

State of California
Regional Water Quality Control Board
San Diego Region

REVISED
EXECUTIVE OFFICER SUMMARY REPORT
August 12, 2009

- ITEM: 9
- SUBJECT: NPDES Permit Reissuance: Waste Discharge Requirements for the U.S. Navy, Naval Base San Diego (including the Graving Dock) Discharge to San Diego Bay (Tentative Order No. R9-2009-0100, NPDES Permit No. CA0109169) (*Vicente Rodriguez*)
- PURPOSE: To hold a public hearing and receive comments from interested parties and interested persons regarding the tentative NPDES permit for waste discharge requirements for The United States Department of the Navy at Naval Base San Diego (Discharger).
- PUBLIC NOTICE: Notices for this hearing and availability of the tentative Order were sent by mail and email on ~~July 9, 2009~~ July 10, 2009 to all known interested parties and interested persons for review and comments. A newspaper notice was published in the San Diego Union Tribune on June 28, 2009. Copies of the tentative Order have been made available for public review at the San Diego Regional Water Quality Control Board office and were posted on the San Diego Regional Board's web site on July 13, 2009. These procedures served as the 30-day official public notification for this action, as required by 40 CFR (Code of Federal Regulations) 124.10.
- This tentative Order (R9-2009-0100) is a revised version of a previous draft that was initially noticed and made publicly available in May 2008 (R9-2008-0061). The changes from the May 2008 version are shown in underline/strikeout format.
- DISCUSSION: The United States Department of the Navy (hereinafter Discharger) is currently discharging pursuant to Order No. R9-2002-0169 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109169. The Discharger submitted a Report of Waste Discharge, dated June 18,

2007, and applied for a NPDES permit renewal to discharge steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; weight test water; and miscellaneous discharges associated with facility maintenance at numerous discharge locations from Naval Base San Diego, hereinafter Facility. The application was deemed complete on March 27, 2008.

The Discharger manages several installations in the San Diego area. These installations are aligned into three major naval bases, including the Facility, Naval Base Coronado (NBC), and Naval Base Point Loma (NBPL). The Facility 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 (NMCSO).

Of the four installations aligned under the Facility, only NBSD has discharges subject to NPDES permitting.

Wastewater is discharged from Discharge Point Nos. SC-001 through SC-175 (steam condensate), BW-001 (pier boom, fender, and mooring cleaning), UV-001 through UV-015 (utility vault and manhole dewatering), WT-001 through WT-013 (weight test water NBSD-001 through NBSD-266 (industrial storm water), to the San Diego Bay, a water of the United States. See Table 2 on the cover page for discharge location information.

The Discharger also operates a graving dock, at which ship modification, repair, and maintenance activities are performed. Discharges from the Facility to the San Diego Bay include saltwater supply system water, graving dock flood dewater, and graving dock caisson gate ballast water, and industrial storm water.

A description of each discharge is provided in section II.A of Attachment F (Fact Sheet) to this Order. Figure B-1 of Attachment B provides a map of the area around the Facility. Attachment C provides flow schematics for the Facility.

~~To date, the~~ The Regional Board has received comments from the Navy (see Supporting Document 4). ~~Copies of all comments received, responses to comments, and any errata to the tentative Order will be provided to the Regional Board~~

~~in the second agenda mailing.~~
The Regional Board staff "Response to Comments" (See Supporting Document 5) responds to most of the comments. The Regional Board staff will respond to the remaining comments at the Regional Board meeting.

An errata sheet (See Supporting Document 6) has been prepared to modify the underline/strikeout tentative Order. These modifications make some grammatical, reference, and other minor wording changes noted since the draft was released for public review, including modifications in response to the Navy's Comment Letter.

Included in the Supporting Documents is US Environmental Protection Agency Comment Letter dated June 3, 2009 (See Supporting Document 7) for reference. This comment letter was submitted in support of the last NPDES permit adopted for the Naval Base Coronado and applies to this tentative Order for Naval Base San Diego.

COMPLIANCE
RECORD:

~~To be provided in the second agenda mailing.~~

1. On April 12, 2004, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169. Major findings reported from that inspection include:
 - a. The 2003 Log of Boom, Mooring and Fender Cleaning Activity was not submitted because it was not maintained as required in section B.3 of MRP R9-2002-0169.
 - b. The contract laboratory analytical results for the 2002/2003 Annual Report did not contain the name or initials of the analysis as required by MRP R9-2002-0169 section A.6.d.
 - c. Hazardous Materials stored on piers 2 and 10 did not have adequate secondary containment and thus create the potential for an unpermitted discharge and a threat to cause pollution of a surface water as required by sections A.4 and A.5 of Order No. R9-2002-0169. On-site practices appeared inconsistent with BMPs 115 and 061 of the site-specific SWPPP at the PWS Sandblasting and Painting/Welding Lot and the SIMA Antenna Repair Shop.
 - d. Scrap metal storage containers did not have covers to prevent materials, such as copper and zinc, from washing into the storm water sewer system

as required by sections A.4 and A.5 of Order No. R9-2002-0169. On-site practices appeared inconsistent with BMP 061 of the site-specific BMP.

- e. Reported sample pH readings are taken at the contract laboratory and thus do not meet the requirements of 40 CFR Part 136 which requires pH to be performed in situ or within 15 minutes of taking the sample as required by section A.2 of MRP R9-2002-0169.
 - f. Coliform samples are scooped and then transferred into the sample container. This does not meet the requirements of 40 CFR Part 136 as required by section A.2 of MRP R9-2002-0169.
2. On December 11, 2007, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169. Major findings reported from that inspection include:
- a. Monitoring and Reporting Program No. R9-2002-0169, Sections C.6.d and C.6.f (Storm water Discharges and Other Visual Observations) state that "Monthly the discharger shall visually observe storm water storage and containment areas...", and "The discharger shall maintain records of all visual observations, personnel, observation dates/locations, and corrective actions...", respectively. Monthly storm water observations were conducted; however, no records of observations, personnel, corrective actions, etc. were provided for the storage and containment areas. Naval Base San Diego does not have areas designed for storm water storage with the exception of the Mole Pier storm water storage tanks that are discharged to the sanitary sewer system after a rain event is over.
 - b. Regional Board Order No. R9-2002-0169, Attachment D, Section A.9.d states that the discharger shall conduct an Annual Comprehensive Site Compliance Evaluation with an evaluation report that includes the following (among other items); the dates of all significant corrective actions of any incidents of noncompliance and a certification that the discharger has completed the annual inspection and is complying with this Order. This information was not provided in the 2006/2007 Annual Stormwater Monitoring Report.
 - c. Regional Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A of this Order that includes BMPs that achieve BCT. Significant materials, as identified in Section 4.3.4 of the Storm water Discharge Management Plan (SDMP), on Pier 8 were not stored in accordance with the site-specific SWPPP. Section 4.6.35.2.2 of the SWPPP requires "Drums and containers of hazardous wastes generated on the pier or manually unloaded from ships are transferred onto containment pallets at temporary bermed staging areas on the pier." Specifically, nine 55-gallon drums and eight pallets were observed stored

adjacent to pier storm drain inlets A32 to A36 as identified on the site-specific site map. BMP 055 of the site-specific SWPPP requires the use of overpack containers or containment pallets to store 55-gallon drums outside of storage areas and BMP 061B requires liquids and significant materials to be stored within a building or covered area. In addition, the secondary containment did not comply with the Storm water BMPs Guidance for Contractors Working on Navy Piers, dated August 2005. This guidance document is provided to each contractor working on the piers. Specifically, Section 3 of the contractor guidance manual, Materials Waste/Labeling, Storage, and Handling Procedures, requires that "secondary containment must be large enough to contain materials/waste from the largest container plus rainwater." Unused secondary containment pallets were observed adjacent to the boom cleaning area and Oil Recovery Maintenance Building.

- d. Regional Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A, of this Order that includes BMPs that achieve BCT. Painting/grit resurfacing operations conducted by a contractor were observed on Pier 8. Two large Rain for Rent tanks (approximately 4,000 gallons each) were utilized for the mixing and pumping of the paint and grit material for the berthed ship's interior floor resurfacing. Secondary containment was provided; however, it did not appear to have the volume consistent with BMP 115 (Store Containers Inside Secondary Containment). In addition, the secondary containment did not comply with Section 3 of the contractor guidance manual, Materials Waste/Labeling, Storage, and Handling Procedures requires that "secondary containment must be large enough to contain materials/waste from the largest container plus rainwater".
- e. Regional Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A of this Order that includes BMPs that achieve BCT. A JLG equipment (i.e., mobile aerial work platform) with basket and drop cloth was observed with an open 5-gallon container of paint in the basket. This was inconsistent with BMP 054 (Properly Store Containers) and with Section 2 of the Stormwater BMPs Guidance for Contractors Working on Navy Piers that states "Keep all containers closed with tight fitting lids". Furthermore, an open pier storm drain inlet was located directly adjacent to the JLG equipment basket. BMP 023, which requires portable rubber mats to be placed over storm drain inlets, was not implemented per the site-specific SWPPP. In addition, the storm drain inlet was not covered in accordance with Section 5 (Cover/Plug Pier Drains) in the contractor guidance manual.
- f. The Facility exceeded effluent limitations specified in Regional Board Order No. R9-2002-0169, Section B.2 at Outfall No. 22 for both samples

taken during the 2006/2007 sampling period. The Order specifies effluent limits of 63.6 $\mu\text{g/L}$ of total copper and 117 $\mu\text{g/L}$ of total zinc at Outfall No. 22. The Facility reported the following exceedances of these effluent limitations on their SMRs submitted to the Regional Board.

- i. August 20, 2007 – 190 $\mu\text{g/L}$, total copper, and
- ii. August 20, 2007 – 1,400 $\mu\text{g/L}$, total zinc.

g. Monitoring and Reporting Program Order No. R9-2002-0169, Section A.10, requires “flow measurement devices shall be calibrated at least once per year”. The permittee was utilizing a flow meter at the discharge point from the filtration treatment system at the Recycling Center that had not been calibrated in over 1 year.

3. On May 5, 2009, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169. Important findings reported from that inspection include:

a. 2007-2008 Annual log of pier boom, mooring, and fender system cleaning: The Order requires the log of pier boom, mooring, and fender system cleaning to include the duration, the personnel in charge of the cleaning, the quantity of the discharge, the date, a summary of any potential impacts to receiving water quality, and a summary regarding the description and location of any booms removed from the Bay to be cleaned because of oil or other pollutants. Although it contains much of the required information, the Discharger's log does not contain the required summary of potential impacts to receiving water quality. Furthermore, the Discharger could not produce records demonstrating that the log was submitted to the Regional Board and that potential impacts to receiving water quality were summarized. This checklist item was rated "marginal" because all other required information was adequately documented.

b. Regional 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." Toxicity samples were collected from 40 industrial outfalls during the February 14, 2008 storm event. Survival of at least 70% was not met in 18 of the 40 samples, or 45% of the time. The Discharger reported this issue in its 2007-2008 Annual Report, Section 2.0, Storm Water Sampling and Analysis Evaluation.

LEGAL CONCERNS: None

SUPPORTING DOCS: 1. Location Map

2. Underline/Strikeout Tentative Order No. R9-2009-0100
3. Tentative Order transmittal letter to discharger and interested parties, dated July 9, 2009
4. US Navy Comment Letter dated July 29, 2009. Enclosure 1 not included because it is too large.
5. Regional Board staff "Response to Comments"
6. Errata Sheet for Tentative Order No. R9-2009-0100
7. US Environmental Protection Agency Comment Letter dated June 3, 2009.

SIGNIFICANT CHANGES
FROM CURRENT ORDER:

1. The Industrial Storm Water Acute toxicity effluent limit was changed as follows:
 - a. Order No. R9-2002-0169:

In a 96-hour static or continuous flow bioassay test, the discharge shall not produce less than 90% survival, 50% of the time, and not less than 70% survival, 10% of the time, using a standard test species and protocol approved by the Regional Water Board. Numerical effluent limits are sampled twice a year and toxicity is sampled at least once a year. This requirement was based on language from the 1974 Enclosed Bays and Estuaries Policy.
 - b. Tentative Order No. R9-2009-0100:

Discharges of storm water shall achieve a rating of "Pass" for acute toxicity with the determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test is determined using a one-tailed hypothesis test called a t-test. The objective of a Pass or Fail test is to determine if survival in the single treatment (100% effluent) is significantly different from survival in the control (0% effluent). The survival rate in the effluent toxicity must not be less than 5% of survival rate in the control sample, using standard statistical methods. Numerical effluent limits and toxicity are sampled at least twice a year. This requirement was based on language from the 1974 Enclosed Bays and Estuaries Policy, the Basin Plan, EPA guidance document "Understanding and Accounting for Method

Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program (EPA/833/R-00/003, 2000), EPA document Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (5 th Edition); (EPA-821-R-02-012, 2002), and the results and comments from the Navy study "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."

2. Inclusion of US Navy Graving Dock Order No. R9-2003-0265 into this permit.

RECOMMENDATION: Staff recommends the adoption of tentative Order No. R9-2009-0100 with errata.