

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

**Item No. 09
Doc. No. 05**

A. Comments submitted by Brian S. Gordon, Water Program Manager, Department of the Navy, on July 29, 2009:

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>Recital 1.</p> <p><u>Current Language in Tentative Permit (Attachment E, Section V.A.2, p.E-13):</u></p> <p>The Discharger shall conduct 96-hour static renewal toxicity tests with the following vertebrate species:</p> <ul style="list-style-type: none"> • The topsmelt, <i>Atherinops affinis</i> [(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); <p>Navy Comment: Because test species are commonly unavailable for use and there are so few qualifying storms, the Navy recommends adding the following:</p> <ul style="list-style-type: none"> • The Inland silverside, <i>Menidia beryllina</i>; only if <i>Atherinops affinis</i> is not available. 	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

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NAVAL BASE SAN DIEGO**

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<p>Recital 2.</p> <p>If the tentative permit continues to require the use of "most sensitive species" (Section V.A.II P E-13 described above), then the language in this section must be changed to accommodate a potential change in test species.</p>	<p>No change needed because both species are fish.</p>
<p>Recital 3.</p> <p><u>Current Language in Tentative Permit (Attachment EI Section V.a.5 1 p.E-15):</u></p> <p>Accelerated Toxicity Testing and TRE/TIE-Process</p> <p>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.</p> <p>2. If the results of acute toxicity monitoring are reported</p>	<p>The purpose of the accelerated toxicity testing is not to determine whether implementation of a TRE/TIE was successful, but rather to determine if a TRE is necessary. A TRE/TIE is not required unless the accelerated testing indicates a failure of one of the additional tests as specified in Attachment E, Section V.a.5.c. Further testing to verify that the implementation of a TRE/TIE was successful should be included in the TRE workplan that is required within 90 days of adoption of the tentative Order.</p> <p>The permit will not be modified.</p>

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NAVAL BASE SAN DIEGO**

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<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	

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NAVAL BASE SAN DIEGO**

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<p>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</p>	
<p>Recital 4.</p> <p><u>Navy Information Addressing Staff's Response to Comments for NBC Order</u></p> <p>Navy Comment 2: Toxicity measured in end-of-pipe storm water samples is not predictive of toxic impacts in bay waters.</p> <p>RWQCB Response: Measuring toxicity in an end-of-pipe storm water sample is the only way to evaluate the potential toxicity effects from the discharge. Measuring toxicity in the receiving water evaluates toxicity inputs from many sources, and not just the discharge(s) regulated by the order. The TSD states <i>"there is a less likely chance for receiving water impacts to be observed in saltwater systems as predicted by toxicity tests"</i>, but the saltwater systems evaluated had a greater dilution than the freshwater systems. This section of the concludes: <i>"The results of the studies at these four sites indicates a 94 percent accuracy when using the marine and estuarine toxicity tests to predict receiving water impacts"</i>. The TSD conclusion is that marine and estuarine toxicity tests are valid in predicting receiving water impacts.</p>	<p>In accordance with 40 CFR 122.45 (a), "All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under 122.44(k) (BMPs where limitations are infeasible) and paragraph (i) of this section (limitations on internal waste streams)." As such, effluent limitations for toxicity established at the end-of-pipe prior to comingling with any other discharge or with receiving waters are appropriate and are standard practice in NPDES permits. If a mixing zone/dilution credit is determined to be appropriate, then the end-of-pipe effluent limitation would be adjusted to allow for the dilution credit. Sampling to determine compliance with effluent limitation would remain at the end-of-pipe and not be changed to receiving water samples. In California, the default assumption is no dilution credit. To date the San Diego Regional Board has not allowed any dilution credit for discharges to San Diego</p>

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NAVAL BASE SAN DIEGO**

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<p>Navy Response: The section of the TSD referenced in the original Navy comment and staff's response relates to measurements made in ambient waters only after accounting for dilution. A key element for the predictive success of the studies evaluated by the EPA was the fact that the testing accounted for mixing and dilution in the receiving environment. The TSD states <i>"The results, when linked together, clearly show that if toxicity is present after considering dilution, impact will also be present."</i> The Navy study showed that not accounting for mixing and dilution in the receiving water leads to an erroneous result.</p>	<p>Bay. The reason for this is, in part, because the circulation within the Bay is poor and mixing times are long. Additionally, many constituents have shown elevated concentrations within the Bay and there is limited or no assimilative capacity for additional mass loading of pollutants.</p> <p>The Regional Board is not prohibited from applying a mixing zone/dilution credit to specific pollutant discharges in San Diego Bay. For the Regional Board to allow a mixing zone and a dilution credit the discharger must specify the method by which the mixing zone and dilution credit were derived and the point(s) in the receiving water where the applicable criteria/objectives must be met. The request for mixing zone and dilution credit must include the information needed by the Regional Board to make a determination on allowing a mixing zone, including the calculations for deriving the appropriate effluent limitations, along with the results of a mixing zone study. To date, the US Navy has not provided sufficient information for the Regional Board to establish a mixing zone/dilution credit for the discharge from Naval Base San Diego for any constituents.</p> <p>The permit will not be modified.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

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<p>Recital 5.</p> <p>Navy Comment 3: Storm water plumes from industrial outfalls are very short lived, have a limited spatial extent and are very low in magnitude .</p> <p>RWQCB Response: The Fact Sheet, section IV.C.2.c. states "The Discharger has not submitted information regarding available dilution for the discharges from the Facility. Thus, 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." Using a dilution of zero is very protective of the beneficial uses. However, the TSD state on page 11 <i>"Biological, physical, and chemical factors of the community can influence the actual effects that effluent toxicity may cause in the receiving water"</i> Because these factors as well as other discharges can affect the toxicity of the receiving water, the toxicity testing is required on the end-of-pipe samples. It is not appropriate to limit considerations on determining appropriate toxicity limitations in the permit to the magnitude and duration of the discharge. Even a limited volume short term duration toxic discharge is prohibited by the Basin Plan toxicity objective.</p> <p>Navy Response: The discharger has in fact submitted information regarding available dilution for the discharges</p>	<p>See response to Recital 4. The Regional Board and USEPA have reviewed the information submitted by the Navy regarding toxicity and does not agree with all of the conclusions within the Navy's study. The toxicity requirements contained in the tentative Order were developed taking into consideration the results of the Navy's study and are appropriate for the discharges from the Naval Base San Diego based on the application submitted by the Navy. The toxicity requirements contained in the tentative Order are the same as previous Orders adopted by the Regional Board for BAE Systems and Naval Base Coronado and have full support by USEPA as evidenced in their June 3, 2009 Comment Letter regarding "BAE Systems San Diego Ship Repair, Inc. - Revised Draft NPDES Permit No. CA0109151 and U.S. Department of the Navy, Naval Base Coronado – Revised Draft NPDES Permit No. CA0109185."</p> <p>The permit will not be modified.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
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NAVAL BASE SAN DIEGO**

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<p>from the Facility. The discharger's 2006 Toxicity Study (Katz et al., 2006) provided ample evidence that receiving waters were protected from toxicological impacts in almost every instance. The discharger provided abundant data that clearly showed that there was no receiving water toxicity, even using one of the most sensitive toxicological endpoints available, as close in as 5' outside the discharger's outfalls pipes. Thus, even a very minimal mixing zone of only several feet is sufficient to assimilate the discharge and render it harmless to bay waters.</p> <p>Staff's comment about "other factors" in the receiving water influencing toxicity may somehow mislead the results is contrary to the notion of being protective. One would certainly want to know if combined discharges to a water body would result in toxicity even if a single discharge alone does not. Ambient testing clearly identifies the combined effects of all discharges and thus provides a high level of protection.</p>	
<p>Recital 6.</p> <p>Navy Comment 4: Copper and zinc are the primary toxicants of concern in the Navy's industrial storm water runoff and area source pollutants contribute to toxicity</p> <p>RWQCB Response: Regional Board staff agrees that area sources can contribute to storm water toxicity. To address this issue, the high risk areas as defined in the Order could be</p>	<p>Areas where industrial activities are conducted have a higher risk of causing toxicity in adjacent receiving waters due to storm water runoff than non-industrialized areas. For this reason, tighter controls on those industrialized areas are needed to fully protect the beneficial uses of adjacent receiving waters. Implementation of appropriate</p>

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NAVAL BASE SAN DIEGO**

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<p>isolated so that storm water from low risk areas does not mix with storm water from high risk areas. Once these high risk areas are isolated, additional BMPs can be more readily implemented. One possible BMP for these isolated, small, high risk areas could be to capture and treat the "high risk:" storm water flows or divert them to the sanitary sewer system. The Order defines high risk areas as areas where wastes or pollutants (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleaners, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances of water quality significance) are subject to exposure to precipitation and runoff. These high risk areas should be minimized and isolated so effective BMPs can be implemented. It should be noted that in the Regional Board is currently engaged in proceedings to consider the issuance of a cleanup and abatement order to a number of parties, including the US Navy for discharging waste which contributed to the accumulation of pollutants in marine sediment at the Shipyard Sediment Site in San Diego Bay to levels, which that cause, and threaten to cause, conditions of pollution, contamination, and nuisance by exceeding applicable water quality objectives for toxic pollutants in San Diego Bay. In those proceedings it is alleged that the U.S. Navy discharged excessive concentrations of copper, lead, and zinc through its municipal separate storm sewer system (MS4) at NAVSTA San Diego to Chollas Creek and San Diego Bay in violation of waste discharge requirements. Technical reports by the U.S. Navy and others indicate that</p>	<p>BMPs are necessary to minimize impacts to receiving waters caused by industrial activities. In order to ensure the proper implementation of BMPs, whole effluent toxicity effluent limitations and testing are appropriate requirements in NPDES permits.</p> <p>The Water Quality Control Plan for the San Diego Basin (Basin Plan) contains, in part, the following toxicity water quality objective "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board."</p> <p>The Basin Plan also states "The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with requirements specified in USEPA, State Water Resources</p>

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<p>Chollas Creek outflows during storm events convey elevated sediment and urban runoff chemical pollutant loading and its associated toxicity up to 1.2 kilometers into San Diego Bay over an area including the Shipyard Sediment Site. While the Regional Board has not made a final determination in the matter the allegations do not support the conclusion that storm water discharges from Naval Installations do not have the potential to adversely affect toxicity levels in San Diego Bay.</p> <p>Navy Response: Isolation of high risk areas has already been completed by the Navy. This comment assumes that runoff from non-high risk areas will meet the end-of-pipe toxicity standard. There is no data to support this assumption and it is unlikely that storm water runoff from any industrial areas, regardless of the BMPs, will consistently meet the toxicity standard.</p> <p>While the RWQCB staff in the clean-up and abatement order makes allegations as to the Navy's contribution to the Shipyard Sediment Site, the Navy vigorously defends its position that its contribution to the site is de minimus.</p>	<p>Control Board or other protocol authorized by the Regional Board. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour acute bioassay. In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.”</p> <p>The toxicity effluent limitations contained in the tentative Order are consistent with and fully protective of the Basin Plan toxicity water quality objectives. If BMPs fail to meet the effluent limitations, then the discharger must change the BMPs, treat the effluent, or divert the discharge from entering the waters of the US.</p> <p>The permit will not be modified.</p>

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NAVAL BASE SAN DIEGO**

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<p>Recital 7.</p> <p>EPA: Recital No. 5 We have reviewed the 27 May 2009 letter from the Navy criticizing the proposed acute toxicity requirements. This letter refers to the Navy's 2006 comprehensive study of storm water toxicity. While EPA appreciates the Navy's work on this study, and believes that the collected data are valuable, EPA does not agree with the all of the conclusions reached by the Navy based on these data. For example, the Navy's conclusion that there was less than 1% observed toxicity is based on statistical methods which are inconsistent with EPA's whole effluent toxicity methods manuals. The Navy's testing approach appears to be biased toward not finding toxicity in situations where a test shows significantly reduced survival relative to control samples. We also disagree that the proposed permits are somehow inconsistent with EPA's March, 1991 "Technical Support Document for Water Quality-based Toxics Control", as implied by the Navy's May 27, 2009 letter. We'd like to reiterate that the proposed permits' provisions on acute toxicity are consistent with current EPA policies and regulations.</p> <p>Navy Response: The Navy completely disagrees with EPA's conclusion: <i>"For example, the Navy's conclusion that there was less than 1% observed toxicity is based on statistical methods which are inconsistent with EPA's whole effluent toxicity methods manuals. The Navy's testing approach</i></p>	<p>See response to Recital 5.</p>

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NAVAL BASE SAN DIEGO**

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<p><i>appears to be biased toward not finding toxicity in situations where a test shows significantly reduced survival relative to control samples."</i></p> <p>The conclusion and accusation of bias are simply not true. No "statistics" were used to arrive at the Navy's conclusion that "1% of receiving water toxicity samples exhibited toxicity" (page 137 of Navy's Study). The Navy's statement was based on simple math: Two toxicity test results out of a total of 202 receiving water toxicity tests were significantly different from their controls (2/202<1%).</p>	
<p><u>Recital 8.</u></p> <p><u>2. Prohibition on Underwater Hull Cleaning (III. Discharge Prohibitions, item N, Page 23)</u></p> <p>The Discharge Prohibition section of the tentative order prohibits discharges from underwater hull cleaning activities. This prohibition appears to have been cut and pasted from the Graving Dock Order into the tentative Naval Base San Diego (NBSD) Order when the two orders were merged. Underwater hull cleaning associated with DOD vessels should not be regulated under the tentative order. This discharge is listed in the Underwater Ship Husbandry category that is regulated under the Uniform National Discharge Standards (UNDS) program.</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

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NAVAL BASE SAN DIEGO**

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<p>In Title 40 of the Code of Federal Regulations (CFR) Part 1700, Congress passed legislation amending the Clean Water Act to control discharges that are incidental to the normal operation of armed forces vessels. Under 40 CFR Sec. 1700.2 (b), Congress prohibited states from regulating discharges from US Navy vessels: "This part prohibits States and their political subdivisions from adopting or enforcing State or local statutes or regulations controlling the discharges from Armed Forces vessels listed in Secs. 1700.4 and 1700.5 according to the timing provisions in Sec. 1700.6." UNDS specifically identifies Underwater Hull Cleaning of Armed Forces vessels as subject to UNDS.</p> <p>Underwater Hull Cleaning is critical aspect of sustaining the operational readiness of the fleet. Removing biofouling from vessel hulls reduces drag resulting in decreased fuel consumption and air emissions. Biofouling also effects vessel performance by decreasing maneuverability and diminishing sonar system efficiency and range. In addition, biofouling increases the roughness of the hull surface creating more noise underway making the ship easier to detect by other vessels.</p> <p>Because the discharge is regulated under the UNDS program The Navy requests the prohibition on underwater hull cleaning be deleted from the tentative order. The Navy could not comply with this prohibition without adversely impacting fleet operational readiness.</p>	

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NAVAL BASE SAN DIEGO**

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<p><u>Recital 9.</u></p> <p><u>3. Prohibition on Vessel Washdown Water (Fact sheet, Page F-14)</u></p> <p>The Fact Sheet on page F-14 lists vessel washdown water as a prohibited discharge. Vessel washdown water associated with DOD vessels should not be regulated under the tentative order. This discharge is listed in the Deck Runoff category that is regulated under the Uniform National Discharge Standards (UNDS) program. Navy personnel use fresh water to remove salt from surfaces of the vessel to reduce corrosion. The Navy requests vessel washdown water be removed from the order.</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>
<p><u>Recital 10.</u></p> <p><u>4. Section V. Receiving Water Limitations, A.I.7 (page 33)</u></p> <p>This section includes a thermal limitation prohibiting discharges greater than 20° F over the natural temperature of the receiving water. The Navy assumes this limitation is the "new" discharge standard from the California Thermal Plan (Thermal Plan). The Thermal Plan applies different standards to "existing" and "new" discharges. The Navy believes this limitation should not be applied across the entire facility and</p>	<p>The receiving water limitation for thermal characteristics will not be deleted but modified with text for existing discharges as follows:</p> <p>7. Thermal Characteristics</p> <p>Discharges from the Facility shall not exceed the natural temperature of the receiving waters by more than 20 °F.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
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NAVAL BASE SAN DIEGO**

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<p>should be applied to specific discharges in accordance with the Thermal Plan. It also seems inappropriate to place what is clearly an effluent limit in the receiving water section of the order. The Navy requests this limitation be deleted.</p>	<p><u>Elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses.</u></p>
<p><u>Recital 11.</u></p> <p><u>5. Steam Condensate - Thermal Effluent Limitation</u></p> <p>The tentative draft order provides an effluent limitation for temperature applicable to steam condensate discharges. Immediately below Table 6 on page 25 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 San Diego (NBSD) are "existing discharges" as defined in the "California Thermal Plan", are low in volume and dispersed over a wide area, and have negligible effect on the ambient receiving water temperature.</p> <p>The California Thermal Plan 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</p>	<p>The effluent limitation will be deleted as suggested.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

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<p>construction has commenced prior to the adoption of this plan. H Steam condensate discharges at NBSD are "existing discharges" that have occurred since prior to 1971, the year the California Thermal Plan was originally adopted. Page F-37 of the order incorrectly states that steam condensate discharges at NBSD 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 at NBSD are low in volume and dispersed over a wide area they will not adversely affect beneficial uses.</p> <p>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. This monitoring will provide the Regional Board staff data to evaluate the necessity of a temperature limitation to protect beneficial uses prior to imposing a standard that will cost tax payers millions of dollars and several years to implement.</p> <p>Enclosure (1) are drawings of the NBSD stearn system that</p>	

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NAVAL BASE SAN DIEGO**

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<p>demonstrate the system was installed in the 1940s and is evidence that the steam condensate discharges are "existing" discharges as defined in the California Thermal Plan.</p>	
<p><u>Recital 12.</u></p> <p><u>6. High Risk Definition, Page A-3</u></p> <p>The definition for high risk areas was intended to apply to industrial areas at Navy installations and other non-Navy facilities. The Navy requests the definition be revised so it clearly states it applies to industrial activities.</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>
<p><u>Recital 13.</u></p> <p><u>7. First Flush Definition, Page A-3</u></p> <p>The existing NBSD order requires the discharge of first 1/4 inch of runoff from high risk areas be terminated. In this tentative order the definition for first flush has been changed to runoff from the first 1 inch of precipitation. The Navy has already designed and implemented programs to capture the first 1/4 inch of runoff from high risk areas in accordance with the existing permit and so requests the definition for first flush in the tentative order be revised to 1/4 inch or prohibition H. on page 23 be changed so it is consistent with the existing permit in requiring termination of runoff from the first 1/4 inch of precipitation. The Fact Sheet, on page F-41, item 4,</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
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NAVAL BASE SAN DIEGO**

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<p>regarding high risk areas states " ... prohibits the discharge of the first 1/4 inch (first flush) of storm water runoff from high risk areas ... ".</p>	
<p>Recital 14.</p> <p>8. Weight Test Water Discharge Eliminated</p> <p>The Weight Test Water discharge at NBSD has been eliminated. Although this discharge consists of bay water collected in a canvas bag and then discharge back to the bay, the costs of monitoring this discharge is sufficiently high that the Navy will now discharge the water to the sanitary sewer or have it trucked off the base for disposal. The Navy will no longer discharge Weight Test Water to San Diego Bay. The Navy request this discharge be removed from the NBSD permit.</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>
<p>Recital 15.</p> <p>9. Monitoring and Reporting Program (MRP)</p> <p>The MRP requirements for discharges at NBSD 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</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
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<p>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.</p> <p><u>Steam Condensate</u></p> <ul style="list-style-type: none"> • Eliminate the requirement for monthly estimates of the flow volume and instead require an engineering estimate of average flow volumes covering the entire year. Monthly estimates will not change because the Navy can not meter steam condensate discharges and it is impractical to measure flows from over a hundred discharge locations every month. The resources required each month would be enormous to send people to the field to collect drips of steam condensate. An updated engineering estimate that takes into account maintenance schedules and other factors would provide more accurate data for determining flow volumes. The Navy could complete an updated engineering estimate within 120 days of the permit adoption. The estimate could be renewed annually to provide the most accurate flow volume information. This comment was developed after discussions with Navy Utility Department Engineers with expertise on the NBSD steam distribution system. • Change the sampling frequency for copper, lead, mercury, zinc, and TCDD equivalents from 1/month to 1/quarter. The process generating this discharge is very consistent and the discharge volume is low. The Navy has adequately characterized this discharge and provided analytical data on 	

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NAVAL BASE SAN DIEGO**

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>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.</p> <p>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. If this request is not granted request a provision be added to the permit allowing the sampling frequency to be reduced after the first year of monitoring if Regional Board staff determine quarterly sampling will provide sufficient data and not increase risk to beneficial uses.</p> <p>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</p>	

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>to beneficial uses. Because the order already includes a "Standard Provision" (page 35) 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. This change would also be consistent with the reporting requirements in the recently issued Naval Base Coronado Order.</p>	
<p>Recital 16.</p> <p>10. Graving Dock Reporting Requirements, Pages E-27 to E-28</p> <p>Several sections of the existing Graving Dock Order No.R9-2003-0265 were cut and pasted into the NBSD order without language clarifying the requirements only apply to the Graving Dock facility. The Navy requests that the requirements for the Spill and Illicit Discharge Log, Chemical Utilization Audit, and Waste Hauling Log be revised so it is clear the requirements apply to the Graving Dock facility and not all areas of NBSD.</p>	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

COMMENTS	REGIONAL BOARD RESPONSES
<p>Recital 17.</p> <p>11. TCDD Equivalents</p> <p>The SIP on pages 28 and 29, 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-7 on page F-48 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 likely probability that sources of the congeners are 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 to meet, but not exceed, the minimum SIP requirements. The effluent limitation for TCDD equivalents should be deleted</p>	<p>The CTR establishes a numeric Water Quality Objective for 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD) of $1.4 \times 10^{-8} \mu\text{g/L}$ for the protection of human health, when aquatic organisms are consumed. When the CTR was promulgated, USEPA stated its support of the regulation of other dioxin and dioxin-like compounds through the use of toxicity equivalencies (TEQs) in NPDES permits. For California waters, USEPA stated specifically, "if the discharge of dioxin or dioxin-like compounds has reasonable potential to cause or contribute to a violation of a narrative criterion, numeric WQBELs for dioxin or dioxin-like compounds should be included in NPDES permits and should be expressed using a TEQ scheme." [65 Fed. Reg. 31682, 31695 (2000)] This procedure uses a set of toxicity equivalency factors (TEFs) to convert the concentration of any congener of dioxin or furan into an equivalent concentration of 2,3,7,8-TCDD. The CTR criterion is used as a criterion for dioxin-TEQ.</p> <p>The permit will not be modified.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>from the order. The Navy also request that the RPA be re-accomplished and the Summary of RPA Results and any other applicable sections of the order be updated.</p>	
<p>Recital 18.</p> <p>12. Dilution Credits</p> <p>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 th 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.</p> <p>Page F-49 of the tentative order states "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.</p> <p>The Discharger has not submitted information regarding</p>	<p>See response to Recital 4.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>available dilution for the discharges from the Facility. Thus, the worstcase 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.”</p> <p>The Navy (discharger) has in fact submitted information regarding available dilution for the discharges from NBSD. The discharger's 2006 Toxicity Study (Katz et al., 2006) provided ample evidence that receiving waters were protected from toxicological impacts in almost every instance. The discharger provided abundant data that clearly showed that there was no receiving water toxicity, even using one of the most sensitive toxicological endpoints available, as close in as 5' outside the discharger's outfalls pipes. Thus, even a very minimal mixing zone of only several feet is sufficient to assimilate the discharge and render it harmless to bay waters.</p>	
<p>Recital 19.</p> <p>13. Editorial Revisions</p> <ul style="list-style-type: none"> • Table I, Discharger Information - Change address Zip Code to 92136-5084. • Page F-8 states that there are dry docks (plural) at NBSD. 	<p>The Regional Board concurs with the comment. The permit will be modified as suggested.</p>

**SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS
TENTATIVE TO ORDER NO. R9-2009-0100
NAVAL BASE SAN DIEGO**

<i>COMMENTS</i>	<i>REGIONAL BOARD RESPONSES</i>
<p>There is only a single dry dock at NBSD. please revise this section so it accurately states dry "dock" (singular).</p> <ul style="list-style-type: none">• Attachment F, Page F-9 - "Sithe Energy" has been replaced by "Primary Energy". Please make correction.• Attachment G, Page G-2 - Sections B.2 and B.3 are the same requirements.• Attachment F, Page F-25 - this paragraph states letter was sent to "Southwest Marina (currently US Navy)". Believe this should have stated to "Southwest Marine (currently BAE)". Please correct this statement.• Attachment I, Page I-I - bottom of page remove pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning. These activities do not occur at NBSD.	