

EXECUTIVE OFFICER SUMMARY REPORT
November 18, 2015

- ITEM: 9.a
- SUBJECT: U.S. Department of the Navy (Navy), Naval Base Coronado.
(Kristin Schwall)
- a. NPDES Permit Reissuance: Discharge to the Pacific Ocean, San Diego Bay and the Tijuana River Estuary (Tentative Order No. R9-2015-0117, NPDES No. CA0109185).
- PURPOSE: To receive public testimony and consider adoption of Tentative Order No. R9-2015-0117 (Tentative Order).
- RECOMMENDATION: Adoption of the Tentative Order (**Supporting Document No. 1**) is recommended.
- KEY ISSUES:
1. The Tentative Order is a comprehensive permit which regulates industrial storm water, municipal storm water, industrial process water, and utility vault and manhole discharges similar to the permits adopted for Naval Base San Diego (NBSD) and Naval Base Point Loma (NBPL).
 2. The Tentative Order requires monitoring of “high risk” industrial storm water discharges for comparison with Numeric Action Levels (NALs), consistent with the approach taken in the statewide *General Permit for Storm Water Discharges Associated with Industrial Activities* (General Industrial Storm Water Permit), Order No. 2014-0057-DWQ, and the U.S. Environmental Protection Agency (USEPA) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)*.
 3. The Tentative Order establishes acute toxicity effluent limitations for “high risk” industrial storm water discharges and chronic toxicity effluent limitations for steam condensate and diesel engine cooling water using the USEPA-approved Test of Significant Toxicity (TST) statistical approach and percent effect to analyze toxicity data to determine whether or not a discharge is toxic. As

discussed in the Compliance Record section below, the Navy has consistently violated the industrial storm water acute toxicity effluent limitations in Order No. R9-2009-0084 (Current Order), due in part to the error rate inherent to the data analysis methodology required under the Current Order. The TST method's improved statistical approach is expected to reduce the number of violations by more accurately identifying the samples that are truly toxic.

4. The Tentative Order requires the development and implementation of a sediment and receiving water monitoring program, consistent with the State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (Sediment Quality Plan).
5. The Tentative Order establishes requirements for steam condensate, diesel engine cooling water, utility vault and manhole dewatering, and pier washing in addition to storm water.
6. The Navy cannot immediately comply with effluent limitations for steam condensate and diesel engine cooling water in the Tentative Order and has submitted a plan to terminate the discharges by February 28, 2018. The Navy could not comply with effluent limitations in the Current Order and many of the effluent limitations in the Tentative Order are new or more stringent than the Current Order. Item 9.b on today's agenda is the proposed adoption of a Time Schedule Order (TSO) that will, if adopted, establish interim effluent limitations for these discharges and a compliance schedule to terminate the discharges.

PRACTICAL VISION: Consistent with the mission of the *Strategy for Healthy Waters* chapter of the Practical Vision, the Tentative Order integrates all applicable technology- based requirements; water quality based effluent limitations and receiving water quality standards in order to optimize protection of water quality and beneficial uses in San Diego Bay.

Additionally, the Tentative Order has provisions allowing for participation in regional monitoring and assessment programs to meet individual monitoring requirements in keeping with San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

DISCUSSION:

The Navy owns and operates three separate military bases located on the San Diego Bay waterfront: NBPL regulated by Order No. R9-2014-0037; NBSD regulated by Order No. R9-2013-0064; and Naval Base Coronado (NBC), currently regulated by Order No. R9-2009-0081 (Current Order). NBC is comprised of the following eight separate installations:

- Naval Air Station, North Island (NASNI)
- Naval Amphibious Base, Coronado (NAB)
- Naval Outlying Landing Field, Imperial Beach (NOLF)
- Silver Strand Training Complex (SSTC), formerly known as the Naval Radio Receiving Facility (NRRF)
- Naval Auxiliary Landing Field, San Clemente Island (NALF)
- Remote Training Site Warner Springs, (RTSWS) formerly known as Survival, Evasion, Resistance, and Escape (SERE) Training School
- Camp Michael Monsoor formerly known as La Posta Mountain Warfare Training Center (La Posta MWTC)
- Camp Morena

All of the installations except NALF will be regulated by the Tentative Order, if adopted. NALF is located in the Los Angeles Regional Water Quality Control Board jurisdictional area and, therefore, is not regulated by the San Diego Water Board.

The RTSWS also discharges secondary treated effluent to a spray field and that discharge is regulated under separate waste discharge requirements in Order No. R9-2015-0012.

NBC discharges into San Diego Bay, the Pacific Ocean, and the Tijuana River Estuary. (**Supporting Document No. 2, Location Map**). If adopted, the Tentative Order will supersede the Current Order and will regulate steam condensate, diesel engine cooling water, utility vault and manhole dewatering, pier washing, municipal storm water, and industrial storm water discharges.

The Tentative Order was noticed and released for formal public review and comment on September 11, 2015. Comments were received from the Navy on October 9, 2015 (**Supporting Document No. 3**). This was the only comment letter received. San Diego Water Board responses to these comments are provided in **Supporting Document No. 4**.

In general, the Navy requested non-substantive clarifications and corrections to the Tentative Order requirements. Modifications to the Tentative Order have been made to address some of the comments received from the Navy and to correct a few other minor errors. The modifications are shown in Supporting Document No. 1 in underline/strikeout format. Additionally, the Tentative Order has been revised in response to these comments and a Revised Tentative Order was posted for public review prior to today's meeting.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

1. Revised Tentative Order No. R9-2015-0117
2. Location Map
3. Comments from the Navy, dated October 9, 2015
4. San Diego Water Board Response to Comments Report

COMPLIANCE RECORD:

The following table summarizes the violations reported during the term of the Current Order:

Discharge Type	Violation Type	Constituent(s)	Number of Violations
Industrial Storm Water	Effluent Limitation Exceedance	Acute Whole Effluent Toxicity (WET)	138
Steam Condensate	Effluent Limitation Exceedance	Lead, Copper, Bis (2-Ethylhexyl) Phthalate, pH	229
Diesel Engine Cooling Water	Effluent Limitation Exceedance	Turbidity, Zinc, Copper	8
Diesel Engine Cooling Water	n/a	Unauthorized Discharge	23

Staff Enforcement Letters (SELs) have been issued for all of these violations.

Industrial Storm Water Toxicity Violations

The Navy petitioned the Current Order for NBC to the State Water Resources Control Board (State Water Board), on July 9, 2009, challenging several permit provisions and requesting a stay of the acute toxicity effluent limitation for industrial storm water. In October 2009, the State Water Board issued Order WQ 2009-0013. While Order WQ 2009-0013 did not stay the acute toxicity effluent limitation, it did stay the related accelerated monitoring requirements and Toxicity Reduction

Evaluation/Toxicity Identification Evaluation (TRE/TIE) requirements of the Current Order which would be triggered in response to violations of the effluent limitation, preventing the San Diego Water Board's ability to pursue meaningful enforcement of the persistent violations of the acute toxicity effluent limitation in the Current Order.

Since 2009, the San Diego Water Board has worked with the Navy to address their objections to the acute whole effluent toxicity (WET) effluent limitations for industrial storm water discharges in San Diego Water Board permits for the Naval Bases in the San Diego Region. As a result of these cooperative efforts, the San Diego Water Board has issued permits for NBSD and NBPL that include acute WET effluent limitations and a statistical approach for evaluating toxicity data using USEPA's TST methodology and a percent effect threshold. The Tentative Order proposes to adopt similar requirements to those in the NBSD and NBPL permits.

For a variety of reasons, the USEPA has expressed the opinion that the TST methodology offers several important benefits when compared to other "traditional" methodologies for evaluating toxicity data¹. By minimizing the "false positive" error rate (namely the rate at which a sample is determined to be toxic when it is not in fact toxic) and the "false negative" error rate (namely the rate at which a sample is determined to be non-toxic when it is actually toxic), the TST methodology has been shown to be better at determining "true toxicity." Also, because the results of the TST methodology are reported as "pass" or "fail," the compliance evaluation is simplified.

For the past two storm years², the Navy has evaluated the acute toxicity results of industrial storm water samples at NBC using both the methodology in the Current Order and the TST methodology with percent effect. Out of 156 storm water samples analyzed, toxicity was found in 47 samples using the methodology in the Current Order and in only 7 samples using the TST methodology with a percent effect threshold. This significant reduction in violations represents the ability of the TST approach with a percent effect threshold to more accurately detect biologically significant toxicity in

¹ See National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, USEPA, June 2010.

² A storm year is July 1 through June 30.

storm water samples.

Steam Condensate and Diesel Engine Cooling Water Effluent Limitation Violations

NBC currently uses pressurized steam for a number of purposes for both onshore and afloat operations. Within NBC, only NASNI has an on-base steam system. Inherent to this system is the formation of condensate, and that condensate is discharged to land and to San Diego Bay and the Pacific Ocean.

NBC has historically used diesel engines to supply water to the fire suppression system (sprinklers). These diesel engines discharge non-contact engine cooling water. The Current Order regulates four diesel engine cooling water systems. Only one diesel engine cooling water system remains on NBC.

The Navy has identified that it must ultimately cease using these systems in order to comply with permit limitations. However, doing so will take time.

For this reason, the Navy submitted a request for a TSO providing the Navy with interim requirements and a time schedule for ceasing discharges from the steam condensate system and the diesel engine cooling water system discharges on December 15, 2011. At that time, the San Diego Water Board and the Navy were working together on developing a new regulatory strategy for NBSD. The Tentative Order and accompanying TSO (Item 9.b) are consistent with the strategy used for the other naval bases in the San Diego Region.

Diesel Engine Cooling Water Discharge at Unauthorized Location

The Navy terminated the discharges of diesel engine cooling water at unauthorized locations by plumbing the discharges to sanitary sewer in August 2011.

PUBLIC NOTICE:

The Tentative Order was noticed and released for formal public review and comment on September 11, 2015. The public noticing consisted of publishing of the notice in the San Diego Union Tribune and posting on the San Diego Water Board's website. Notice was also provided in the meeting notice and agenda for the November 18, 2015 Board meeting. The release for public review and comment

consisted of an email sent to all known interested parties and posting on the San Diego Water Board's website.