

**Item No. 08
Doc. No. 05
Enclosures
1-10 on CD**



**DEPARTMENT OF THE NAVY
COMMANDER NAVY REGION SOUTHWEST
937 NO. HARBOR DR.
SAN DIEGO, CALIFORNIA 92132-0058**

IN REPLY REFER TO:
5090
Ser N45JWB.bg/0153
May 27, 2009

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court
San Diego, CA 92123-4340

Mr. John Robertus:

SUBJECT: NAVY COMMENTS ON TENTATIVE ORDER NO.R9-2009-0081
NPDES PERMIT NO.CA0109185, WASTE DISCHARGE
REQUIREMENTS FOR THE UNITED STATES DEPARTMENT OF THE
NAVY, NAVAL BASE CORONADO

2009 MAY 27 P 4:32
SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD

The following are Navy comments and supporting documents regarding the subject tentative order for Naval Base Coronado (NBC). These comments address storm water toxicity requirements; thermal, TCDD equivalents, and receiving water limitations; Monitoring and Reporting Program requirements; dilution credits and exceptions for non-storm water discharges; and minor editorial corrections to the order.

1. Storm Water Toxicity Requirements

Introduction

The Navy has a critical concern with the tentative order's storm water toxicity requirement. The toxicity requirement is inappropriately applied, excessively conservative, ignores toxic affects of area source pollutants, and given its inherent infeasibility to meet could result in upwards of \$300M in compliance costs to construct infrastructure to capture and divert storm water discharges. The following discussion provides the basic scientific facts and information supporting these comments as well as provides a rational alternative for compliance that is protective of San Diego Bay waters without causing undue regulation and cost.

Toxicity Study Conclusions

The Navy performed a comprehensive, peer reviewed, scientific study of storm water toxicity (Katz et al., 2006), Enclosure (1), that was requested by and presented to the Regional Board. The main conclusions of the study are as follows:

- **Storm water discharges from Navy industrial facilities rarely cause toxicity in bay waters.** There were only two instances of toxicity in over 200 receiving water tests (<1% observed toxicity). It is clear from this very large dataset, collected over the entire range of expected conditions, that storm water from Navy facilities has a negligible toxic impact on San Diego Bay waters. Current Best Management Practices (BMPs) and compliance efforts by the Navy are already meeting the goals of the order to maintain beneficial uses.
- **Toxicity measured in end-of-pipe storm water samples is not predictive of toxic impacts in bay waters.** This result, based on over 300 storm water and receiving water tests, showed that toxicity was almost never found in bay waters regardless of the toxicity level measured in end-of-pipe storm water samples. This is consistent with the EPA's Technical Support Document (TSD) (EPA's Technical Support Document for Water Quality-based Toxics Control, EPA, 1991), Enclosure (2), stating on page 9: "*there is a less likely chance for receiving water impacts to be observed in saltwater systems as predicted by toxicity tests*". It is apparent from the study results that failing an end-of-pipe storm water sample toxicity test is not meaningful with regards to identifying potential bay impacts.
- **Storm water plumes from industrial outfalls are very short-lived, have a limited spatial extent and are very low in magnitude.** The volume of storm water discharged from Navy facilities is sufficiently small that it is observed only in the immediate vicinity of the discharge and is rapidly (<12 hours) assimilated. The low exposure conditions posed by the natural mixing of storm water plumes results in lack of toxic impacts. The use of whole effluent toxicity (WET) testing was intended to evaluate toxicity for large continuous discharge sources, and then, only after mixing with the receiving water was taken into account. This is consistent with EPA's TSD stating on page 11: "*The results, when linked together, clearly show that if toxicity is present after considering dilution, impact will also be*

present" or "Impact from toxics would only be suspected where effluent concentrations after dilution are at or above the toxicity effect concentration". The use of Whole Effluent Toxicity (WET) testing is therefore only appropriate if it is used as intended; that is, that it be conducted on receiving water samples or on end-of-pipe samples adjusted for the magnitude and duration of the discharge.

- **Copper and zinc are the primary toxicants of concern in the Navy's industrial storm water runoff.** Toxicity Identification Evaluations (TIEs) were conducted as part of the study. Data from the TIEs showed that copper and zinc were the primary cause of acute toxicity in Navy storm water discharges. This is particularly troublesome because significant sources of copper and zinc in storm water discharges are from area sources.

Area source pollutants contributing to toxicity

The toxicity requirements fail to recognize that contaminants causing toxicity in storm water discharges are found in all urban areas largely as a result of atmospheric and direct deposition from automobile sources such as brake pads and tire wear. Numerous scientific studies identify the role of automotive sources and other industrial plant generation of these contaminants. For instance, the City of San Diego has recently estimated that these sources provide an overwhelming majority of copper to the Chollas Creek watershed (Weston Solutions, 2009). These contaminants have been shown to routinely cause toxicity in parking lot runoff (Greenstein et al., 2003) including the Regional Board's own parking lot, indicating the ubiquitous nature of problem. With these findings, the City of San Diego has sponsored SB 346 (Kehoe) which would require the design of brake pads to remove contaminants of concern including copper and zinc. The Senate Environmental Quality Committee analysis of this bill, Enclosure (3), noted:

"Scientific studies have shown that a major source of copper in highly urbanized watersheds is material worn off vehicle brake pads. It is estimated that about one-half of the copper found in run-off is attributed to brake pads."

"The ubiquity of copper in the urban environment, and the technical difficulty and impracticality of treating storm water to remove it, means that compliance with copper TMDLs will not be feasible without source reduction of

copper. Cost could go into the billions of dollars to remediate if source reduction measures are not taken."

Further evidence that copper and zinc sources are wide spread comes from the 2006 Air Toxics "Hot Spots" Program Report for San Diego County (August 2007), Enclosure (4). Table 1 of this report lists 451,827 lbs/year of zinc and 90,132 lbs/year of copper emissions from all sources in San Diego. Of this total, 99.0% of zinc and 97.3% of copper comes from mobile, area, and natural emission sources. The remainder, 1.0% for zinc and 2.7% for copper comes from industrial sources.

This offers an explanation why the Regional Board's parking lot and facility continue to fail the same toxicity test applied to the proposed order. Enclosures (5) and (6) provide storm water monitoring results for the Region Board's parking lot.

Unlike the Navy's study referenced above, the Regional Board has not offered scientific based evidence demonstrating that storm water runoff from Navy installations is having an adverse impact on San Diego Bay; nor has the Regional Board provided scientific based findings that, given the amount of contaminants from area sources, and their small particle size, that it is possible/feasible for end of pipe compliance with the storm water toxicity requirements.

In addition, the most recent scientific data show that storm water from all sources, not just Navy outfalls, is a minor source of copper and zinc to San Diego Bay. The most recent mass loading data (Chadwick et al., 2004) show that storm water from all sources accounts for only 7% of the copper loading to the bay. The Navy's storm water contribution is on the order of 10% of the total storm water loading, and is thus a minor fraction (~1%) of the overall Bay budget.

The proposed toxicity standard is not feasible

The Navy has continued to investigate and employ a number of BMPs to reduce the release of toxic contaminants from its activities. Moreover, the Navy and others continue to investigate treatment technologies. Despite these efforts, however, there has been no evidence to date that BMPs or treatment technologies can consistently pass the toxicity requirements proposed in the order. The only demonstrated consistent manner to satisfy the requirement is to divert the storm water flow to the City of San Diego sanitary sewer system. For Navy installations the cost to divert storm water runoff is estimated at over \$300 million. It is not clear that (1) sufficient funds could be available to implement this measure short of major appropriations from Congress, and (2) whether there is sufficient land on installations to build the required

infrastructure without significant disruption of critical missions.

It is also very unlikely, due to capacity constraints, that the City of San Diego could accommodate storm water runoff from large naval installations as they have for the smaller shipyard and boatyard facilities. Therefore, any findings of feasibility that the Regional Board may have made for the shipyard permits are not applicable to the Navy permits and should be supplemented with clear findings that the proposed conditions are economically feasible.

In summary, the Navy has provided substantial scientific evidence to support the fact that bay water beneficial uses are currently protected, that toxicity measured at the end-of-pipe is not a meaningful metric to evaluate potential impacts to bay waters, and that conducting WET tests on end-of-pipe samples does not appropriately take into account natural exposure conditions in bay waters. There is additional scientific evidence, and emerging recognition by the California Legislature, that the primary sources of copper and zinc in urban settings come from automobiles and atmospheric deposition and that storm water from urban areas such as parking lots will also fail toxicity tests for the same reasons explained above. Navy compliance, if feasible at all, with the proposed toxicity requirements would cost millions of dollars. To restate this, the tentative order's toxicity requirement is:

- **Inappropriate**-WET testing methods are designed to account for exposure conditions in receiving waters
- **Overly protective**-storm water rarely (<1%) causes toxicity in bay waters
- **Will not improve beneficial uses**-beneficial uses are already being met.
- **Costly and Infeasible to meet** - compliance will require storm water capture and diversion measures that are costly and may not be feasible.

A final comment comes directly from the tentative order's Section VI.D.1.a. found on p. F-75:

Receiving Water Monitoring, Surface Water:

"Monitoring of the receiving water is necessary to determine if the discharges from the Facility are impacting the receiving waters, applicable beneficial uses, and aquatic life."

The Navy could not agree more with this underlying rationale for the importance to measure in the receiving environment.

Rational Alternative for Toxicity Requirement

Though the Navy believes that toxicity measurements made in the receiving water alone are sufficient to assess impacts to beneficial uses, and continues to question the high cost of the current end-of-pipe monitoring given its limited scientific value, the Navy recommends that the following changes be made to the tentative permit to create a realistic monitoring requirement that will provide the necessary information to accurately evaluate whether or not beneficial uses of San Diego Bay are being protected. This change is necessary as the current toxicity test applied to end-of-pipe characterizes most storm water, including urban runoff, as toxic. This results from the emerging consensus discussed above that toxic constituents in storm water like copper and zinc are ubiquitous. The Navy believes that such overstatement of toxicity makes its use alone as a measure of compliance inappropriate and inequitably singles out Navy storm water for toxicity while ignoring similar toxicity from urban sources, including those impacting our sites from aerial deposition beyond our boundaries.

The Navy's toxicity study was based on evaluating paired samples of storm water and bay water collected immediately outside outfalls to assess impacts. This methodology allowed for an assessment of the effluent as well as its impact directly in the bay. The Navy proposes that this methodology be followed in the permit so that the information derived from end-of-pipe toxicity testing can be clearly tied to a receiving water impact.

Specifically the Navy recommends that:

- 1) The definition of a toxicity failure be redefined
- 2) The accelerated testing requirement be eliminated

The tentative permit could continue to require that toxicity be measured in 100% effluent. If a sample toxicity result is declared toxic (significantly different from the control at 95% confidence level), then during a subsequent storm event a 100% effluent sample should and a receiving water sample shall be collected immediately outside of that outfall. If both the 100% effluent and receiving water samples collected during the second storm are declared toxic (significantly different from the control at 95% confidence level), then the outcome would be a failure of meeting the order. Failure to meet the

order shall then trigger a TRE to assess the causes of the failure.

This requirement gets to the heart of the issue, whether the end-of-pipe storm water effluent is sufficiently toxic to cause a toxic impact in the bay. Additional end-of-pipe measurements alone (accelerated testing requirement) are insufficient to make this assessment.

Specific Comments on Toxicity Testing

Current Language in Tentative Permit (Attachment E, Section V.A., p.E-14):

Once each year (July-June), at a different time of year from the previous years, the Discharger shall split a single storm water and a single non-storm water effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species; the Discharger shall then continue to conduct routine toxicity testing using the single, most sensitive species, including testing for accelerated monitoring, until the next sensitivity testing the following year. The split sample from a storm water location and from a non-storm water location must be from a sample locations which most expected toxicity and, if possible, at a different location from previous years.

Navy Comment: The Navy recommends dropping this requirement. This requirement contradicts EPA TSD guidance that specifically states (page 58): "EPA recommends against selecting a "most sensitive" species for toxicity testing." The Navy's study provided sufficient data to show that common test species showed similar sensitivity in identifying storm water toxicity. Also, test species are commonly not available for use thereby posing an undue constraint. The requirement will cause the Navy to incur extra cost with no benefit. Finally, there is no mechanism to obtain non-storm water samples from the Navy's storm water conveyance system as there is rarely, if any water available.

Current Language in Tentative Permit (Attachment E, Section V.B., p.E-15):

The Discharger shall conduct 96-hour static renewal toxicity tests with the following vertebrate species:

- The topsmelt, *Atherinops affinis* [(Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality

make it possible to calculate acute toxicity for desired exposure periods (i.e., 96-hour Pass-Fail test)] in the first edition of Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995) (specific to Pacific Coast waters);

Navy Comment: Because test species are commonly unavailable for use and there are so few qualifying storms, the Navy recommends adding the following:

- The Inland silverside, *Menidia beryllina*, only if *Atherinops affinis* is not available.

If the tentative permit continues to require the use of "most sensitive species" (Section V.A., P E-14 described above), then the language in this section must be changed to accommodate a potential change in test species.

Current Language in Tentative Permit (Attachment E, Section V.E., p.E-17):

Accelerated Toxicity Testing and TRE/TIE Process

1. If the results of acute toxicity monitoring are reported as "Fail" and the likely source of toxicity is known (e.g., a temporary plant upset), then the Discharger shall conduct one additional toxicity test using the same species and test method. This test shall begin at the next storm event. If the additional toxicity test does not result in a determination of "Fail", then the Discharger may return to their regular testing frequency. The determination of the likely source of toxicity must be demonstrated by implementing the first two parts of the TRE work plan (VI.C.2.a.i. (a) and (b) of this Order.

2. If the results of acute toxicity monitoring are reported as "Fail" and the source of toxicity is not known, then the Discharger shall conduct accelerated toxicity testing using the same species and test method. The accelerated toxicity monitoring shall include monitoring of the next 4 storm events. This testing shall begin at the next storm event. If none of the additional toxicity tests result in a determination of "Fail", then the Discharger may return to the regular testing frequency.

3. If one of the additional toxicity tests (in section V.E.1 or V.E.2) are reported as "Fail" for acute toxicity, then, at the next storm event, the Discharger shall initiate a TRE as specified in section VI.C.2.a.ii of the Order.

4. Any TIE conducted as a part of the TRE as specified in section VI.C.2.a of this Order shall be based on the same sample that exhibited toxicity and from samples collected during subsequent storm events. Therefore, the discharger shall collect additional sample volume, sufficient for a TIE, when in an accelerated testing phase.

Navy Comment: The Navy recommends dropping the accelerated toxicity testing and TRE/TIE process requirement. The Navy believes that the permit requirement to retest toxicity after a failure provides no benefit unless the Navy has the time and ability to implement changes identified in the TRE that may alter the likelihood of a different future result. The requirement to retest is a contradiction of the EPA's TRE guidance that identifies that testing be conducted after an alternative approach has been implemented. Retesting before implementation will provide no useful data and create undue monitoring costs.

Current Language in Tentative Permit (Attachment E, Section V.F1., p.E-17):

A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—for determination of Pass/Fail; LC50; TUa = 100/LC50; NOAEC; TUa = 100/NOAEC—reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

Navy Comment: It is recommended that references to LC50; TUa; and NOAEC be removed as these metrics are not recorded for survival tests conducted with 100% effluent.

2. Steam Condensate - Thermal Effluent Limitation

The tentative draft order provides an effluent limitation for temperature applicable to steam condensate discharges.

Immediately below Table 7 on page 21 the order states "At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water". This limitation is overly conservative and unnecessary to protect San Diego Bay beneficial uses. Steam condensate discharges at Naval Base Coronado (NBC) are "existing discharges" as defined in the "California Thermal Plan"¹, are exceptionally low in volume and dispersed over a wide area, and have negligible affect on the ambient receiving water temperature.

The California Thermal Plan, Enclosure (7), defines existing discharges as "Any discharge (a) which is presently taking place, or (b) for which waste discharge requirements have been established and construction commenced prior to adoption of this plan, or (c) any material change in an existing discharge for which construction has commenced prior to the adoption of this plan." Steam condensate discharges at NBC are "existing discharges" that have occurred since prior to 1971, the year the California Thermal Plan was originally adopted, and are currently included as an authorized discharge in Order No.R9-2003-0008 (issued on November 13, 2003). Page F-32 of the order incorrectly states that steam condensate discharges at NBC commenced after the Thermal Plan was adopted. The California Thermal Plan requires existing discharges into enclosed bays "... comply with limitations necessary to assure protection of beneficial uses." Because steam condensate discharges are exceptionally low volume and dispersed over a wide area they will not adversely affect beneficial uses.

The total volume of steam condensate discharges to San Diego Bay from NBC has been estimated at between 100 and 375 gallons per day from 33 discharge points or on average up to 11 gallons per day from each discharge location. The estimated discharge rate from the steam lines is 1 (one) ounce per minute. These low volume discharges (literally drips) are dispersed over a wide area and would not result in a measurable change in receiving water temperature. This conclusion is supported by a temperature modeling study performed by the Navy in 2008 at Naval Weapons Station Earle, NJ². Although not performed in San Diego Bay the study modeled steam condensate discharges nearly identical to those occurring at NBC and used conservative assumptions to ensure the results reflected the worst case scenario. The modeling predicted changes in the receiving water

¹ Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California

² Temperature Modeling for Steam Condensate Discharge at Naval Weapons Station Earle, NJ, Technical Memorandum 2008 (SPAWAR Systems Center San Diego Environmental Services Branch)

temperature would be negligible. A copy of the study is provided as Enclosure (8).

The cost to install any type of system to either eliminate the discharges or reduce their temperature is not justified because the discharges have negligible affect on the receiving water temperature and will not adversely affect beneficial uses. Therefore the Navy proposes the temperature limitation be removed from the tentative order and a requirement be added to the Monitoring and Reporting Program (MRP) to measure the receiving water temperature to verify there are no significant changes in the ambient water temperature.

3. Receiving Water Limitations

The tentative draft order includes a receiving water limitation that should be revised to specify how compliance with the limitation is determined. Section V. Receiving Water Limitations, A. Surface Water Limitation includes the following statement *"The discharge of waste shall not cause or contribute to an exceedance of any applicable water quality objective or standard contained in applicable statewide water quality control plans, the California Toxics Rule, or the San Diego Basin Plan."* Although the Fact Sheet (pages F-75, attachment F) explains that monitoring in the receiving water will be used to determine compliance with receiving water limitations, the Navy requests a similar statement be added to the receiving water limitation (page 26 of the order) to ensure it is clear to the reader how compliance is determined.

This is a critical issue to the Navy because a lawsuit has been filed against the Navy for alleged violations of receiving water limitations in the existing Naval Base San Diego Waste Discharge Requirements (Order No.R9-2002-0169). The receiving water limitation included in the existing NBSD order is the same limitation included in the tentative order for NBC (stated in the above paragraph). The plaintiff argues in the lawsuit that the NBSD order requires receiving water objectives and standards, including CTR, be applied at the end of the discharge pipe for storm water discharges. The Navy disagrees with this interpretation and believes compliance with the receiving water limitations is determined by evaluating receiving water conditions, not by measuring pollutant concentrations at the end of the pipe. To eliminate any questions on the compliance requirements for the receiving water limitations, the Navy requests the NBC tentative order be revised to clearly state that compliance with the receiving water limitations will be

determined in the receiving water. The Navy recommends the following sentence be added to the end of A. Surface Water Limitation - "Compliance with this limitation will be determined through monitoring of the receiving water (San Diego Bay and the Pacific Ocean) using appropriate methods as specified by the Regional Water Board."

4. Monitoring and Reporting Program (MRP)

The MRP requirements for discharges at NBC can be reduced and still be effective in evaluating compliance, and protecting water quality and beneficial uses. Reducing monitoring and reporting will conserve resources (staff time and funding) and allow more resources to be directed towards implementing programs to improve water quality, such as testing and implementation of additional BMPs. The Navy requests the following changes be included in the MRP.

Steam Condensate

- Reduce the sampling frequency for flow from 1/month to 1/quarter. The volume of steam condensate discharged to San Diego Bay at each discharge location is extremely small and is dispersed over a large area. The total discharge volume per day based on 33 discharge points is estimated at 100 to 350 gallons or on average approximately 11 gallons for each discharge location. The process generating this discharge has not changed in several years so quarterly monitoring is more than adequate to determine the flow volume. Request Table E-2 be revised to require 1/quarter sampling.
- Change the sampling frequency for Bis (2-ethylhexyl) Phthalate, Copper and Lead from 1/month to 1/quarter. The process generating this discharge is very consistent and the discharge volume is extremely low. The Navy has adequately characterized this discharge and provided analytical data on the priority pollutants and a list of boiler chemicals used in the steam generating process. The permit already includes a provision for the Navy to report all process changes that could affect the character of the discharge. The boiler chemicals do not contain the pollutants listed above and the only sources of these pollutants would be from potable water delivered to the installation, or the boiler or distribution piping system. Changing the sampling frequency from 1/month to 1/quarter will provide sufficient data for the Navy and Regional

Water Board staff to evaluate compliance, pollutant loading to the bay, and determine if BMPs are effective. Request Table E-2 be revised to require 1/quarter sampling.

- Change the sampling frequency for TCDD Equivalents from 1/month to 1/quarter. The process generating this discharge is very consistent and is not expected to produce these pollutants. Changing the sampling frequency from 1/month to 1/quarter will provide sufficient data for the Navy and Regional Water Board staff to evaluate compliance, pollutant loading to the bay, and determine if BMPs are effective. Request Table E-2 be revised to require 1/quarter sampling.

Diesel Engine Cooling Water - The monthly monitoring requirements for diesel engine cooling water should be reduced to quarterly monitoring. The Navy has adequately characterized this discharge and provided analytical data on the priority pollutants. Changing the sampling frequency from 1/month to 1/quarter will provide sufficient data for the Navy and Regional Water Board staff to evaluate compliance, pollutant loading to the bay, and determine if BMPs are effective. Request Table E-3 be revised to require 1/quarter sampling for the following parameters - Total Suspended Solids, arsenic, cadmium, chromium, copper, DDT, lead, mercury, nickel, TCDD-equivalents, zinc, and salinity.

Receiving Water Monitoring - The monthly monitoring requirement for temperature is presumably required to evaluate impacts of thermal discharges to the bay. Since monitoring of thermal discharges for temperature at NBC is required quarterly the Navy requests the receiving water temperature monitoring in Table E-12 be changed to 1/quarter to coincide with discharge effluent monitoring.

Self Monitoring Reports - The MRP requires the monthly submittal of self monitoring reports. Reducing this reporting frequency from monthly to quarterly will conserve resources (staff time and funding) and allow more resources to be directed towards implementing programs to improve water quality, such as testing and implementation of additional BMPs, rather than on report writing. This will also reduce the work load for Regional Water Board staff by reducing the number of reports requiring review. Quarterly self monitoring reports will provide the identical data as submitted in monthly reports for use in evaluating compliance and potential impacts to beneficial uses. Because the order already includes a "Standard Provision" (page 30)

requiring the Navy to notify the Regional Water Board within 24 hours of violating any condition of the order, including effluent limitations, the change from monthly to quarterly will not affect prompt notification for any violations of the order.

5. TCDD Equivalents

The SIP³ on pages 28 and 29, Enclosure (9), only requires 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) be evaluated to determine if Water Quality Based Effluent Limitations (WQBELs) are required and not other TCDD congeners. The SIP requires monitoring for other TCDD congeners with the stated purpose of assessing the presence and amounts of congeners discharged so that future multi-media control strategies can be developed. In addition, WQBELs were inappropriately established for all TCDD equivalents using the California Toxics Rule (CTR) criteria established for 2,3,7,8-TCDD. Table F-6 on page F-43 of the fact sheet incorrectly lists the 2,3,7,8-TCDD CTR criteria as the criteria for all TCDD equivalents. This resulted in a final WQBEL that is overly conservative for TCDD equivalents and not based on the actual toxicity of the pollutant. Other factors that argue against effluent limits for TCDD equivalents include laboratory uncertainty at the very low detection limits required by the permit and the possibility that sources of the congeners may not be under the direct control of the discharger (i.e. atmospheric deposition, intake water). For these reasons we request the reasonable potential analysis (RPA) and WQBEL (if required) be limited to 2,3,7,8-TCDD. The effluent limitation for TCDD equivalents should be deleted from the order. The Navy also request that the RPA be re-accomplished and the Summary of RPA Results (Table F-8) and any other applicable sections of the order be updated.

6. Case by Case Exceptions

In a 9 April 2009 letter, Enclosure (10), to Mr. John Robertus the Navy requested "Case by Case" exceptions from SIP provisions for several discharges at San Diego area Navy installations with negligible potential impact to beneficial uses and that are in support of the public interest. Marine mammal enclosure cleaning is a discharge at NBC that was included in the April letter. The Navy requests support from the SDRWQCB in obtaining approval for the exception from the

³ The SIP is the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclose Bays, and Estuaries of California (State Water Resources Control Board 2005)

State Water Resources Control Board. In addition, the Navy requests monitoring and effluent limitations included in the NBC Order be delayed pending the outcome of the exception request.

7. Dilution Credits

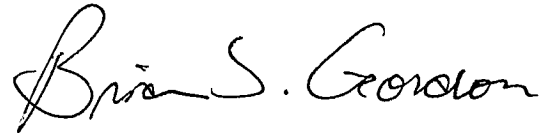
Dilution credits should be applied when calculating Water Quality Based Effluent Limits (WQBELs). The SIP (page 15) allows the use of dilution credits when calculating WQBELs. Dilution credits are appropriate for the listed Navy discharges because the discharges are relatively low in volume and total pollutant loading will not cause or contribute to a water quality criteria/objective exceedance, and will not adversely impact designated beneficial uses. The Navy, therefore, requests dilution credits be applied when calculating WQBELs for discharges at NBC. If dilution credits are allowed, the Navy will provide appropriate data, as required by your staff, to determine applicable dilution credits for each discharge.

8. Editorial Revisions

- Page F-4, Table F-1 - Remove Robert Chichester for Authorized Person to Sign and Submit Reports and replace with Brian Gordon, Water Program Manager, (619) 532-2273.
- Page 19, F. section VI.C.3.c. does not appear to be correct citation.
- Footnote on page 20 - High risk definition in footnote should be revised to match definition included in Attachment A of the order.
- Outfall 55 (NAS-038) is no longer considered industrial and no longer subject to sampling and observation; it should no longer be identified as industrial in the permit.
- Outfall 50 (NAB-038) is no longer considered industrial and no longer subject to sampling and observation; it should no longer be identified as industrial in the permit.
- NOLF - Outfall OLF5 is currently considered industrial and should be added to the permit. The coordinates of OLF5 are 32° 33' 53" N, 117° 6' 14" W.

If there are any questions regarding this submittal please feel free to contact me at (619) 532-2273.

Sincerely,



Brian S. Gordon
Water Program Manager
By direction

Enclosures:

- (1) 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 (May 2006)
- (2) EPA TSD for Water Quality-Based Toxics Control (March 1991) on CD
- (3) Senate Committee on Environmental Quality Analysis of Senate Bill 346 (Kehoe)
- (4) 2006 Air Toxics Hot Spots Program Report for San Diego County
- (5) Storm Water Toxicity Test Results for: Regional Water Quality Control Board San Diego, CA (February 14, 2008 Storm Event)
- (6) Storm Water Monitoring Results for RWQCB Parking Lot (2003 through 2008)
- (7) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California
- (8) Temperature Modeling for Steam Condensate Discharge at Naval Weapons Station Earle, NJ, Technical Memorandum 2008 (SPAWAR Systems Center San Diego Environmental Services Branch)
- (9) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SWRCB 2005)
- (10) Navy April 9, 2009 letter requesting Case by Case Exceptions for non-storm water discharges