges and authorized non-storm water discharges through implementation of *best available technology economically achievable* (BAT) for toxic and non-conventional pollutants, and *best conventional pollutant control technology* (BCT) for conventional pollutants.

The Discharger shall develop and implement a SWPPP that complies with the requirements in Attachment D, Section A of Order No. R9-2002-0169 and that includes BMPs that achieve BAT and BCT.

10. Section E of Order No. R9-2002-0169 for NBSD established special conditions for utility vault and manhole dewatering discharges. The special conditions included reducing or preventing pollutants associated with these discharges through the implementation of BAT and BCT; development and implementation of a *Pollution Prevention Plan* (PLAN) with all of the required elements that includes BMPs that achieve BAT and BCT; and actions to be taken as a result of an exceedance of Receiving Water Limitations by a utility vault or manhole dewatering discharge.

11. Discharge effluent limitations and specifications for saltwater supply system water, USN Graving Dock flood dewatering, and industrial storm water were contained Order No. R9-2003-0265 for the USN Graving Dock. Effluent limitations contained in Order No. R9-2003-0265 are summarized below.

a. Effluent limitations for saltwater supply system water, graving dock deflooding dewatering, and graving dock caisson gate ballast dewatering water included:

Table F-4. Historic Numeric Effluent Limitations for Graving Dock discharges

Parameter	Units	Effluent Limitations		
		Monthly Average	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L	25	40	75
Settleable Solids	ml/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	pH units	Within limits of 6.0 – 9.0 at all times.		
Temperature	°F	Not more than 20°F greater than natural temperature of receiving waters.		

b. The following acute and chronic toxicity effluent limitations apply to the discharges of saltwater supply system and caisson gate ballast water in Order No. R9-2003-0265 for the USN Graving Dock:

i. Acute toxicity: Undiluted discharges to the San Diego Bay shall not produce less than 90% survival, 50% of the time, and not less than 70% survival, 10% of the time, except where the percent survival in San Diego Bay Water at the intake location is less than these levels. Where the percent survival in San Diego Bay water at the intake location is less than these levels, the percent survival in undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not be less than the percent survival in San Diego Bay water at the intake location. In the absence of test results demonstrating otherwise, it will be assumed that the percent survival in San Diego Bay water at the intake location is not less than these levels.

ii. Chronic toxicity: Undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not exceed 1 TUc, except where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc. Where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc, the chronic toxicity of undiluted discharges to San Diego Bay which consists of water taken from San Diego Bay shall not exceed the chronic toxicity of San Diego Bay water at the intake location. In the absence of test results demonstrating otherwise, it will be assumed that the chronic toxicity in San Diego Bay water at the intake location does not exceed 1 TUc.

c. A summary of the available monthly monitoring data for regulated parameters under Order No. R9-2003-0265 for the USN Graving Dock for saltwater supply system water and caisson ballast water are summarized below:

Table F-5. Discharge Data Summary

Parameters	Units	Highest Reported Value	
		Saltwater Supply System	Caisson Ballast Water
Oil and Grease	mg/L	<5	<5
Settleable Solids	ml/L	<0.2	<0.2
Turbidity	NTU	3.8	0.6
pH	pH units	6.3 – 7.93	6.7 – 7.83
Temperature	°F	68.2	70.5
Acute Toxicity[1]	% survival	98	100
Chronic Toxicity	TU_c	1	1

NA – Not Available

[1] Lowest survival percentage. However only one value was available for toxicity for each discharge during the period of review.

D. Compliance Summary

1. The 2010/2011 Annual Report for Storm Water Discharges Associated with Industrial Activities for Naval Base San Diego contains the following statements indicating copper and zinc are present in the storm water:

> Outfalls 5, 8, 9, 11, 14, 24, 27, 30, 34, 35, 46, 48, 80, 122, 218-247 (Pier No. 4), 289-314 (Pier No. 7), 343 (Pier No. 10), and 415-438 (Pier No. 13) exceeded copper and/or zinc benchmarks.

2. The 2009/2010 Annual Report for Storm Water Discharges Associated with Industrial Activities for Naval Base San Diego contains the following statements indicating toxicity, copper, and zinc are present in the storm water:

> Toxicity samples were collected from the 21 industrial outfalls during the December 7, 2009 storm event and were analyzed as required by EPA/821/R-02/012. Considering only samples that were statistically different from controls, of the 21 first-flush outfall samples tested for toxicity, only six samples, or 29 percent, had survivals of less than 90 percent. Therefore, the NBSD NPDES permit primary toxicity requirement was considered to have been met: However, four samples, or 19 percent had survivals less than 70 percent. Therefore, the NBSD NPDES permit secondary toxicity requirement was considered to have not been met.
>
> Outfalls 5, 8, 9, 11, 14,22,24,27,30,34,35,39,45,46,48,80, 80A, 122, 167-171 (pier No.1), 172-195 (pier No.2), and 415-438 (pier No. 13) exceeded copper and/or zinc benchmarks.

3. The Discharger has reported the following non-compliance events at Naval Base San Diego Complex to the San Diego Water Board:

a. On June 7, 2011, a mixture of water and activated alumina desiccant (97% aluminum oxide) were spilled onto the pier. Spill containment measures were implemented so an estimated 1-2 gallons of mixture reached San Diego Bay.

b. On March 7 and 8, 2011, paint dust/ chips were discharged to San Diego Bay.

c. On March 20 and 21, 2011, at the Defense Reutilization Marketing Organization (DRMO) Scrap Yard Compound, NBSD Environmental Personnel noticed that the storm water containment basin was leaking. The berm on northwest side of the high risk area was leaking and discharging storm water out of the bermed area to Outfall 122.

d. On September 30, 2010, first flush storm water from the Wharf Builder site, an Industrial High Risk Area, was not diverted and was discharged to San Diego Bay.

e. On March 29, 2010, approximately 0900, about 1 cup of oil and water mixture in the compressed air hose was discharged to San Diego Bay at Pier 8 when a pump was turned on. (ECM)

4. On April 26, 2010, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169 for NBSD Complex. Major findings reported from that inspection include:

San Diego Water Board Order No. R9-2002-0169, Discharge Specification B.4.a specifies that a toxicity test of "undiluted storm water runoff associated with industrial activity shall not produce less than 90% survival, 50% of the time, and *not less than 70% survival, 10% of the time* [emphasis added]." Toxicity samples were collected from 41 industrial discharge outfalls during the November 4, 2008 qualifying storm event. Survival not less than 90% was not met in 26 of the 41 samples, or 63% of the time, and survival of at least 70% was not met in 18 of the 41 samples, or 44% of the time (refer to Exhibit 4). The Discharger reported this issue in its 2008/2009 Annual Report, Section 2.0, Storm Water Sampling and Analysis Evaluation. This Major Finding was also identified during the previous inspection conducted on May 4, 2009.

5. The April 26, 2010, inspection report also included the following information about copper and zinc benchmark exceedances:

San Diego Water Board Order No. R9-2002-0169, Discharge Specification B.2 states "Whenever the analyses of an industrial storm water discharge from any industrial activity contains a copper concentration greater than 63.6 µg/L or a zinc concentration greater than 117 µg/L, the Discharger must comply with Discharge Specification B.2, which contains specifications to modify the SWPPP and sample the industrial storm water discharge for two additional storm events." A number of samples exceeded the benchmark action levels specified in the Order. Specifically, Outfalls 5, 8, 9, 11, 14, 22, 24, 27, 30, 34, 35, 39, 45, 46, 48, 80, 80A, 122, 167-171 (Pier No. 1), 172-195 (Pier No. 2), and 415-438 (Pier No. 13) exceeded copper and/or zinc benchmarks. The Discharger reported these results in its 2008/2009 Annual Report, Section 2.0, Storm Water Sampling and Analysis Evaluation. In addition, the Discharger had prepared an Evaluation and Minimization Plan for Copper and Zinc to evaluate major sources of copper and zinc and consider alternatives to minimize receiving water impacts. The inspector conducted spot checks of SWPPP modifications and it appeared that the Discharger completed the follow-up actions required by Discharge Specification B.2.

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt a NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The San Diego Water Board adopted a Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Requirements of this Order implement the Basin Plan. Beneficial uses applicable to the San Diego Bay are as follows:

Table F-6. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
SC-001 through SC-175, BC-001, UV-001 through UV-006, UV-008 through UV-011; NBSD-001 through NBSD-266, and NGD-001; NGD-002; NGD-003; NGD-004	San Diego Bay	Existing: Industrial service supply (IND); navigation (NAV); contact water recreation (REC1); non-contact water recreation (REC2); commercial and sport fishing (COMM); preservation of biological habitats of special significance (BIOL); estuarine habitat (EST); wildlife habitat (WILD); preservation of rare, threatened or endangered species (RARE); marine habitat (MAR); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); shellfish harvesting (SHELL)
Storm Water Discharges, as identified in Attachment K to this Order.	Chollas Creek	Existing: Non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD) Potential: Contact water recreation (REC1)
Storm Water Discharges, as identified in Attachment K to this Order.	Paleta Creek (Seventh Street Channel)	Existing: Non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD) Potential: Contact water recreation (REC1)
Storm Water Discharges, as identified in Attachment K to this Order.	San Diego River	Existing: Municipal and domestic supply (MUN); agricultural (AGR); industrial service supply (IND); industrial process supply (PROC); Contact Water Recreation (REC1); Non-contact water recreation (REC2); warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD)
Storm Water Discharges, as identified in Attachment K to this Order.	Lindberg Hydrologic Subarea	Existing: Non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD) Potential: Contact water recreation (REC1)

Requirements of this Order implement the Basin Plan.

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975.

The Thermal Plan defines *elevated temperature waste* as "*liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water.*" The Thermal Plan also defines a *new discharge* as "*any discharge (a) which is not presently taking place unless*

waste discharge requirements have been established and construction as defined in Paragraph 10 has commenced prior to adoption of this plan or (b) which is presently taking place and for which a material change is proposed but no construction as defined in Paragraph 10 has commenced prior to adoption of this plan." Because the discharges of steam condensate with temperatures in excess of 100°C meet the criteria of an elevated temperature waste, and because these discharges commenced prior to adoption of the Thermal Plan, discharges of steam condensate are considered existing discharges of elevated temperature waste for the purposes of this Order.

The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (Sediment Quality Plan) on September 16, 2008. The Sediment Quality Plan became effective on August 25, 2009. The Sediment Quality Plan establishes sediment quality objectives, identifies beneficial uses, and integrates chemical and biological measures to determine if the sediment dependent biota are protected or degraded as a result of exposure to toxic pollutants. Beneficial uses for sediment include: Estuarine Habitat, Marine Habitat, Commercial and Sport Fishing, Aquaculture, and Shellfish Harvesting. Requirements of this Order implement the Sediment Quality Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants which are discharged to inland surface waters, bays, and estuaries.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the San Diego Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

5. **Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[1] section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations and conditions of the previous orders.

7. **Atomic Energy Act.** Pursuant to the *Atomic Energy Act*, the San Diego Water Board does not have jurisdictional authority to regulate the discharge of radioactive wastes from U.S. naval nuclear propulsion plants and their support facilities. The Fact Sheets for Order No. R9-2002-0002 for NBPL and Order No. R9-2003-0008 for NBC included an attached memorandum dated July 22, 2002 which was written for the Fact Sheet for Order No. R9-2002-0002. The memorandum specifies that radioactive discharges are not subject to regulation by the San Diego Water Board and that the United States Department of the Navy and the Department of Energy have jurisdiction for discharges of radioactive material. The memorandum also specified that radioactivity monitoring was not to be included in the Order. The San Diego Water Board finds that the memorandum is applicable to the Facility. Consistent with the

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

memorandum, this Order does not regulate the discharge of radioactive wastes and does not include monitoring for radioactivity.

8. **Uniform National Discharge Standards (UNDS).** In 1996 Congress passed legislation amending Section 312 of the Clean Water Act to provide the Department Of Defense and the USEPA authority to jointly establish UNDS for incidental discharges from vessels of the Armed Forces in State waters and the contiguous zone. This comprehensive, three-phase, regulatory program applies to vessels of the Armed Forces including, but not limited to, the Navy, Military Sealift Command, Marine Corps, Army, Air Force, and Coast Guard. UNDS is designed to enhance environmental protection of coastal waters by creating protective standards for previously unregulated discharges, encourage environmentally sound management practices on current vessels, help establish standardized training for crews to perform missions, and help determine the way future ships will be built. The Phase I final rule and preamble language, including a summary of the Phase I process and findings (64 FR 25126; 40 CFR Part 1700), was published in the Federal Register on May 10, 1999. Phase I of UNDS determines the types of vessel discharges that require control by a Marine Pollution Control Device (MPCD) and those that do not require control, based on consideration of the anticipated environmental effects of the discharge and other factors listed in the Clean Water Act. In Phase I, the Environmental Protection Agency (EPA) and The Department of Defense (DoD) identify 25 discharges to be controlled by MPCDs. Phase II of UNDS development focuses on promulgating MPCD performance standards for those vessel discharges identified during Phase I as requiring an MPCD. In this Phase, DoD and EPA are establishing discharge performance standards for different classes, types, and sizes of vessels. These standards are specific to existing vessels as well as future (new design) vessels and will be promulgated in batches for efficiency purposes. Phase III of UNDS development will focus on establishing requirements for the design, construction, installation, and use of MPCDs. The requirements of this Order do not apply to vessel discharges identified in the Uniform National Discharge Standards.

9. **Vessel General Permit.** USEPA signed the 2013 Vessel General Permit (VGP) on March 28, 2013. The VGP will become effective on December 19, 2013 and regulates discharges incidental to the normal operation of vessels operating in a capacity as a means of transportation. Vessels in a dry dock are not operating in a capacity as a means of transportation and are not covered by the VGP. Floating drydocks have been determined to be operating as a means of transportation when it is docking or undocking a vessel inclusive of the transition from that operation. Discharges from vessels at the Facility which are not operating as a means of transportation are regulated by this Order.

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

Under section 303(d) of the 1972 Clean Water Act, states, territories and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 12, 2010 USEPA gave final approval to California's 2010 section 303(d) List of Water Quality Limited Segments. The San Diego Bay, as a whole, is listed as impaired for polychlorinated biphenyls (PCBs). Portions of the San Diego Bay including the 32nd Street San Diego Naval Station; San Diego Bay Shoreline, near Chollas Creek; San Diego Bay Shoreline, North of 24th Street Marine Terminal; and San Diego Bay Shoreline, 7th Street Channel are adjacent to NBSD. These portions of the San Diego Bay are listed in the 303(d) list as impaired for benthic community effects and sediment toxicity. In addition, portions of the San Diego Bay including the San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers and the San Diego Bay, G Street Pier are adjacent to the Broadway Complex. The San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers is listed in the 303(d) list as impaired for benthic community effects, sediment toxicity, and total coliform. The San Diego Bay Shoreline, G Street Pier is listed in the 303(d) list as impaired for total coliform. The impairments for NBSD Complex are summarized in the table below.

Table F-7. San Diego Bay 303(d) Impairments for NBSD

Waterbody	Location	Constituent	Facility
San Diego Bay	Whole bay	Polychlorinated biphenyls (PCBs)	NBSD and Broadway Complex
San Diego Bay	32nd Street San Diego Naval Station	Benthic community effects and sediment toxicity	NBSD
San Diego Bay	San Diego Bay Shoreline, near Chollas Creek	Benthic community effects and sediment toxicity	NBSD
San Diego Bay	San Diego Bay Shoreline, North of 24th Street Marine Terminal	Benthic community effects and sediment toxicity	NBSD
San Diego Bay	San Diego Bay Shoreline, 7th Street Channel	Benthic community effects and sediment toxicity	NBSD
San Diego Bay	San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers	Benthic community effects, sediment toxicity, and total coliform	Broadway Complex
San Diego Bay	San Diego Bay, G Street Pier	Total coliform	Broadway Complex

Waterbody	Location	Constituent	Facility
Chollas Creek	From San Diego Bay to 4 miles inland	Copper, lead, zinc, diazinon, indicator bacteria, phosphorus, nitrogen, and trash	NBSD

Storm water is discharged to Chollas Creek from NBSD. Chollas Creek is listed in the 303(d) list as impaired for copper, diazinon, indicator bacteria, lead, phosphorus, total nitrogen, trash, and zinc. On August 14, 2002 the San Diego Water Board adopted the Chollas Creek Diazinon TMDL (Resolution No. R9-2002-0123). The State Water Board subsequently approved the TMDL on July 16, 2003, and the Office of Administrative Law (OAL) and USEPA approved the TMDL on September 11, 2003, and November 3, 2003 respectively. The Chollas Creek Diazinon TMDL identifies specific MS4s within the Chollas Creek watershed as significant contributors. The significant contributors specified do not include NBSD; USEPA has banned diazinon; and monitoring of Chollas Creek has shown dramatic decreases in diazinon concentrations. This Order establishes no requirements for diazinon because Chollas Creek has achieved the numeric target for diazinon.

The San Diego Water Board adopted the Chollas Creek Metals TMDLs on June 13, 2007 (Resolution No. 2008-0043). The TMDL was subsequently approved by the State Water Board on July 15, 2008. The OAL and USEPA approved the TMDL on October 22, 2008 and December 18, 2008 respectively. The Chollas Creek Metals TMDL identifies NBSD as a point source contributor of water quality criteria exceedances for copper, lead, and zinc. This Order establishes Stormwater Action Levels (SALs) for copper, lead, and zinc, consistent with the requirements of the Chollas Creek Metals TMDLs.

E. Other Plans, Polices and Regulations

1. **Bays and Estuaries Policy.** The State Water Board adopted a Water Quality Control Policy for Enclosed Bays and Estuaries of California (Bays and Estuaries Policy) on May 16, 1974 (last amended in 1995). The Bays and Estuaries Policy establishes principles for management of water quality, quality requirements for waste discharges, discharge prohibitions, and general provisions to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. These principles, requirements, prohibitions and provisions have been incorporated into this Order.

   a. The Bays and Estuaries Policy contains the following principle for management of water quality in enclosed bays and estuaries, which includes the San Diego Bay:

      i. The discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries

shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a San Diego Water Board only when the San Diego Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge. For the purpose of this policy, ballast waters, deflooding waters, and innocuous non-municipal wastewaters such as clear brines, wash water, and pool drains are not necessarily considered industrial process wastes, and may be allowed by San Diego Water Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

ii. The Bays and Estuaries Policy also prohibits the discharge or by-passing of untreated wastes. This Order prohibits the discharge and by-passing of untreated waste except for steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; graving dock deflooding water; salt water rinse water; graving dock caisson ballast dewatering; and emergency fire suppression water and salt water supply water. For the purpose of the Bays and Estuaries Policy and the Order, the discharges of steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; graving dock deflooding water; salt water rinse water; graving dock caisson ballast dewatering; and emergency fire suppression water and salt water supply water will be considered innocuous non-municipal wastewaters and, as such, will not be considered industrial process wastes.

b. The following Principles for the Management of Water Quality in Enclosed Bays and Estuaries, as stated in the Bays and Estuaries Policy, apply to all of California's enclosed bays and estuaries including San Diego Bay:

i. Persistent or cumulative toxic substances shall be removed from the waste to the maximum extent practicable through source control or adequate treatment prior to discharge.

ii. Bay or estuarine outfall and diffuser systems shall be designed to achieve the most rapid initial dilution practicable to minimize concentrations of substances not removed by source control or treatment.

iii. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.

iv. Waste discharges shall not cause a blockage of zones of passage required for the migration of anadromous fish.

v. Non-point sources of pollutants shall be controlled to the maximum practicable extent.

This San Diego Water Board has considered the Principle for the Management of Water Quality in Enclosed Bays in Estuaries, in adopting this Order. The terms and conditions of this Order are consistent with the Principles for the Management of Water Quality in Enclosed Bays and Estuaries.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

A. Discharge Prohibitions

1. **Discharge Prohibition III.A.** Ship repair and maintenance activities may result in the discharge of pollutants and wastes to waters of the United States. Discharge Prohibition III.A prohibits the discharge of wastes from ship repair and maintenance activities. This prohibition is based on the requirements of the Enclosed Bays and Estuaries Policy and is retained from Order No. R9-2002-0169 and Order No. R9-2003-0265.

2. **Discharge Prohibitions III.B, III.C, and III.D.** The Basin Plan prohibitions are incorporated by reference in the Order. Discharge Prohibitions III.B, III.C, and III.D. are retained from Order No. R9-2002-0169 and require the Discharger to comply with the Basin Plan prohibitions.

3. **Discharge Prohibition III.E.** Waste discharges from ship repair and maintenance activities on ships, piers, and shore side facilities can cause high concentrations of copper, zinc, other metals, and oil and grease in industrial storm water runoff. High concentrations of these pollutants in the industrial storm water runoff can be toxic to aquatic organisms. Discharge Prohibition III.E is based on the toxicity requirements contained in the Basin Plan and prohibits the discharge of the first ¼ inch (first flush) of storm water runoff from Industrial High Risk Areas unless the discharge can be demonstrated to meet the limits of this Order.

4. **Discharge Prohibition III.F.** This Prohibition is based on the requirements of the Bays and Estuaries Policy and is consistent with prohibitions established for similar facilities.

5. **Discharge Prohibition III.G.** This Order prohibits the discharge of hazardous substances equal to or in excess of reportable quantities listed in 40 CFR Part 117 and/or CFR Part 302.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA's NPDES permit regulations at section 122.44, title 40 of the Code of Federal Regulations, 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. The discharges authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3.

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

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

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

c. Best conventional pollutant control technology (BCT) represents 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.

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

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 authorize the use of BPJ to derive TBELs 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.

2. Applicable Technology-Based Effluent Limitations (TBELs)

a. The State Water Board adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) on September 15, 2009, which became effective on March 10, 2010. Although the Ocean Plan is not directly applicable to enclosed bays, such as San Diego Bay, the salinity and beneficial uses of San Diego Bay are similar to those of the ocean waters of the State. Therefore, in order to protect the beneficial uses of San Diego Bay, the Ocean Plan can be used as a reference for developing discharge specifications, receiving water prohibitions, and narrative limitations and to supplement the provisions contained in the CTR, the SIP, and the Bays and Estuaries Policy.

Table A of the Ocean Plan establishes TBELs for industrial discharges for which ELGs have not been established pursuant to sections 301, 302, 304, or 306 of the federal CWA. Because of the similar salinity and beneficial uses and because there are no ELGs for shipyards, the San Diego Water Board finds that the TBELs in Table A of the Ocean Plan are applicable to industrial process discharges to San Diego Bay. These TBELs have been established in NPDES permits for boatyards and shipyards discharging to San Diego Bay. These effluent limitations were previously established in Order No. R9-2003-0265 for the USN Graving Dock.

Numeric effluent limitations based on Table A of the Ocean Plan are being established in this Order for discharges of steam condensate, and USN Graving Dock discharges from Discharge Point Nos. SC-001 through SC-175, and NGD-001 through NGD-004.

The effluent limitation established in Table A of the Ocean Plan for suspended solids states, *"Dischargers shall, as a 30-day average, remove 75 percent of suspended solids from the influent stream before discharging wastewaters to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L."*

Because the industrial discharges from the Facility do not receive treatment prior to discharge, an effluent limitation of 60 mg/L for total suspended solids has been established.

The applicable TBELs are summarized below:

Table F-8. Numeric Technology-based Effluent Limitations for Discharge Point Nos. SC-001 through SC-175, and NGD-001 through NGD-004

Parameter	Units	Effluent Limitations		
		Average Monthly	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L	25	40	75
Suspended Solids	mg/L	60	--	--
Settleable Solids	ml/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	standard units	--	--	[1]

[1] Within limits of 6.0 – 9.0 at all times.

b. Utility Vaults. The State Water Board found in Section V.B.2 of the Fact Sheet to Order No. 2006-0008-DWQ that it is not feasible to establish numeric effluent limitations for pollutants in discharges from utility vaults and underground structures. Instead, the State Water Board included a provision in Order No. 2006-0008-DWQ requiring implementation of pollution prevention practices to control and abate the discharge of pollutants to surface waters, achieve compliance utilizing BAT and BCT requirements, and achieve compliance with applicable water quality standards. Federal Regulations at 40 CFR 122.44(k)(3) and (4) authorize the San Diego Water Board to require BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible and when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. Consistent with the requirements of State Water Board Order No. 2006-0008-DWQ and Order No. R9-2002-0169 for NBSD Complex, and as described in section VII.B.3.a of this Fact Sheet, this Order includes a provision requiring the Discharger to continue the implementation and maintenance of their Best Management Practices and Pollution Prevention Plan for Utility Vault and Manhole Dewatering Discharges (Utility Vault PLAN) includes BMPs to reduce the discharge of pollutants from utility vault and manhole dewatering. The Utility Vault PLAN requirements have been revised from Order No. R9-2002-0169 to reflect the requirements in Order No. 2006-0008-DWQ.

c. Boom Cleaning. Due to the nature of activities associated with discharges from pier boom, fender, and mooring cleaning, it is impractical to collect and treat the associated wastewaters prior to discharge. Therefore, the San Diego Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom, fender, and mooring cleaning. In accordance with 40 CFR 122.44(k)(3) and (4), the San Diego Water Board finds that the implementation of BMPs in lieu of numeric effluent limitations are appropriate. This Order includes a provision requiring the implementation of BMPs to control and abate the discharge of pollutants from pier boom, fender, and mooring cleaning.

d. Graving Dock. Order No. R9-2003-0265 required the Discharger to reduce or prevent the discharge of pollutants through the implementation of BAT [CWA §301(b)(2)(A)] for toxic and non-conventional pollutants and BCT [CWA §301(b)(2)(E)] for conventional pollutants. In accordance with 40 CFR 122.44(k), Order No. R9-2003-0265 determined that the implementation of BMPs for the discharge of conventional, non-conventional, and toxic pollutants via industrial discharges and storm water were appropriate. Order No. R9-2003-0265 required the Discharger to develop and implement a BMP plan for pollutants and wastes associated with ship construction, modification, repair, and maintenance. This Order carries over the requirement for the Discharger to develop and implement a BMP Plan for pollutants and wastes from the Graving Dock.

e. Small (Military Base) Municipal Separate Storm Sewer System (MS4). In accordance with 40 CFR 122.44(k), the inclusion of BMPs in lieu of numeric effluent limitations is appropriate in storm water permits. The Discharger must implement BMPs that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality. This Order requires the Discharger to develop and implement a Storm Water Management Plan (SWMP) that describes BMPs, measurable goals, and timetables for implementation in six minimum control measures. This approach is consistent with the requirements of the current State-wide Phase II MS4 Permit (State Water Board Order No. 2013-0001-DWQ).

f. Industrial Storm Water. In accordance with 40 CFR 122.44(k), Order No. R9-2002-0169 for NBSD Complex determined that the implementation of BMPs for the discharge of industrial storm water were appropriate. To carry out the purpose and intent of the CWA, Order No. R9-2002-0169 for NBSD Complex required the Discharger to develop and implement a SWPPP, as authorized by CWA section 304(e) and section 402(p), for toxic pollutants and hazardous substances, and for the control of storm water discharges. The requirement to implement an appropriate SWPPP for areas associated with industrial activity is retained from Order No. R9-2002-0169.

In addition to the retention of a SWPPP, this Order establishes Numeric Action Levels (NALs) for storm water from Industrial High Risk Areas and Industrial Low Risk Areas in lieu of benchmarks.

The draft State-wide Industrial Storm Water General Permit (July 18,2012), contains NALs based on benchmarks in USEPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) which became effective May 27, 2009. Consistent with the direction of the State Water Board, this Order establishes NALs with a tiered compliance strategy. The San Diego Water Board finds that the USEPA benchmarks serve as an appropriate set of TBELs that demonstrate compliance with BAT/BCT.

Consistent with the direction of the State Water Board in the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002, this Order requires all treatment BMPs to be designed for no less than a 5-year, 24-hour storm event. Because pollutants contained within storm water may negatively impact the receiving water if not properly controlled, and NALs are technology-based and not necessarily protective of water quality, corrective actions for Receiving Water Limitations violations have also been included within the Order.

g. Non-storm water Discharges. Non-storm water discharges include a wide variety of sources and may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections must be addressed through structural as well as non-structural BMPs. The San Diego Water Board recognizes, however, that certain non-storm water discharges may be necessary for general operation. Therefore, this Order authorizes such discharges provided they meet certain conditions that will minimize the discharge of pollutants to the receiving waters.

h. Graving Dock Pre-flood Cleaning. In addition to numeric TBELs for discharge NGD-001 and 002, the Discharger is required to implement BMPs to ensure that no wastes are discharged during the flooding and de-flooding of the graving dock in accordance with 40 CFR 122.44(k)(4).

i. Weight Test Water. Due to the nature of activities associated with discharges from weight test water, it is impractical to collect and treat the associated wastewaters prior to discharge. The weight test bags are filled utilizing the ship's salt water system which is regulated under the UNDS program. The bags are thoroughly cleaned after every use so no contaminants are added and the only discharge is the same water as the ship's salt water system which is regulated by the UNDS program. Therefore, the San Diego Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from weight test water. In accordance with 40 CFR 122.44(k)(3) and (4), the San Diego Water Board finds that the implementation of BMPs in lieu of numeric effluent limitations are appropriate. This Order includes a provision requiring the implementation of BMPs to control and abate the discharge of pollutants from weight test water.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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 applicable water quality standards.

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 the 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, WQBELs must be established using: (1) USEPA 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 section 122.44(d)(1)(vi).

The process for determining reasonable potential 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 that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the San Diego Bay, Chollas Creek, Paleta Creek, and San Diego River contained in the Basin Plan are summarized in section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving waters.

The CTR promulgated toxics criteria for California and, in addition, incorporated the previously adopted National Toxics Rule criteria that were applicable in the State. Priority pollutant water quality criteria in the CTR are applicable to discharges to the San Diego Bay, Chollas Creek, Paleta Creek, and the San Diego River too. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply: In accordance with section 131.38(c)(3), freshwater criteria apply to areas where salinities are at or below 1 part per thousand (ppt) 95 percent or more of the time. The San Diego Water Board determined that because the

discharges are within a bay, saltwater CTR criteria are applicable. The CTR criteria for saltwater aquatic life or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the San Diego Bay, a water of the US in the vicinity of the discharges.

The SIP procedures for implementation of CTR and NTR criteria are not applicable to storm water discharges. However, the toxicity objectives contained in the Basin Plan and the Bays and Estuary Policy are applicable to the discharge of storm water from Facility to the San Diego Bay. The applicable toxicity limitations are discussed in this section of the Fact Sheet.

The SIP procedures for implementation of CTR and NTR criteria are applicable to non-storm water discharges. The non-storm water discharges from the Facility to San Diego Bay include steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; graving dock deflooding; caisson ballast dewatering; and saltwater supply system water.

Representative monitoring of the steam condensate discharges was conducted at five locations and submitted in the annual reports for years 2003 through 2009. Monitoring of the San Diego Bay in the vicinity of the discharges was submitted in the application.

Representative monitoring of utility vault and manhole dewatering discharges was conducted at nine locations and submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the Discharger's *Case Study for Utility Vault and Manhole Dewatering Discharges at Naval Base Point Loma, Naval Base San Diego, and Naval Base Coronado*. Additional monitoring results from 2007 through 2009 were provided by the Discharger in annual reports. Receiving water in the vicinity of the discharges was not conducted.

Representative monitoring of the pier boom cleaning, fender, and mooring cleaning discharge was conducted and submitted in the application for a total of one sampling event. Monitoring of the San Diego Bay in the vicinity of the discharges was also submitted in the application.

Data for the caisson ballast dewatering, the saltwater supply system water, and the receiving water was available from 2004 through 2009. Data for the graving dock deflooding water was only available for August 8, 2003.

A Reasonable Potential Analysis (RPA) was conducted for industrial process wastewaters to the San Diego Bay using all the available data. The table below summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the RPAs for this Order.

Table F-9. Applicable CTR/NTR Water Quality Criteria

Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms Only
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Antimony, Total Recoverable	4,300	Not Applicable		--	--	Not Applicable	4,300
Arsenic, Total Recoverable	36.00			69.00	36.00		--
Beryllium, Total Recoverable	No Criteria			--	--		--
Cadmium, Total Recoverable	9.36			42.25	9.36		--
Chromium (III)	No Criteria			--	--		--
Chromium (VI)	50			1,100	50		--
Copper, Total Recoverable	3.73			5.78	3.73		--
Cyanide, Total Recoverable	1.00			1.00	1.00		--
Lead, Total Recoverable	8.52			220.82	8.52		--
Mercury, Total Recoverable	0.051			--	--		0.051
Nickel, Total Recoverable	8.28			74.75	8.28		4,600
Silver, Total Recoverable	2.24			2.24	--		--
Selenium, Total Recoverable	71			290	71		--
Thallium, Total Recoverable	6.3			--	--		6.3
Zinc, Total Recoverable	85.62			95.14	85.62		--
TCDD-Equivalents	1.40×10^{-8}			--	--		1.40×10^{-8}
Bromoform	360			--	--		360
Chlorodibromomethane	34			--	--		34
Chloroform	No Criteria			--	--		--
Dichlorobromomethane	46			--	--		46
Methyl Chloride	No Criteria			--	--		--
Methylene Chloride	1,600			--	--		1,600
Phenol	4,600,000			--	--		4,600,000
Acenaphthene	2,700			--	--		2,700
Acenaphthylene	No Criteria			--	--		--
Anthracene	110,000			--	--		110,000
Benzo (a) Anthracene	0.049			--	--		0.049
Benzo (a) Pyrene	0.049			--	--		0.049
Benzo (b) Fluoranthene	0.049			--	--		0.049

Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms Only
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzo (ghi) Perylene	No Criteria			--	--		--
Benzo (k) Fluoranthene	0.049			--	--		0.049
Bis (2-ethylhexyl) Phthalate	5.9			--	--		5.9
Butylbenzyl Phthalate	5,200			--	--		5,200
Chrysene	0.049			--	--		0.049
Dibenzo (a,h) Anthracene	0.049			--	--		0.049
Diethyl Phthalate	120,000			--	--		120,000
Dimethyl Phthalate	2,900,000			--	--		2,900,000
Di-n-butyl Phthalate	12,000			--	--		12,000
Di-n-octyl Phthalate	No Criteria			--	--		--
1,2-Diphenylhydrazine	0.54			--	--		0.54
Fluoranthene	370			--	--		370
Fluorene	14,000			--	--		14,000
Indeno (1,2,3-cd) Pyrene	0.049			--	--		0.049
Naphthalene	No Criteria			--	--		--
Nitrobenzene	1,900			--	--		1,900
Phenanthrene	No Criteria			--	--		--
Pyrene	11,000			--	--		11,000
1,2,4-Trichlorobenzene	No Criteria			--	--		--

b. Dilution Credits. Section 1.4.2 of the SIP establishes procedures for granting mixing zones and the assimilative capacity of the receiving water. Before establishing a dilution credit for a discharge, it must first be determined if, and how much, receiving water is available to dilute the discharge.

The worst-case dilution is assumed to be zero to provide protection for the receiving water beneficial uses. The impact of assuming zero assimilative capacity within the receiving water is that discharge limitations are applied end-of-pipe with no allowance for dilution within the receiving water.

3. Determining the Need for WQBELs

a. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard.

The San Diego Water Board conducted the RPA in accordance with section 1.3 of the SIP. A summary of the results for the parameters which demonstrated reasonable potential, for each applicable discharge, is provided in the tables below.

Table F-10. Summary of RPA Results[1]

Discharge Location No.	Parameter	MEC[1] µg/L	B[2] µg/L	C[3] µg/L	Reason
Steam Condensate (SC-001 through SC-175)	Copper, Total Recoverable	130	4.42	3.73	MEC & B > C
	Lead, Total Recoverable	18.78	0.361	8.52	MEC > C
	Mercury, Total Recoverable	0.15	<0.01	0.051	MEC > C
	Zinc, Total Recoverable	249.82	10.31	85.62	MEC > C
Pier Boom, Fender, and Mooring Cleaning (BC-001)	Copper, Total Recoverable	10.16	5.22	3.73	MEC & B > C
	Benzo (b) Fluoranthene	0.071	0.0031	0.049	MEC > C
	Benzo (k) Fluoranthene	0.057	0.0023	0.049	MEC > C
	Chrysene	0.1264	0.0032	0.049	MEC > C
Utility Vault and Manhole Dewatering (UV-001 through UV-012)	Arsenic, Total Recoverable	210	NA	36	MEC > C
	Cadmium, Total Recoverable	22	NA	9.36	MEC > C
	Chromium, Total Recoverable	100	NA	50.35	MEC > C
	Copper, Total Recoverable	5,300	NA	3.73	MEC > C
	Lead, Total Recoverable	400	NA	8.52	MEC > C
	Mercury, Total Recoverable	8.3	NA	0.051	MEC > C
	Nickel, Total Recoverable	82	NA	8.28	MEC > C
	Silver, Total Recoverable	25	NA	2.24	MEC > C
	Zinc, Total Recoverable	1,500	NA	85.62	MEC > C
	Benzo (a) Anthracene	0.11	NA	0.049	MEC > C
	Benzo (a) Pyrene	0.066	NA	0.049	MEC > C
	Benzo (b) Fluoranthene	0.072	NA	0.049	MEC > C
	Chrysene	0.094	NA	0.049	MEC > C
	Indeno (1,2,3-cd) Pyrene	0.13	NA	0.049	MEC > C
Deflooding Water (NGD-001 and NGD-002)	Copper, Total Recoverable	11.1	16.7	3.73	MEC & B > C
Caisson Ballast Dewatering (NGD-003)	Cadmium, Total Recoverable	30	0.0752	9.36	MEC > C
	Copper, Total Recoverable	40	16.7	3.73	MEC & B > C
	Nickel, Total Recoverable	50	0.844	8.28	MEC > C
	Silver, Total Recoverable	10.1	45.1	2.24	MEC & B > C
	Zinc, Total Recoverable	165	21.3	85.62	MEC > C
Saltwater System Supply Water (NGD-004)	Copper, Total Recoverable	213	16.7	3.73	MEC & B > C
	Nickel, Total Recoverable	79.7	0.844	8.28	MEC > C
	Silver, Total Recoverable	5.65	45.1	2.24	MEC & B > C
	Zinc, Total Recoverable	771	21.3	85.62	MEC > C

[1] MEC = Maximum Effluent Concentration
[2] B = Background Concentration
[3] C = Criterion
[4] NA – Not Available

4. WQBEL Calculations

a. Utility Vaults. As shown in Table F-10, the San Diego Water Board finds that discharges from utility vault and manhole dewatering have the reasonable potential to exceed water quality criteria for several priority pollutants. However, section V.C.3 of the Fact Sheet to State Water Board Order No. 2006-0008-DWQ states that "*establishment of numeric effluent limitations for pollutants from utility vaults and underground structures is not feasible because: (1) utility companies have numerous short duration intermittent releases of water to surface waters from many different locations, and (2) treatment of all these releases to meet numeric effluent limitations would be impractical.*" Consistent with State Water Board Order No. 2006-0008-DWQ and Order No. R9-2002-0169 for NBSD Complex, the San Diego Water Board is not establishing numeric effluent limitations for utility vaults and manholes in this Order. However, as described in section VII.C.3.a of this Fact Sheet, this Order includes a provision requiring the Discharger to continue the implementation and maintenance of their Utility Vault PLAN which includes BMPs to reduce the discharge of pollutants from utility vault and manhole dewatering.

b. Boom Cleaning. As shown in Table F-10, the San Diego Water Board finds that discharges from pier boom, fender, and mooring cleaning exhibit reasonable potential to exceed water quality criteria for a number of priority pollutants. However, as discussed in section IV.B.2.c of this Fact Sheet, the San Diego Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom, fender, and mooring cleaning. In lieu of numeric effluent limitations, the San Diego Water Board finds that the implementation of BMPs is appropriate. As described in section VII.C.3.b of this Fact Sheet, this Order includes a provision requiring the implementation of BMPs to control and abate the discharge of pollutants from pier boom, fender, and mooring cleaning.

c. The Basin Plan states, "*In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0*."

WQBELs have been established based on the water quality objectives established in the Basin Plan.

d. The Thermal Plan establishes the following water quality objectives for existing discharges to enclosed bays:

"Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses."

Steam condensate discharges are considered discharges of elevated temperature wastes and must comply with the water quality objective. The Discharger installed the steam condensate system prior to the adoption of the

Thermal Plan on May 18, 1972 so this steam condensate discharge is an existing discharge. A numeric effluent limitation is not provided for existing discharges. The Thermal Plan water quality objective has been applied as a narrative receiving water effluent limitation.

Due to the low discharge rate of steam condensate into the receiving water, the discharge is not expected to degrade beneficial uses due to elevated temperatures.

e. Effluent limitations for cadmium, copper, lead, mercury, nickel, silver, and zinc were calculated in accordance with section 1.4 of the SIP. The paragraphs below describe the methodology used for calculating effluent limitations for these parameters.

f. Effluent Limitation Calculations.

In calculating maximum effluent limitations, the ECAs were set equal to the criteria/standards/objectives.

$$ECA_{acute} = CMC \qquad ECA_{chronic} = CCC$$

For the human health, agriculture, or other long-term criterion/objective, a dilution credit can be applied. The ECA is calculated as follows:

$$ECA_{HH} = HH + D(HH - B)$$

where:

ECA_{acute} = effluent concentration allowance for acute (1-hour average) toxicity criterion

$ECA_{chronic}$ = effluent concentration allowance for chronic (4-day average) toxicity criterion

ECA_{HH} = effluent concentration allowance for human health, agriculture, or other long-term criterion/objective

CMC = criteria maximum concentration (1-hour average)

CCC = criteria continuous concentration (4-day average, unless otherwise noted)

HH = human health, agriculture, or other long-term criterion/objective

D = dilution credit

B = maximum receiving water concentration

Acute and chronic toxicity ECAs were then converted to equivalent long-term averages (LTA) using statistical multipliers and the lowest is used. Additional statistical multipliers were then used to calculate the maximum daily effluent limitation (MDEL) and the average monthly effluent limitation (AMEL).

Human health ECAs are set equal to the AMEL and a statistical multiplier is used to calculate the MDEL.

$$AMEL = mult_{AMEL}\left[\min\left(\underbrace{M_A ECA_{acute}}_{LTA_{acute}}, M_C ECA_{chronic}\right)\right]$$

$$MDEL = mult_{MDEL}\left[\min\left(M_A \underbrace{ECA_{acute}}_{LTA_{chronic}}, M_C ECA_{chronic}\right)\right]$$

$$MDEL_{HH} = \left(\frac{mult_{MDEL}}{mult_{AMEL}}\right) AMEL_{HH}$$

where: $mult_{AMEL}$ = statistical multiplier converting minimum LTA to AMEL

$mult_{MDEL}$ = statistical multiplier converting minimum LTA to MDEL

M_A = statistical multiplier converting CMC to LTA

M_C = statistical multiplier converting CCC to LTA

WQBELs were calculated for cadmium, copper, lead, mercury, nickel, silver, and zinc as follows in Tables F-11 through F-17, below.

Table F-11. WQBEL Calculations for Cadmium

	Acute	Chronic
Criteria (µg/L) [1]	42.25	9.36
Dilution Credit	No Dilution	No Dilution
ECA	42.25	9.36
ECA Multiplier	0.32	0.53
LTA	13.57	4.94
AMEL Multiplier (95th%)	[2]	1.55
AMEL (µg/L)	[2]	**7.7**
MDEL Multiplier (99th%)	[2]	3.11
MDEL (µg/L)	[2]	**15.4**

[1] CTR Aquatic Life Criteria

[2] Limitations based on chronic LTA (Acute LTA > Chronic LTA)

Table F-12. WQBEL Calculations for Copper

	Acute	Chronic
Criteria (µg/L) [1]	5.78	3.73
Dilution Credit	No Dilution	No Dilution
ECA	5.78	3.73
ECA Multiplier	0.32	0.53
LTA	1.86	1.97
AMEL Multiplier (95th%)	1.55	[2]
AMEL (µg/L)	**2.9**	[2]
MDEL Multiplier (99th%)	3.11	[2]
MDEL (µg/L)	**5.8**	[2]

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (Acute LTA < Chronic LTA)

Table F-13. WQBEL Calculations for Lead

	Acute	Chronic
Criteria (µg/L) [1]	220.82	8.52
Dilution Credit	No Dilution	No Dilution
ECA	220.82	8.52
ECA Multiplier	0.32	0.53
LTA	70.90	4.49
AMEL Multiplier (95th%)	[2]	1.55
AMEL (µg/L)	[2]	**7.0**
MDEL Multiplier (99th%)	[2]	3.11
MDEL (µg/L)	[2]	**14.0**

[1] CTR Aquatic Life Criteria

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

Table F-14. WQBEL Calculations for Mercury

	Human Health
Criteria (µg/L)[1]	0.051
Dilution Credit	No Dilution
ECA	0.051
AMEL (µg/L)[2]	**0.051**
MDEL/AMEL Multiplier[3]	2.01
MDEL (µg/L)	**0.102**

[1] CTR Criteria for Human Health (for Consumption of Organisms Only)

[2] AMEL = ECA per section 1.4.B, Step 6 of SIP

[3] Assumes sampling frequency n<=4. Calculated multiplier based on Step 6 of section 1.4 of the SIP.

Table F-15. WQBEL Calculations for Nickel

	Acute	Chronic
Criteria (µg/L) [1]	74.75	8.28
Dilution Credit	No Dilution	No Dilution
ECA	74.75	8.28
ECA Multiplier	0.32	0.53
LTA	24.00	4.37
AMEL Multiplier (95th%)	[2]	1.55
AMEL (µg/L)	[2]	**6.8**
MDEL Multiplier (99th%)	[2]	3.11
MDEL (µg/L)	[2]	**13.6**

[1] CTR Aquatic Life Criteria

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

Table F-16. WQBEL Calculations for Silver

	Acute	Chronic
Criteria (µg/L) [1]	2.24	No Criteria
Dilution Credit	No Dilution	--
ECA	2.24	--
ECA Multiplier	0.32	--
LTA	0.72	--
AMEL Multiplier (95th%)	1.55	--
AMEL (µg/L)	**1.1**	**--**
MDEL Multiplier (99th%)	3.11	--
MDEL (µg/L)	**2.2**	**--**

[1] CTR Aquatic Life Criteria

Table F-17. WQBEL Calculations for Zinc

	Acute	Chronic
Criteria (µg/L) [1]	95.14	85.62
Dilution Credit	No Dilution	No Dilution
ECA	95.14	85.62
ECA Multiplier	0.32	0.53
LTA	30.55	45.16
AMEL Multiplier (95th%)	1.55	[2]
AMEL (µg/L)	**47.4**	[2]
MDEL Multiplier (99th%)	3.11	[2]
MDEL (µg/L)	**95.1**	[2]

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (Acute LTA < Chronic LTA)

g. A summary of the applicable WQBELs are provided below:

Table F-18. Applicable WQBELs

Discharge Type (Discharge Point Nos.)	Parameter	Units	Effluent Limitations	
			Average Monthly	Maximum Daily
Steam Condensate (SC-001 through SC-175)	Copper, Total Recoverable	µg/L	2.9	5.8
	Lead, Total Recoverable	µg/L	7.0	14.0
	Mercury, Total Recoverable	µg/L	0.051	0.102
	Zinc, Total Recoverable	µg/L	47.4	95.1
	pH	pH units	--	[1]
Graving Dock Deflooding Water and Salt Water Rinse Water (NGD-001 through NGD-002)	Copper, Total Recoverable	µg/L	2.9	5.8
	pH	pH units	--	[1]
Graving Dock Caisson Ballast Dewatering (NGD-003)	Cadmium, Total Recoverable	µg/L	7.7	15.4
	Copper, Total Recoverable	µg/L	2.9	5.8
	Nickel, Total Recoverable	µg/L	6.8	13.6
	Silver, Total Recoverable	µg/L	1.1	2.2
	Zinc, Total Recoverable	µg/L	47.4	95.1
	pH	pH units	--	[1]
Graving Dock Emergency Fire Suppression Water and Salt Water Supply Water (NGD-004)	Copper, Total Recoverable	µg/L	2.9	5.8
	Nickel, Total Recoverable	µg/L	6.8	13.6
	Silver, Total Recoverable	µg/L	1.1	2.2
	Zinc, Total Recoverable	µg/L	47.4	95.1
	pH	pH units	--	[1]

[1] To be applied as an instantaneous effluent limitation, the discharge shall at all times be between 7.0 and 9.0 standard pH units.

h. On September 8, 2010, the Discharger submitted a request for intake water credits pursuant to Section 1.4.4 of the SIP. The Discharger has requested intake water credits for total recoverable copper for the following discharges:

- Graving dock deflooding and salt water rinse water (Discharge Point Nos. NGD-001 and NGD-002)
- Caisson ballast dewatering (Discharge Point No. NGD-003)
- Emergency fire suppression water and salt water supply water (Discharge Point No. NGD-004)

Section 1.4.4 of the SIP establishes the following minimum requirements before intake credits may be granted:

i. The observed maximum ambient background concentration, as determined in section 1.4.3.1, and the intake water concentration of the pollutant exceeds the most stringent applicable criterion/objective for that pollutant.

The Discharger has provided receiving water sample data for the San Diego Bay water adjacent to the USN Graving Dock for the time frame of 2004 through 2010. Nine (9) of twelve (12) samples collected in this time frame resulted in concentrations that exceed the saltwater chronic criteria for copper of 3.73 µg/L, and 10 of the results exceed the calculated AMEL.

The Discharger has demonstrated compliance with this requirement for the application of intake credits.

ii. The intake water credits provided are consistent with any TMDL applicable to the discharge that has been approved by the San Diego Regional Board, the State Water Board, and the USEPA.

The receiving water is on the 303(d) list as impaired for benthic community effects and sediment toxicity, however a TMDL has not been completed and is not scheduled for completion until 2019. Thus, the application of intake credits is not currently restricted by a TMDL. It should be noted that intake credits that are granted prior to TMDL completion may be revised in the future upon adoption of a TMDL for the receiving water.

The Discharger has demonstrated compliance with this requirement for the application of intake credits.

iii. The intake water is from the same water body as the receiving water body.

The intake water for all the requested discharges is the receiving water directly adjacent to the Graving Dock.

The Discharger has demonstrated compliance with this requirement for the application of intake credits.

iv. The NBSD does not alter the intake water pollutant chemically or physically in a manner that adversely affects water quality and beneficial uses.

No available information indicates that the Discharger will alter the intake water pollutant in any manner that would increase the concentrations of copper discharged to the receiving water.

Further, the application of intake credits for copper based on current receiving water data encourages the Discharger to ensure effective methods for maintaining the same water quality as the intake water are implemented, and would likely result in effluent limitation exceedances if the Discharger negatively altered the water quality of the intake prior to discharge.

By maintaining the discharges at similar water quality to the intake, no additional negative effects to the receiving water are expected to occur.

v. The timing and location of the discharge does not cause adverse effects on water quality and beneficial uses that would not occur if the intake water pollutant had been left in the receiving water body.

There is no reason to believe the timing and location of the discharges for which intake credits have been requested would cause adverse effects on water quality and beneficial uses that would not occur if the intake water pollutant had been left in the receiving water body.

The Discharger appears to be in compliance with this requirement for the application of intake credits.

vi. Section 1.4.4 of the SIP requires that the permit specify how compliance with effluent limitations with intake water credits will be assessed. The SIP states that this may be done by basing the effluent limitation on the ambient background concentration data or by simultaneously monitoring the pollutant concentrations in the intake water and in the effluent.

To account for variation of concentrations of total recoverable copper in intake water and the effluent that might occur during operations (i.e., concentration of pollutant may vary slightly from hour to hour in both the intake and effluent), and the inherent accuracy limitations of laboratory analyses, compliance with the intake credit-based effluent limitation has been determined based on the 90th percentile of all available ambient background data submitted between April 8, 2004 through March 3, 2010. The resulting intake credit for total recoverable copper at NGD-001 through NGD-004 is 13.8 µg/L.

vii. The AMEL is calculated based on a discharge of waste for every day during the month. Dischargers are allowed to exceed the AMEL during a day as long as the discharge is below the MDEL or the instantaneous maximum effluent limit for the day and as long as the average for the month is below the AMEL. The discharges from the graving dock deflooding water and caisson ballast dewatering only occur very infrequently, only one day every several months. It is not appropriate to apply an AMEL to a discharge that occurs only one time during the month. A footnote has been added to the AMEL for the graving dock deflooding water and caisson ballast dewatering which states “The AMEL only applies if there is a discharge more than one day in a 30 day period or if there is no other effluent limitation for the parameter.”

5. Whole Effluent Toxicity (WET)

a. Background and Rationale

The Basin Plan defines toxicity as the adverse response of organisms to chemicals or physical agents.

The Basin Plan establishes a narrative water quality objective for toxicity:

"All waters shall be maintained free of toxic substances in concentrations that are toxic, or that produce detrimental physiological responses in human, plant, animal, or aquatic life."

Order No. R9-2002-0169 and Order No. R9-2003-0265 established acute toxicity effluent limitations for storm water discharges. Survival rates reported by the Discharger for two storm water sampling events conducted in December 2006 and April 2007 range from 0 to 100 percent, indicating the presence and reasonable potential for acute toxicity in the discharge of storm water from the Facility.

In discussions with USEPA Region 9, the USEPA has informed San Diego Water Board staff that the application of chronic toxicity monitoring and effluent limitations for storm water runoff are generally more desirable than acute toxicity because chronic toxicity is more conservative and provides a better indicator of chronic effects to organisms in the receiving water, other than percent survival. Chronic effects, such as detrimental physiological responses (affecting fertilization, growth, reproduction, etc.) may be present, even when acute effects such as the death of an organism are not apparent. The use of chronic toxicity allows for a more accurate determination of the narrative water quality objective, which specifies *"detrimental physiological responses"*. Many detrimental physiological responses are not addressed when the test is limited to simply percent survival.

Based on the USEPA Region 9 guidance, chronic toxicity monitoring and effluent limitations are established in this Order for the discharge of industrial process water at the Facility. Because chronic toxicity is considered to be a more conservative indicator of toxicity, and the monitoring of all industrial wastewater sample locations for both acute and chronic toxicity would be costly and redundant, the monitoring requirements and effluent limitations for acute toxicity have been removed for industrial wastewater discharges based on the application of the more conservative chronic toxicity requirements. If the Discharger complies with the effluent limitations for chronic toxicity, they will achieve water quality greater than that necessary to achieve compliance with acute toxicity effluent limitations.

The State Water Board has not adopted a policy or plan for regulating toxicity in storm water discharges. NBSD currently has acute toxicity effluent limitations for industrial storm water discharges which they have not been able to achieve. An acute toxicity effluent limitation from Order R9-2002-0169 has been carried over to this Order and been revised to incorporate USEPA's guidance on the TST method. This Order also requires further study on chronic toxicity in industrial storm water discharges through a study on an appropriate in-stream waste concentration for discharges to San Diego Bay. Because there is no established policy and the potential effects on receiving waters from chronic toxicity in industrial storm water discharges are not well understood, this Order maintains the acute toxicity effluent limitation for Industrial High Risk Areas storm water discharges. The San Diego Water Board may choose to establish end-of-pipe chronic toxicity effluent limitations for Industrial High Risk Areas storm water discharges in the future. In developing such a limitation an instream waste concentration factor of 100 percent will be assumed whenever mixing zones or dilution credits are not authorized by the San Diego Water Board.

Navy Acute Toxicity Effluent Limitation Challenge

During the renewal of the Discharger's NPDES permits for the Facility, NBC, and NBPL, the Discharger challenged the acute toxicity limitation and has asserted that the acute toxicity limitation is not based on scientific data, that it is overly stringent for protecting water quality, and that diversion of all storm water runoff to the sanitary sewer is the only effective BAT/BCT for meeting the effluent limitation. This Order maintains an acute toxicity effluent limitation for Industrial High Risk Areas storm water discharges. Although this Order is establishing chronic toxicity effluent limitations instead of acute toxicity effluent limitations for industrial process wastewater discharges, the Discharger's challenge to the acute toxicity effluent limitations is addressed below because some of the concerns can be applied to chronic toxicity.

The acute toxicity effluent limitation established in Order No. R9-2002-0169 for NBSD Complex and Order No. R9-2003-0265 for the USN Graving Dock was established to implement the Basin Plan water quality objective for toxicity in receiving waters. The effluent limitation was derived from, and is essentially the same as, the acute toxicity discharge standard contained in the 1974 Bays and Estuaries Policy.

The Discharger's NPDES permits contained provisions which allowed the Discharger to recommend, after conducting a required study, alternative scientifically valid survival rates for acute exposure to discharges of storm water from industrial areas at the Discharger's facilities. The Discharger conducted a study to develop a scientifically defensible, and appropriate, toxicity limitation for industrial storm water discharges from Naval facilities to San Diego Bay. The results of the study were summarized in a Final Report,

Storm Water Toxicity Evaluation Conducted at: Naval Station San Diego, Naval Submarine Base San Diego, Naval Amphibious Base Coronado, and Naval Air Station North Island, dated May 2006.

The Discharger's final recommendations included in the report are summarized below:

- The use of appropriate USEPA WET test methods and data evaluation when declaring a test result as toxic.

- Acknowledge of WET method variable and the minimum significant difference that laboratory testing can provide in declaring a toxic result.

- Consideration of realistic exposure conditions when using WET testing to infer toxicity in the receiving water.

In addition, the Discharger has submitted comments regarding the current acute toxicity requirements. Comments of significant importance are summarized below:

- The Discharger has requested that the existing storm water toxicity testing language be revised to require a statistical comparison of discharge toxicity results with control sample toxicity results using a student t-test, to determine whether a discharge is toxic or not.

- The Discharger has requested that the existing storm water toxicity testing language be revised to require the use of percent minimum significant difference, using the 10^{th} and 75^{th} percentiles as lower and upper bounds, respectively, to account for inherent variability of toxicity testing procedures to determine whether a discharge is toxic or not.

- The Discharger has requested that the existing storm water toxicity discharge specification language be revised according to two proposed alternatives that presumably consider realistic exposure conditions to infer toxicity in the receiving water.

San Diego Water Board staff stated in a memorandum to the Executive Officer dated August 22, 2006 that the Discharger's proposed toxicity alternatives should not be adopted in their entirety and, "*Toxicity in storm water discharges should not be ignored just because the causative agent is diluted in bay water. Testing times should not be shortened to ensure that the variability inherent to storm water discharges is not causing low level toxicity that may be missed in an acute test.*"

Toxicity Rationale

The San Diego Water Board has considered the following information in developing toxicity monitoring and effluent limitations:

- The study performed by the Discharger,
- Comments received from the Discharger,
- Discussions with USEPA Region 9,
- USEPA's June 2010 guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, An Additional Whole Effluent Toxicity Statistical Approach for Analyzing Acute and Chronic Data (*EPA 833-R-10-003*),*
- USEPA's June 2010 guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document, An Additional Whole Effluent Toxicity Statistical Approach for Analyzing Acute and Chronic Data* (EPA 833-R-10-004), and
- The interpretation of State regulations.

The implementation of toxicity monitoring requirements and effluent limitations are based on a new statistical approach developed by USEPA that assesses the WET measurement of wastewater effects on specific test organisms' ability to survive, grow, and reproduce called the Test of Significant Toxicity (TST). This new approach is a statistical method that uses hypothesis testing techniques based on research and peer-reviewed publications. The approach examines whether an effluent at the critical concentration and a control within a WET test differ by an unacceptable amount (the amount that would have a measured detrimental effect on the ability of aquatic organisms to thrive and survive).

Organism response to the effluent and control are unlikely to be exactly the same, even if no toxicity is present. They might differ by such a small amount that even if statistically significant, it would be considered negligible biologically. A more useful approach could be to rephrase the null hypothesis, "Is the mean response in the effluent less than a defined biological amount?" The Food and Drug Administration has successfully used that approach for many years to evaluate drugs, as have many researchers in other biological fields. In that approach, the null hypothesis is stated as the organism response in the effluent is less than or equal to a fixed fraction (*b*) of the control response (e.g., 0.75 of the control mean response):

$$\text{Null hypothesis: Treatment mean} \leq b * \text{Control mean}$$

To reject the null hypothesis above means the effluent is considered non-toxic. To accept the null hypothesis means the effluent is toxic.

Before the TST null hypothesis expression could be recommended by USEPA, certain Regulatory Management Decisions (RMDs) were needed, including what effect level in the effluent is considered unacceptably toxic and the desired frequency of declaring a truly negligible effect within a test non-toxic.

In the TST approach, the *b* value in the null hypothesis represents the threshold for unacceptable toxicity. For chronic toxicity, the USEPA made the RMD that the *b* value is set at 0.75, which means that a 25 percent effect (or more) at the IWC is considered evidence of unacceptable chronic toxicity. For acute toxicity, the *b* value is set at 0.80.

USEPA's RMDs for the TST method are intended to identify unacceptable toxicity most of the time when it occurs, while also minimizing the probability that the in-stream waste concentration (IWC) is declared toxic when in fact it is truly acceptable. Additional RMDs by USEPA to achieve this objective were made regarding acceptable maximum false positive (β using a TST approach) and false negative rates (α using a TST approach).

In the TST approach, the RMDs are defined as:

1) Declare a sample toxic between 75 – 95 percent of the time ($0.05 \leq \alpha \leq 0.25$) when there is unacceptable toxicity.

2) Declare an effluent non-toxic no more than 5 percent of the time ($\beta \leq 0.05$) when the effluent effect at the critical effluent concentration is 10 percent.

USEPA used valid toxicity data from approximately 2,000 WET tests to develop and evaluate the TST approach. The TST approach was tested using nine different whole effluent toxicity test methods comprising twelve biological endpoints and representing most of the different types of whole effluent toxicity test designs in use. More than one million computer simulations were used to select appropriate alpha error rates for each test method that also achieved USEPA's other RMDs for the TST approach.

Effluent limitations are established using the TST "pass" "fail" approach as well as a percent effect. A MDEL for chronic toxicity for industrial process wastewater is established in this Order and is exceeded when a toxicity test results in a "fail," and the percent effect is greater than or equal to 0.50 for chronic toxicity tests in accordance with Compliance Determination section VII of this Order.

Chronic Pass

A test result that rejects the null hypothesis (Ho) below is reported as "Pass" in accordance with the TST approach:

Ho: Mean response (100 percent effluent) ≤ 0.75 × Control mean response

Chronic Fail

A test result that does not reject the null hypothesis (Ho) above is reported as "Fail" in accordance with the TST approach.

The percent effect at the IWC is calculated for each test result using the following equation:

$$\% \text{ Effect at IWC} = \frac{\text{Mean Control Response - Mean IWC Response}}{\text{Mean Control Response}} * 100$$

A MMEL for chronic toxicity is established for industrial process wastewaters. The MMEL is exceeded when the median results of three independent toxicity tests, conducted within the same calendar month, and analyzed using the TST, (i.e. two out of three) is a "fail".

A MDEL for acute toxicity is established for Industrial High Risk Areas storm water discharges and is exceeded when a toxicity test during routine monitoring results in a "fail" in accordance with the TST approach and the percent effect is greater than or equal to 0.40.

Acute Pass

An acute toxicity test result that does not reject the null hypothesis (Ho) below is reported as "pass" in accordance with the TST approach:

Ho: Mean response (100 percent effluent) ≤ 0.80 × Control mean response

Acute Fail

An acute toxicity test result that does not reject the null hypothesis (Ho) above is reported as "fail" in accordance with the TST approach.

A percent effect of 0.50 for chronic toxicity and 0.40 for acute toxicity has been incorporated into the MDEL. The decision to conduct a Toxicity Identification Evaluation (TIE) is based upon consideration of multiple factors such as the magnitude and persistence of toxicity. The magnitude of toxicity present in storm water is an important consideration because a moderate to high level of toxicity typically yield more successful results. Usualy, TIEs can

be successfully conducted on samples producing at least 50 percent effect (e.g., >50% mortality or reduction in reproduction), and this value is recommended for general use in selecting samples for TIEs. However, effective TIEs can also be conducted with less toxic samples (e.g., >25% effect), but there is a greater chance of the TIE being inconclusive due to changes in toxicity with storage or variability in response (Norberg-King et al. 2005). A percent effect of 0.50 for chronic toxicity and 0.40 for acute toxicity has been incorporated into the MDEL to facilitate a successful TIE.

The IWC for these discharges are established at 100% effluent. Allowances for dilution and a different IWC may be made at the discretion of the San Diego Water Board. Because the San Diego Water Board has no documentation to support a different IWC, the IWC is defined as 100 percent effluent (undiluted). This definition of IWC is consistent with other San Diego Water Board's NPDES permitted discharges to San Diego Bay which do not allow dilution. This Order requires further study on the appropriate in-stream waste concentration for chronic toxicity observed in industrial storm water discharges to San Diego Bay.

The San Diego Water Board finds that the application of USEPA's TST method with the 50% effect for chronic toxicity and 40% effect for acute toxicity is scientifically defendable and appropriate for the determination of compliance with the Basin Plan's narrative objective for toxicity. As such, toxicity monitoring requirements, analysis, and effluent limitations are established in this Order based on USEPA's TST method and a 50% effect for chronic toxicity and 40% effect for acute toxicity. Taken together, these refinements of using chronic toxicity instead of acute toxicity for industrial process wastewater and using the TST approach with the appropriate percent effect clarifies the requirements for toxicity analyses, provide Dischargers with the positive incentive to generate high quality data, and afford greater protection to aquatic life.

b. Acute Toxicity

As discussed previously, acute toxicity limitations have not been carried over and have been replaced with chronic toxicity limitations for industrial process waste water discharges. Acute toxicity effluent limitations have been maintained for industrial high risk storm water discharges and have been updated to use the USEPA's TST method to evaluate the tests with a percent effect of 40%. Where acute toxicity limitations had previously been applied in conjunction with chronic toxicity effluent limitations for industrial process wastewater discharges, the acute limitations have also been removed to reduce duplicative monitoring to implement the narrative toxicity water quality objective. Chronic toxicity monitoring and effluent limitations provide a more conservative indicator and more protective effluent limitation for water quality, and do not constitute back sliding.

c. Chronic Toxicity

As previously discussed, chronic toxicity monitoring requirements and effluent limitations have been established for industrial process wastewater discharges demonstrated to have toxic pollutants in toxic concentrations (See Table F-10), consistent with USEPA's TST approach.

For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct WET testing for chronic toxicity, as specified in the Monitoring and Reporting Program (Attachment E section V). This Order also requires the Discharger to implement BMPs to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity.

D. Final Effluent Limitations

1. Final Effluent Limitations

a. Applicable TBELs and WQBELs for pH, described in sections IV.B and IV.C of this Fact Sheet, have been applied in this Order. Both TBELs and WQBELs were applicable to the discharges (6.0 – 9.0 standard units and 7.0 – 9.0 standard units, respectively). To ensure the protection of water quality, the more stringent lower and upper limitations for pH have been applied as the final effluent limitations in this Order.

b. Discharges of steam condensate to San Diego Bay from Discharge Point Nos. SC-001 through SC-175 shall not exceed the effluent limitations summarized below:

Table F-19. Effluent Limitations for Discharges of Steam Condensate from Discharge Point Nos. SC-001 through SC-175

Parameter	Units	Effluent Limitations					
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median
Conventional Pollutants							
Total Suspended Solids	mg/L	60	--	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	75	--
pH	pH units	--	--	--	7.0	9.0	--
Priority Pollutants							
Copper, Total Recoverable	µg/L	2.9	--	5.8	--	--	--
Lead, Total Recoverable	µg/L	7.0	--	14.0	--	--	--
Mercury, Total Recoverable	µg/L	0.051	--	0.102	--	--	--
Zinc, Total Recoverable	µg/L	47.4	--	95.1	--	--	--

Parameter	Units	Effluent Limitations					
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median
Non-Conventional Pollutants							
Settleable Solids	ml/L	1.0	1.5	--	--	3.0	--
Turbidity	NTU	75	100	--	--	225	--
Chronic Toxicity	Pass/Fail	--	--	[1]	--	--	[1]

[1] Compliance with the MDEL and Monthly Median Effluent Limitation (MMEL) shall be based on the procedures specified in section V of the MRP.

c. The Discharge of graving dock deflooding water and salt water rinse water at Discharge Point Nos. NGD-001 and NGD-002, shall not exceed the effluent limitations summarized below:

Table F-20. Effluent Limitations for Graving Dock Deflood Water and Salt Water Rinse Water at Discharge Point Nos. NGD-001 and NGD-002

Parameter	Units	Effluent Limitations						
		Annual Average	Average Monthly[2]	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median
Conventional Pollutants								
Total Suspended Solids	mg/L	--	60	--	--	--	--	--
Oil and Grease	mg/L	--	25	40	--	--	75	--
pH	pH units	--	--	--	--	7.0	9.0	--
Priority Pollutants								
Copper, Total Recoverable	µg/L	--	--	--	13.8	--	--	--
Non-Conventional Pollutants								
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	--
Turbidity	NTU	--	75	100	--	--	225	--
Chronic Toxicity	Pass/Fail	--	--	--	[1]	--	--	[1]

[1] Compliance with the MDEL and MMEL shall be based on the procedures specified in section V of the MRP.

[2] The AMEL only applies if there is a discharge more than one day in a 30 day period or if there is no other effluent limitation for the parameter.

d. The Discharge of caisson ballast dewatering at Discharge Point No. NGD-003, shall not exceed the effluent limitations summarized below:

Table F-21. Effluent Limitations For Caisson Ballast Dewatering – Discharge Point No. NGD-003

Parameter	Units	Effluent Limitations						
		Annual Average	Average Monthly[2]	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median
Conventional Pollutants								
Total Suspended Solids	mg/L	--	60	--	--	--	--	--
Oil and Grease	mg/L	--	25	40	--	--	75	--
pH	pH units	--	--	--	--	7.0	9.0	--
Priority Pollutants								
Cadmium, Total Recoverable	µg/L	--	7.7	--	15.4	--	--	--
Copper, Total Recoverable	µg/L	--	--	--	13.8	--	--	--
Nickel, Total Recoverable	µg/L	--	6.8	--	13.6	--	--	--
Silver, Total Recoverable	µg/L	--	1.1	--	2.2	--	--	--
Zinc, Total Recoverable	µg/L	--	47.4	--	95.1	--	--	--
Non-Conventional Pollutants								
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	--
Turbidity	NTU	--	75	100	--	--	225	--
Chronic Toxicity	Pass/Fail	--	--	--	[1]	--	--	[1]

[1] Compliance with the MDEL and MMEL shall be based on the procedures specified in section V of the MRP.

[2] The AMEL only applies if there is a discharge more than one day in a 30 day period or if there is no other effluent limitation for the parameter.

e. The Discharge of emergency fire suppression water and salt water supply water at Discharge Point No. 004, shall not exceed the effluent limitations summarized below:

Table F-22. Effluent Limitations for Emergency Fire Suppression Water and Salt Water Supply – Discharge Point No. NGD-004

Parameter	Units	Effluent Limitations						
		Average Annual	Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Monthly Median
Conventional Pollutants								
Total Suspended Solids	mg/L	--	60	--	--	--	--	--
Oil and Grease	mg/L	--	25	40	--	--	75	--
pH	pH units	--	--	--	--	7.0	9.0	--
Priority Pollutants								
Copper, Total Recoverable	µg/L	--	--	--	13.8	--	--	--
Nickel, Total Recoverable	µg/L	--	6.8	--	13.6	--	--	--
Silver, Total Recoverable	µg/L	--	1.1	--	2.2	--	--	--
Zinc, Total Recoverable	µg/L	--	47.0	--	95.1	--	--	--
Non-Conventional Pollutants								
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	--
Turbidity	NTU	--	75	100	--	--	225	--
Chronic Toxicity	Pass/Fail	--	--	--	[1]	--	--	[1]

[1] Compliance with the MDEL and MMEL shall be based on the procedures specified in section V of the MRP.

f. In addition to numeric technology-based limitations, the previous Orders required the Discharger to develop and implement a BMP plan for Pier Boom, Fender, Mooring Cleaning Discharger, utility vaults, and the Graving Dock, and a SWPPP for storm water discharges throughout the Facility, as authorized by CWA section 304(e) and section 402(p). An individual discussion for each plan is provided in section IV.B.2 of this Fact Sheet. The requirements to update and implement BMP plans and a SWPPP are carried over from the previous Orders.

g. The discharge of storm water from designated "Industrial High Risk Areas," as defined in section IV.B.1.d of the Order, shall achieve a rating of "Pass" for acute toxicity based on the procedures in section V of the MRP.

2. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R9-2002-0169 and Order No. R9-2003-0265 and meet State and federal anti-backsliding requirements.

3. Satisfaction of Antidegradation Policy

WDRs for the Discharger must conform to federal and state antidegradation policies provided at 40 CFR 131.12 and in State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The antidegradation policies require that beneficial uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the San Diego Water Board, an antidegradation analysis is required in accordance with the State Water Board's Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting.

The Discharger has requested that four additional steam condensate discharges be authorized to discharge to the San Diego Bay (Discharge Point Nos. SC-150 through SC-153). Order No. R9-2002-0169 regulated 190 steam condensate discharge locations. Previous discharges of steam condensate were estimated up to 2,150 gallons per day (GPD). However, due to the demolition of Piers 10 and 11 and replacement of Pier 10, and the demolition and replacement of Pier 12, there are now only 175 steam condensate discharge locations. The estimated discharge of steam condensate is now 2,000 GPD. Considering the reduction in volume of steam condensate discharged to the receiving water, and the fact that the additional effluent streams are similar to the current steam condensate discharges, the addition of Discharge Point Nos. SC-150 through SC-153 for steam condensate discharges is not expected to negatively affect/impact the receiving water.

The limitations and requirements of this Order are more stringent than established in Order No. R9-2002-0169 and Order No. R9-2003-0265. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

4. Stringency of Requirements for Individual Pollutants

This Order contains both TBELs and WQBELs for individual pollutants. The TBELs applied in the Order consist of restrictions on oil and grease, suspended solids, settleable solids, turbidity, and pH as specified in Table A of the Ocean Plan; a requirement to continue to implement a PPP for utility vault and manhole dewatering discharges; a requirement to develop and maintain a BMP Plan for discharges from pier boom, fender, and mooring cleaning; and a requirement to continue to implement a SWPPP for toxic pollutants and hazardous substances in storm water runoff. These restrictions and requirements are discussed in section IV.B.2. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "*applicable water quality standards for purposes of the CWA*" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

E. Storm Water Risk Level Designations

This Order addresses storm water discharges from various locations throughout the Facility, with varying degrees of industrial activity and potential to impact water quality. As such, a tiered approach has been applied in the Order to control storm water discharges, including MS4 requirements, industrial storm water requirements, and effluent limitations. To apply the appropriate controls for storm water, the Discharger is required to identify all storm water outfalls located at the Facility, and designate the outfalls as either: Industrial High Risk Area, Industrial Low Risk Area, Industrial No Exposure Area, or Small MS4 Area.

Because operations at the Facility are subject to change, areas currently designated as Small MS4 Areas may be used for industrial activities at some time in the life of this permit or areas once used for industrial purposes may no longer be used for industrial uses. As such, annual site surveys are necessary to account for any

operational changes that may occur at the Facility to ensure that appropriate regulatory mechanisms are being applied.

F. Small (Military Base) Municipal Separate Storm Sewer System (MS4) Discharge Specification

As discussed in section II.A.1.a of the Fact Sheet, the San Diego Water Board finds that Phase II MS4 requirements are applicable to storm water discharges from non-industrial portions of the Facility. As such, applicable requirements of the Phase II MS4 program, consistent with the requirements of the current State-wide Phase II MS4 Permit (State Water Board Order No. 2013-0001-DWQ) have been applied to ensure discharges of storm water from Non-industrial Areas meet the minimum requirement of MEP. Specific requirements have been established where necessary to increase the tracking and enforceability of the Discharger's SWMP.

G. Storm Water Action Levels (SALs) - Chollas Creek Metals TMDL Implementation

1. Waste Load Allocations for Metals in Chollas Creek

The Chollas Creek Metals TMDLs contain the following Waste Load Allocations (WLA) applicable to storm water discharges to Chollas Creek shown in Table F-23. The WLAs are based on the CTR values for freshwater. The Criteria Maximum Concentration is the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. The Criteria Continuous Concentration is the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. These WLAs apply to Chollas Creek upstream of Harbor Drive.

Table F-23. Waste Load Allocations for Chollas Creek Storm Water Discharges

Metal	Numeric Target for Acute Conditions: Criteria Maximum Concentration	Numeric Target for Chronic Conditions: Criteria Continuous Concentration
Dissolved Copper	(0.9) * (0.96) * {e^ [0.9422 * ln (hardness) - 1.700]} * WER	(0.9) * (0.96) * {e^[0.8545 * ln (hardness) - 1.702]} * WER
Dissolved Lead	(0.9) * {1.46203 – [0.145712 * ln (hardness)]} * {e^ [1.273 * ln (hardness) - 1.460]} * WER	(0.9) * {1.46203 – [0.145712 * ln (hardness)]} * {e^[1.273 * ln (hardness) - 4.705]} * WER
Dissolved Zinc	(0.9) * (0.978) * {e^ [0.8473 * ln (hardness) + 0.884]} * WER	(0.9) * (0.986) * {e^[0.8473 * ln (hardness) + 0.884]} * WER

The Water-Effect Ratio (WER) is the ratio of the toxicity of the metal in the site water to the toxicity of the same metal in standard laboratory water. The WER is assumed to be 1.0 unless there is a site-specific and chemical-specific WER incorporated into the Basin Plan. The WER is multiplied by the criteria to adjust for site specific conditions.

The WLA in the Chollas Creek TMDLs are based on the hardness of the receiving water which is Chollas Creek. Because the part of Chollas Creek where the Facility discharges storm water is heavily influenced by salt water from San Diego Bay, the hardness is at or above 400 mg/L. Pursuant to the Chollas Creek TMDLs, at times when the hardness concentration exceeds 400 mg/L, a value of 400 mg/L will be used for hardness no matter what the extent of the exceedance. This is because the CTR caps the allowable hardness value that can be used to calculate the resulting water quality criteria. The WLA calculated for a hardness of 400 mg/L are required to be met by October 22, 2028 and are shown below in Table F-24:

Table F-24. Final Waste Load Allocations for Chollas Creek Storm Water Discharges for a Harness of 400 mg/L

Metal	WLAs Acute Conditions: Criteria Maximum Concentration[1]	WLAs for Chronic Conditions: Criteria Continuous Concentration[1]
Dissolved Copper	45 µg/L	26 µg/L
Dissolved Lead	253 µg/L	10 µg/L
Dissolved Zinc	341 µg/L	344 µg/L

[1] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these WLA will be multiplied by the appropriate WER.

2. TMDL Implementation Schedule

The Chollas Creek Metals TMDLs contain the following implementation schedule for achieving the WLAs. The WLAs became effective October 22, 2008

Table F-25. Implementation Schedule for Chollas Creek Metals TMDLs.

Allowable Exceedance of the WLAs (allowable percentage above)			
Compliance Year	**Copper**	**Lead**	**Zinc**
1 = 2008	--	--	--
10 =2018	20%	20%	20%
20 = 2028	0%	0%	0%

The first compliance date is 2018 with an allowable exceedance of the WLAs of 20% exceedance above the WLA. This date is outside the term of this Order. The WLA in 2018 are identified below in Table F-26:

Table F-26. Interim WLAs for Chollas Creek Storm Water Discharges for a Harness of 400 mg/L in 2018 with 20% exceedance - Dissolved

Metal	Interim WLAs for Acute Conditions: Criteria Maximum Concentration[1]	Interim WLAs for Chronic Conditions: Criteria Continuous Concentration[1]
Dissolved Copper	54 µg/L	32 µg/L
Dissolved Lead	303 µg/L	12 µg/L
Dissolved Zinc	410 µg/L	413 µg/L

[1] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these WLA will be multiplied by the appropriate WER.

Effluent limitations are expressed in terms of total recoverable metals. The SIP requires the use of USEPA conversion factors in Appendix 3 of the SIP to covert dissolved criterion to total recoverable criterion. The dissolved criterion is divided by the USEPA conversion factor to calculate a total recoverable criterion. The conversion factors and resulting total recoverable criterion are shown in Table F-27 below:

Table F-27. Interim WLAs for Chollas Creek Storm Water Discharges for a Harness of 400 mg/L in 2018 with 20% exceedance – Total Recoverable

Metal	Conversion Factor - Fresh Water Acute	Conversion Factor – Fresh Water Chronic	Interim WLA for Acute Conditions: Criteria Maximum Concentration[1]	Interim WLA for Chronic Conditions: Criteria Continuous Concentration[1]
Copper, Total Recoverable	0.96	0.96	56 µg/L	33 µg/L
Lead, Total Recoverable	0.589002	0.589002	515 µg/L	20 µg/L
Zinc, Total Recoverable	0.978	0.986	419 µg/L	419 µg/L

[1] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these WLA will be multiplied by the appropriate WER.

3. Storm Water Action Levels (SALs) Calculations

Storm water Action Levels (SALs) for storm water discharges from the Facility to Chollas Creek were calculated using the interim WLAs shown in Table F-27 for a hardness of 400 mg/L in 2018. The methodology from the SIP and described above in section IV.C.4.f of the Fact Sheet was used to convert Criteria Maximum Concentration and the Criteria Continuous Concentration to MDELs and AMELs as shown in tables F-28 through F-30 below. These MDEL and AMEL will be implemented as SALs until 2018 when the TMDL requires compliance with these numbers.

Table F-28. SAL Calculations for Total Copper in Discharges of Storm Water to Chollas Creek.

	Acute [3]	Chronic [3]
Criteria (µg/L) [1]	56	33
Dilution Credit	No Dilution	No Dilution
ECA	56	33
ECA Multiplier	0.321	0.527
LTA	18	17
AMEL Multiplier (95th%)	[2]	1.55
AMEL (µg/L)	[2]	**27**
MDEL Multiplier (99th%)	[2]	3.11
MDEL (µg/L)	[2]	**54**

[1] Chollas TMDL WLA

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

[3] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these SAL will be multiplied by the appropriate WER.

Table F-29. SAL Calculations for Total Lead in Discharges of Storm Water to Chollas Creek.

	Acute [3]	Chronic [3]
Criteria (µg/L) [1]	515	20
Dilution Credit	No Dilution	No Dilution
ECA	515	20
ECA Multiplier	0.321	0.527
LTA	165	11
AMEL Multiplier (95th%)	[2]	1.55
AMEL (µg/L)	[2]	**16**
MDEL Multiplier (99th%)	[2]	3.11
MDEL (µg/L)	[2]	**33**

[1] Chollas TMDL WLA

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

[3] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these SAL will be multiplied by the appropriate WER.

Table F-30. SAL Calculations for Zinc in Discharges of Storm Water to Chollas Creek.

	Acute[3]	Chronic[3]
Criteria (µg/L) [1]	419	419
Dilution Credit	No Dilution	No Dilution
ECA	419	419
ECA Multiplier	0.321	0.527
LTA	135	221
AMEL Multiplier (95th%)	1.55	[2]
AMEL (µg/L)	**210**	[2]
MDEL Multiplier (99th%)	3.11	[2]
MDEL (µg/L)	**420**	[2]

[1] Chollas TMDL WLA

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

[3] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these SAL will be multiplied by the appropriate WER.

4. Storm Water Action Levels (SAL) Requirements

a. The flow weighted average concentration of all discharges from Discharge Point Nos. NBSD-068, NBSD-070, NBSD-071, NBSD-120, and NBSD-121shall not exceed the SALs listed in Table F-31 as of October 22, 2018, at which time the SALs listed in Table F-31 will be prescribed in the NPDES Permit as numerical effluent limits and the final WLAs for Chollas Creek prescribed as SALs. Samples can be collected from all points and a flow weighted average can be used to compare with the SAL. This will allow BMPs to be implemented at the most advantageous locations. Exceedances of a SAL are not violations of this Order. However, failure to evaluate and/or improve BMPs between wet seasons if SALs are not met is a violation of this Order.

Table F-31. Storm water Action Levels for Discharges to Chollas Creek

Parameter	Units	Action Levels[1]				
		Average Monthly[1]	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants						
Copper, Total Recoverable	µg/L	27	--	54	--	--
Lead, Total Recoverable	µg/L	16	--	33	--	--
Zinc, Total Recoverable	µg/L	210	--	420	--	--

[1] If a site-specific and chemical-specific WER is incorporated into the San Diego Basin Plan, these SAL will be multiplied by the appropriate WER.

b. The Discharger is required to develop and implement a Storm Water Action Level Plan (SAL Plan) to achieve the SALs by 2018. The TMDL requires

compliance with the SALs by 2018; therefore numeric effluent limitations will be established and replace action levels in an NPDES permit at that time.

The "San Diego Bay Watershed Urban Runoff Management Program 2009-2010 Annual Report" contains a table titled "Chollas Creek Dissolved Metals TMDL Implementation Plans Updates." This table has a section titled "United States Navy Watershed Activities Reporting Phase I of the Chollas Creek Dissolved Metals TMDL Implementation Plan." The Navy has three activities; an Evaluation and Minimization Plan for Copper and Zinc in Storm Water, an MS4 Storm Water Management Plan, and a Creek Trash Removal Program. These activities are not adequate to achieve compliance with the TMDL so a new SAL Plan is required by the Order.

The initial plan submitted by 12 months form the effective date of this Order is expected to be a rough plan with some short term actions with clear implementation dates and longer term actions with dates that may change over time. The SAL Plan shall include identification of the sources of copper, lead, and zinc in storm water discharges, as well as source control BMPs to be implemented, Low Impact Development (LID) BMPs to be implemented, and treatment control BMPs to be implemented. The SAL Plan shall also identify funding mechanisms and a time schedule for BMP implementation. The SAL Plan will be updated each year in the annual storm water report required by the MRP to incorporate changes and refinements in the plan from year to year. The annual storm water report updates should also show measureable progress towards meeting the SALs in the form of decreasing metals concentrations or iterative BMP implementation. If SALs are not met in one wet season, the discharger shall reevaluate existing BMPs and enhance or improve as needed. The SAL Plan shall affirmatively augment and implement all necessary storm water controls and measures to reduce the discharge of the associated class of pollutants(s) to levels below the SALs. Failure to take action between wet seasons if SALs are exceeded is a violation of this Order.

H. Industrial Storm Water Discharge Specifications

1. **Pollutant Reduction to BAT/BCT.** NPDES Permits for storm water discharges must meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require control of pollutant discharges using BAT and BCT to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.

2. **Storm Water Pollution Prevention Plan (SWPPP) for Industrial Areas.** Prior to the adoption of Order No. 2002-0169, the storm water discharges at the Facility were regulated by the State Water Board's General Order for Discharges of Storm Water Associated with industrial Activities Excluding Construction Activities (Order No. 97-03-DWQ, NPDES No. CAG000001). To carry out the

purpose and intent of the CWA, Order No. 97-03-DWQ and subsequently Order No. R9-2002-0169 required the Discharger to develop and implement a SWPPP, as authorized by CWA section 304(e) and section 402(p), for toxic pollutants and hazardous substances, and for the control of storm water discharges. Consistent with Order No. 97-03-DWQ and Order No. R9-2002-0169, this Order requires the Discharger to continue to implement and regularly update an adequate SWPPP as specified in Attachment G. This is explained in more detail in section IV.B.2.f of this Fact Sheet.

3. **Numeric Action Levels (NALs).** Consistent with the direction of the State Water Board, this Order establishes NALs based on USEPA's benchmarks with a tiered compliance strategy. This is explained in more detail in section IV.B.2.f of this Fact Sheet.

I. Non-Storm Water Discharge Specifications

Discharge Specifications for the discharge of exempted non-storm water discharges are based on the requirements of 40 CFR 122.26(d). These discharge specifications exempt the discharge of certain wastes from prohibition that are not currently expected to be a significant source of pollutants to the receiving waters.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving Water Limitations in this Order are derived from the water quality objectives for bays and estuaries established by the Basin Plan (1994), the Bays and Estuaries Policy (1974), the California Toxics Rule (2000), the State Implementation Policy (2005), and the Sediment Quality Plan (2008). San Diego Bay is listed as impaired for sediment toxicity and benthic community in the area directly off shore of the facility. The facility will need a Time Schedule Order to meet some of the effluent limitations for steam condensate and caisson gate ballast dewatering. This 303(d) impairment and elevated effluent concentrations demonstrates that there is reasonable potential to cause or contribute to an exceedance of the sediment quality objectives which have been included as receiving water limitations.

B. Groundwater

[Not Applicable]

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the San Diego Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Industrial Storm Water Monitoring Location Study and Annual Report

In order to determine compliance with effluent limitations and evaluate the effectiveness of BMPs specified in the SWPPP, this order establishes monitoring requirements for industrial storm water. The San Diego Water Board recognizes that establishing monitoring requirements at all discharge locations would be redundant and an inefficient use of resources. Monitoring is only necessary at representative discharge locations for industrial storm water. This directive requires the discharger to identify representative monitoring locations for these discharges, and verify these monitoring locations annually.

B. Influent Monitoring

Influent monitoring has been established for the intake/source water for USN Graving Dock deflooding water and salt water rinse water, caisson gate ballast dewatering, emergency fire suppression water, and salt water supply water for total recoverable copper so that intake credits may be appropriately applied to discharges from the USN Graving Dock.

C. Effluent Monitoring

Pursuant to the requirements of 40 CFR §122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of BMPs and pollution prevention plans, and to assess the impacts of the discharge on the receiving water.

1. Steam Condensate Monitoring (Monitoring Locations SC-001 through SC-175)

a. Annual effluent flow monitoring has been revised to monthly to more accurately determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Annual effluent monitoring of total suspended solids has been revised to quarterly in order to better characterize the discharge of steam condensate from the Facility into the San Diego Bay.

c. Annual effluent monitoring for oil and grease, settleable solids, turbidity, and pH has been revised to quarterly in order to determine compliance with effluent limitations based on Table A of the Ocean Plan

d. Annual monitoring for temperature in the steam condensate discharges has been revised to quarterly to determine the effects of the discharge to the beneficial uses of the San Diego Bay.

e. Quarterly monitoring using grab samples for copper, lead, mercury, and zinc is required to determine compliance with the applicable effluent limitations.

f. Monitoring once in Year One and once in Year Five of steam condensate discharges for the remaining CTR priority pollutants has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP. Monitoring for arsenic, cadmium, chromium, nickel, and silver are included in this annual CTR monitoring and are no longer specified individually in the MRP.

g. Monitoring once per year for steam condensate discharges for chronic toxicity has been included to determine compliance with the applicable chronic toxicity effluent limitation, as specified in this Order.

h. Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of chemicals added to the steam boiler annually.

2. Graving Dock Deflooding Water and Salt Water Rinse Water (Monitoring Location Nos. NGD-001 and NGD-002)

a. Daily Flow monitoring has been established (increased from annually) so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Quarterly monitoring for oil and grease, settleable solids, turbidity, pH, copper has been established to determine compliance with applicable effluent limitations.

c. Quarterly monitoring for temperature has been established to characterize the discharge.

d. Annual monitoring for tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed

water quality objectives/criteria in future permitting efforts as specified in section 1.3 of the SIP.

e. Annual monitoring for chronic toxicity has been included to determine compliance with chronic toxicity effluent limitations, as specified in this Order.

3. Caission Gate Ballast Dewatering (Monitoring Location No. NGD-003)

a. Daily effluent flow monitoring has been established (increased from annually) so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Annual monitoring requirements for total suspended solids, oil and grease, turbidity, settleable solids, pH, and temperature from MRP No. R9-2003-0265 have been carried over.

c. Annual monitoring for cadmium, copper, nickel, silver, and zinc have been included to determine compliance with effluent limitations contained in the Order.

d. Annual monitoring for tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed water quality objectives/criteria in future permitting efforts as specified in section 1.3 of the SIP. Monitoring for lead, mercury, and PAHs are included under the requirement to monitor for the remaining CTR Priority Pollutants.

e. Annual monitoring for chronic toxicity has been included to determine compliance with chronic toxicity effluent limitations, as specified in this Order.

4. Emergency Fire Suppression Water and Salt Water Supply Water (Monitoring Location No. NGD-004)

a. Daily effluent flow monitoring has been established (increased from annually) so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Annual monitoring requirements for total suspended solids, oil and grease, turbidity, settleable solids, pH, and temperature from MRP No. R9-2003-0265 have been carried over.

c. Annual monitoring for copper, nickel, silver, and zinc have been included to determine compliance with effluent limitations contained in the Order.

d. Annual monitoring for the tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed water quality objectives/criteria in future permitting efforts as specified in section 1.3 of the SIP. Monitoring for lead, mercury, and PAHs are included under the requirement to monitor for the remaining CTR Priority Pollutants.

e. Monitoring once Year One and Year Five of the permit term for chronic toxicity has been included to determine compliance with chronic toxicity effluent limitations and to evaluate reasonable potential, as specified in this Order.

5. Pier Boom, Fender, and Mooring Cleaning Monitoring (Monitoring Location BC-001)

a. Annual effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. In order to determine the effectiveness of the BMPs, annual monitoring for the Table A parameters is established in this Order.

c. Monitoring data submitted by the Discharger for pier boom, fender, and mooring cleaning indicates that the discharge has the reasonable potential to exceed water quality criteria for copper, benzo (b) fluoranthene, benzo (k) fluoranthene, and chrysene. Annual monitoring using grab samples is required to determine the effectiveness of the Discharger's BMPs.

d. Monitoring once in Year One and once in Year Five of pier boom, fender, and mooring cleaning discharges for the remaining CTR priority pollutants has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

e. Monitoring once in the five year permit cycle of pier boom, fender, and mooring cleaning discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

f. Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of pier boom, fender, and mooring activity annually.

6. Utility Vault and Manhole Dewatering Monitoring (Monitoring Locations UV-001 through UV-012)

a. Annual effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Annual effluent monitoring of total petroleum hydrocarbons, oil and grease, pH, and total suspended solids has been incorporated from State Water Board General Order No. 2006-008-DWQ to characterize the discharge of utility vault and manhole dewatering from the Facility into the San Diego Bay.

c. Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of the utility vault and manhole dewatering discharges annually.

D. Whole Effluent Toxicity Testing Requirements

As discussed above in section IV.C.5 of this Fact Sheet, chronic and acute toxicity effluent limitations established in this order are based on USEPA's TST method and percent effect. The chronic toxicity effluent limitations are replacing acute toxicity effluent limitations for industrial process wastewater discharges established in Order No R9-2002-0169 for NBSD and Order No R9-2003-0265 for the USN Graving Dock. Acute toxicity effluent limitations are maintained for industrial storm water discharges. Chronic and acute toxicity monitoring is required because there are effluent limitations.

Past sampling of industrial storm water at the Facility shows the presence and reasonable potential for toxicity in the discharge of industrial storm water from the Facility. Survival rates reported by the Discharger for two storm water sampling events conducted in December 2006 and April 2007 range from 0 to 100 percent. In December 2009 and November 2008, the Discharger did not meet the effluent limitation of more than 70% survival more than 10% of the time. In November 2008, the Discharger did not meet the effluent limitation of more than 90% survival more than 50% of the time.

This Order requires the Discharger to conduct additional toxicity testing for exceedances of the toxicity effluent limitations. If the additional tests demonstrate toxicity, the Discharger is required to submit a Toxicity Reduction Evaluation Workplan in accordance with USEPA guidance which shall include: further steps taken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharge will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. This provision also includes requirements to conduct the TRE/TIE process in accordance with the workplan if the results of toxicity testing exceed the effluent limitation for toxicity.

E. Receiving Water Monitoring

1. Water and Sediment Monitoring Plan

The Discharger is required to submit a Water and Sediment Monitoring Plan within 12 months of the effective date of this Order. The Water and Sediment Monitoring Plan has all the elements required by the Sediment Quality Plan which became effective on August 25, 2009 to be implemented for both water and sediment for consistency. A conceptual model, existing data, and ongoing monitoring will be considered in the development of the Water and Sediment Monitoring Plan.

2. Surface Water

a. Monitoring of the receiving water is necessary to determine if the discharges from the Facility are impacting the San Diego Bay, applicable beneficial uses, and aquatic life.

b. Monitoring locations will be determined in the Water and Sediment Monitoring Plan.

c. Annual monitoring of cadmium, copper, mercury, nickel, and zinc in the San Diego Bay has been established to determine compliance with receiving water limitations and to help determine reasonable potential, as specified in section 1.3 of the SIP, for future permitting efforts.

d. Annual temperature monitoring has been established in order to determine compliance with the effluent limitations for temperature for discharges of steam condensate.

e. Monitoring once during the permit cycle for the CTR priority pollutants has been added to help determine reasonable potential, as specified in section 1.3 of the SIP, for future permitting efforts and provide data to help determine long-term trends in receiving water quality.

3. Sediment Monitoring

a. This Order establishes monitoring and analysis requirements consistent with the Sediment Quality Plan.

b. Monitoring locations will be determined in the Water and Sediment Monitoring Plan.

c. Sediment Chemistry, Toxicity, and Benthic Community Condition: Sediment chemistry, toxicity and benthic community monitoring are required in accordance with, at a minimum, the requirements under the Sediment Quality Control Plan.

4. Monitoring Coalitions.

To achieve maximum efficiency and economy of resources, the San Diego Water Board encourages and may require San Diego Bay dischargers to establish or join a San Diego Bay water body monitoring coalition. Monitoring coalitions enable the sharing of technical resources, trained personnel, and associated costs and create an integrated water and sediment monitoring program within each water body. Focusing resources on water body issues and developing a broader understanding of pollutants effects in these water bodies enables the development of more rapid and efficient response strategies and facilitates better management of water and sediment quality.

5. Water and Sediment Monitoring Report

The Discharger or water body monitoring coalition is required to submit a Water and Sediment Monitoring Report at least twice during a permit cycle in accordance with the schedule contained in the Water and Sediment Monitoring Plan unless otherwise directed in writing by the San Diego Water Board. Receiving water sampling will be done annually and sediment sampling will be done at least twice during the term of this Order, so two reports during a permit cycle will allow more samples to be collected and reported in one report.

F. Other Monitoring Requirements

1. The discharge of industrial contact storm water to San Diego Bay may contain pollutants from the surrounding area which could contribute to the exceedance of the water quality criteria/objectives of the receiving waters. Industrial storm water monitoring requirements have been retained from Order No. R9-2002-0169 to determine the effects of storm water discharges on the receiving water and monitor the effectiveness of the SWPPP to meet applicable effluent limitations, numeric action levels and receiving water limits.

2. Monitoring requirements for storm water discharges to Chollas Creek have been added to allow comparison of storm water samples to the SALs established to implement the Chollas Creek Metals TMDLs. Monitoring is required for 2 storms per year for copper, lead, and zinc.

3. The discharger is required to submit a sampling plan for MS4 storm water discharges within 12 months of the effective date of this Order. A minimum of five representative monitoring locations must be identified to reduce the number of samples required. Sampling and analysis is required twice per year for storm water and twice per year for dry-weather.

4. Monitoring requirements for graving dock deflooding water discharges have been updated to reflect modern technology and carried over from MRP No. R9-2003-0265 to ensure that appropriate BMPs are properly implemented.

5. Monitoring requirements for spill and illicit discharges have been carried over from MRP No. R9-2003-0265 to help determine the effectiveness of the BMP Plan and ensure that appropriate BMPs are properly implemented.

6. The requirement for a Chemical Utilization Audit from MRP No. R9-2003-0265 has not been retained and instead chemical information will be obtained through the California Environmental Reporting System (CERS). CERS is a publically accessible statewide web-based system used to electronically collect and report Emergency Planning and Community Right-to-Know Act (EPCRA) hazardous chemical storage information and various hazardous materials data as mandated by the California Health and Safety Code and AB 2286. The discharger will be using CERS to submit all business information regarding hazardous material regulatory activities, chemical inventories, underground and aboveground storage tanks, hazardous waste generation as well as emergency contact information.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

40 CFR section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Monitoring and Reporting Program (MRP) Requirements

Language in this section requires the Discharger to properly implement and submit self-monitoring reports (SMRs) to the San Diego Water Board and Discharge Monitoring Reports (DMRs) for USEPA to the State Water Board. Addresses, telephone and fax numbers are also provided. The San Diego Water Board office may be relocated. Dischargers will be notified of new contact information.

C. Special Provisions

1. Reopener Provisions

This Order includes a list of circumstances when the Order may be reopened.

2. Special Studies and Additional Monitoring Requirements

The TRE/TIE requirements have been moved to the MRP.

3. Best Management Practices and Pollution Prevention

a. Best Management Practices and Pollution Prevention Plan for Utility Vault and Manhole Dewatering Discharges (Utility Vault PLAN). As discussed in sections IV.B.2.b and IV.C.4.a of this Fact Sheet, the San Diego Water Board finds that numerical effluent limitations are not feasible for discharges from utility vault and manhole dewatering discharges. Federal Regulations at 40 CFR 122.44(k)(3) and (4) authorize the San Diego Water Board to require BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible and when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

The development of a PPP provides the flexibility necessary to establish controls which can appropriately address the various utility vault and manhole dewatering discharges. The pollution prevention practices have two major objectives:

i. To identify situations which allow water to collect in the vault or underground structure and lead to a discharge; and

ii. To describe and ensure the implementation of practices that will reduce pollutants in the discharge from normal operations of utility companies.

Similar to BMPs, pollution prevention practices are designed to prevent or control the discharge of pollutants. They may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. The Best Management Practices and Pollution Prevention Practices Plan for Utility and Manhole Dewatering Discharges (Utility Vault PLAN) is a written document that describes the operator's activities to comply with the requirements of this Order. The Utility Vault PLAN is intended to evaluate potential pollutant sources at the site and select and implement appropriate measures designed to prevent or control the discharge of pollutants. Order No. R9-2002-0169 incorporated the pertinent requirements of Order No. 2001-11-DWQ, including the requirement to develop and implement a Utility Vault PLAN that included BMPs to achieve BAT and BCT. According to the *Case Study for Utility Vault and Manhole Dewatering*

Discharges at Naval Base Point Loma, Naval Base San Diego, and Naval Base Coronado submitted by the Discharger in May 2007, the Discharger has maintained and implemented the *Pollution Prevention Plan for Utility Vault Dewatering Discharges* as required by Order No. R9-2002-0169, which describes the types of discharges, prohibited discharges, pollution prevention practices and BMPs, and monitoring and inspections of utility vault and manhole discharges. Additionally, the case study states that the Discharger has implemented procedures to eliminate manhole dewatering discharges to surface waters and either pumps the water into an adjacent utility manhole or transfers the water to the sanitary sewer system. However, the Discharger acknowledges the potential for rare emergency situations that would require dewatering of a utility vault or manhole onto the ground surface.

Order No. 2006-0008-DWQ includes additional specifications for PPPs for Utility and Manhole Dewatering Discharges for dischargers of utility and manhole dewatering discharges. This Order incorporates the additional specifications from Order No. 2006-0008-DWQ. The Discharger is required to maintain and implement their Utility Vault PLAN in accordance with the requirements of Provision VI.C.3.a of this Order. For assistance in developing the Utility Vault PLAN, the Discharger may refer to the *California Stormwater BMP Handbook – Industrial/Commercial* (*January 2003 Edition*), published by the California Stormwater Quality Association, which includes references the Discharger may find useful.

b. BMP Plan for Pier Boom, Fender, and Mooring Cleaning Discharges, and Graving Dock Pre-flood Cleaning, and Weight Testing Water. Due to the nature of activities associated with discharges from pier boom, fender, and mooring cleaning, weight testing water, and operations at the USN Graving Dock, it is impractical to collect and treat the associated wastewaters prior to discharge. The San Diego Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom, fender, and mooring cleaning and weight testing water. In accordance with 40 CFR 122.44(k)(3) and (4), the San Diego Water Board finds that the implementation of BMPs in lieu of numeric effluent limitations are appropriate. Further, the San Diego Water Board finds that the implementation of BMPs are necessary to achieve effluent limitations established for the USN Graving Dock, and carries over the requirement for a BMP plan, based on the requirements from Order No. R9-2003-0265.

This Order requires the Discharger to develop and implement a BMP Plan that includes, at a minimum, the requirements contained in Attachment I to prevent, or minimize the potential for, the release of pollutants to waters of the State and waters of the United States.

c. BMP Plan for Seawater Cooling Overboard Discharges. USEPA's Vessel General Permit determined that numeric effluent limitations were infeasible for many vessel discharges. While the Vessel General Permit is not applicable to this Order it is appropriate to incorporate BMP requirements for discharges of Seawater Cooling Overboard Discharges (Including Non-Contact Engine Cooling Water; Hydraulic System Cooling Water, Refrigeration Cooling Water) consistent with the Vessel General Permit. This Order requires that adequate BMPs for vessel cooling water discharges are incorporated into the BMP Plan.

d. CWC section 13263.3(d)(2) Pollution Prevention Plans. Section 13263.3 of the California Water Code states that pollution prevention should be the first step in the hierarchy for reducing pollution and managing wastes. Further, section 13263.3 (d)(1)(D) states that a Regional Water Board may require a Discharger to complete and implement a PPP if the Regional Water Board determines that pollution prevention is necessary to achieve a water quality objective. The results of the RPAs detailed in Table F-10 of this Fact Sheet indicate the Discharger has the reasonable potential to exceed water quality objectives for cadmium, copper, lead, mercury, nickel, silver, and zinc, and that pollution prevention is necessary to achieve water quality objectives for these constituents. The Discharger is required to prepare and implement a Pollution Prevention Plan for steam condensate discharges (Discharge Point Nos. SC-001 through SC-175) for copper, lead, mercury, zinc; and USN Graving Dock deflooding water and salt water rinse water (Discharge Point Nos. NGD-001 and NGD-002) for copper; for caisson ballast dewatering (Discharge Point Nos. NGD-003) for cadmium, copper, nickel, silver, and zinc; and fire suppression water and salt water supply water (Discharge Point No. NGD-004) for copper, nickel, silver, and zinc.

e. The PPP shall, at a minimum, meet the requirements outlined in CWC section 13263.3(d)(2) in this Order, for each applicable discharge. The minimum requirements for the PPPs include the following:

i. An analysis of one or more of the pollutants, as directed by the State Water Board, a San Diego Water Board, or a POTW, that the Facility discharges into water or introduces into POTWs, a description of the sources of the pollutants, and a comprehensive review of the processes used by the discharger that result in the generation and discharge of the pollutants.

ii. An analysis of the potential for pollution prevention to reduce the generation of the pollutants, including the application of innovative and alternative technologies and any adverse environmental impacts resulting from the use of those methods.

iii. A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution prevention techniques.

iv. A statement of the Discharger's pollution prevention goals and strategies, including priorities for short-term and long-term action.

v. A description of the Discharger's existing pollution prevention methods.

vi. A statement that the Discharger's existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Board, the San Diego Water Board, or the POTW, and information that supports that statement.

vii. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the Discharger is also subject to that act.

viii. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.

ix. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the Discharger for implementation.

4. Construction, Operation, and Maintenance Specifications

The construction, operation, and maintenance specifications have been retained from Order No. R9-2002-0169.

5. Other Special Provisions – Not Applicable

VIII. PUBLIC PARTICIPATION

The San Diego Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the United States Department of the Navy, Naval Base San Diego Complex. As a step in the WDR adoption process, the San Diego Water Board staff has developed tentative WDRs. The San Diego Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The San Diego 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. Notification was provided through the following: Published in the San Diego Union-Tribune on Friday, June 7, 2013, posted on the San Diego Water Board website on Friday, June 7, 2013, and sent by mail on Friday, June 7, 2013.

B. Written Comments

The staff determinations are tentative. Interested persons were invited to submit written comments concerning these tentative WDRs. Comments were required to be submitted either in person or by mail to the Executive Office at the San Diego Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the San Diego Water Board, written comments were required to be received at the San Diego Water Board offices by 5:00 p.m. on Monday, July 8, 2013.

C. Public Hearing

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

Date: **August 14, 2013**
Time: **9:00 A.M.**
Location: **Regional Water Quality Control Board, San Diego Region**
Board Meeting Room
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony was heard; however, for accuracy of the record, important testimony was requested to be provided in writing.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the San Diego Water Board regarding the final WDRs. The petition must be submitted within 30 days of the San Diego 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 (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the San Diego Water Board' s 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 San Diego Water Board by calling (858) 467-2952.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the San Diego Water 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 Ben Neill at (858) 467-2952 or email: bneill@waterboards.ca.gov or to Kristin Schwall at (858) 467-2345 or kschwall@waterboards.ca.gov.