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/0096
April 9, 2009

Mr. John Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Dear Mr. Robertus:

Sub: CASE BY CASE EXCEPTIONS FOR NON-STORM WATER DISCHARGES AT VARIOUS LOCATIONS AT NAVAL BASE POINT LOMA, TENTATIVE ORDER NO. R9-2008-0060, AND NAVAL BASE CORONADO COMPLEX (NAVAL AMPHIBIOUS BASE), TENTATIVE ORDER NO. R9-2008-0062

Commander Navy Region Southwest respectfully submits this letter requesting Case by Case Exceptions from provisions contained in Section 1 and 2 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). These Case by Case Exceptions are for non-storm water discharges currently taking place at Naval Base Point Loma (NBPL) and Naval Base Coronado Complex (NBCC), Naval Amphibious Base (NAB), pursuant to Orders No.R9-2002-0002 and R9-2003-0008, respectively.

The non-storm water discharges to San Diego Bay, discussed in enclosure (1), include Dolphin Pool Water, Unused Bay Water, Abalone Tank and Bioassay Trailer Water, and Mammal Enclosure Cleaning Water.

If there are any questions regarding this submittal, please feel free to contact Ms. Theresa Trost at (619) 532-3709 or myself at (619) 532-2273.

Sincerely,

Brian S. Gordon
Director, Compliance and
Technical Division
By direction

Enclosures: 1. Case by Case Exceptions from SIP Provisions

Enclosure (10)

CASE BY CASE EXCEPTIONS FROM SIP PROVISIONS

Dolphin Pool Water

a. The United States Department of the Navy (Discharger) is currently discharging pursuant to Order No. R9-2002-0002, and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109363. The Discharger submitted an application for an NPDES permit renewal for various non-storm water discharges from Dolphin Pools associated with the training of marine mammals. The Dolphin Pools are located at the Magnetic Silencing Facility (MSF), and Space and Naval Warfare Systems Center Pacific, Point Loma Campus (SSC Pacific PLC), two of eight installations located at Naval Base Point Loma (NBPL) San Diego. One sampling location was identified at the MSF (32° 41'34" N; 117°14'22" W) and one at SSC Pacific PLC (32°42'8" N; 117°14'14" W). The application was deemed complete on March 27, 2008. The discharger's office is located at 937 North Harbor Drive, Box 81, San Diego, CA 92132. The point of contact (POC), Theresa Trost, can be reached by phone at (619) 532-3709 or fax at (619) 532-2283.

b. Both MSF and SSC Pacific PLC use Shipboard Forward Deployable training/holding pools for marine mammals and discharge pool water into the San Diego Bay.

c. The specific SIP provision for which the Discharger is requesting a Case by Case Exception is contained in Section 1 and 2, of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Section 1: Establishing Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives; and Section 2: Determining Compliance with Priority Pollutant Critera/Objectives and Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives, include the calculation of effluent limitations and compliance schedule for monitoring, and reporting of discharges. An exception from these requirements will not compromise the beneficial uses of San Diego Bay.

d. The Discharger requests a Case by Case Exception from the San Diego Regional Water Quality Control Board (RWQCB) for exclusion of the Dolphin Pools (located at the MSF and SSC Pacific PLC on Naval Base Point Loma), from impending requirements contained in Order No. R9-2008-0060; NPDES No.CA0109363. The costly monitoring of Dolphin Pool discharges that have negligible potential impact on San Diego Bay, will divert limited funding away from other important environmental programs. These funds could potentially support other Navy monitoring efforts within the San Diego watershed or be focused on the further reduction of pollutants by developing advanced best management practices that can be used by other dischargers.

e. The Dolphin Pools at NBPL range in size from 10,000 to 23,500 gallons and are used approximately once per month for a period of three days. When the marine mammals are in the pools, seawater is continuously pumped into them from San Diego Bay, circulated throughout the pools, and discharged back to the bay. The bay water is not processed in

(01) enclosure 3

any way, and no chemicals are added to the pool system. The dolphin herd lives in the bay, and any waste the animals generate while in the pools, would have gone directly into the bay whether the dolphins were occupying the pools or not. Because the sole source of seawater in the Dolphin Pools is obtained directly from San Diego Bay, it can be concluded that priority pollutants found in the discharge from the Dolphin Pools originate from the San Diego Bay.

Comparing priority pollutant test results from Dolphin Pool discharge and receiving water samples (April 2007) collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, show that analytical testing results do not differ significantly between the discharge and receiving water samples (Attachment 1). This comparison also shows that the potential impact to the receiving water is negligible and does not compromise the beneficial uses of San Diego Bay.

Monitoring results show that, in most cases, when analytes are present in the samples, their concentrations could not be adequately quantified (Attachment 1). This results in the reporting of only estimated concentrations; i.e. the results are either in the detected, not quantified (DNQ) category, annotated with a "3", or designated by a "U" (result is less than the estimated detection limit) or a "J" (the result is equal to or greater than the estimated detection limit and less than the reporting limit) (see attached sampling results). Often the receiving water had higher measured analytes than did the discharge water. Again it is evident from the data, that the source of these analytes must originate in the seawater obtained from San Diego Bay, that the Dolphin Pool discharge is not contributing to the degradation of San Diego Bay, and that the detection levels of these analytes can not be adequately quantified.

In support of the public interest SIP provision, technically defensible documentation and papers demonstrate the invaluable service provided by the Marine Mammal Program at the MSF and SSC Pacific PLC, whose existence is focused primarily on the best interest of the public and our national security (Attachment 2).

- The Dolphin Pools support marine mammals essential to our national security. The mammals' exceptional biological sonar is unmatched by hardware sonars in detecting objects in the water column and on the sea floor, and they are capable of repetitive deep diving. The marine mammals, along with their trainers, can be deployed within 72 hours notice and can be rapidly transported by aircraft, helicopter, and land vehicles to potential regional conflict or staging areas all over the world. As a benefit to the public, the marine mammals provide harbor security to personnel during military operations and were utilized to support waterside security during the 1996 Republican convention. In 2002, the dolphins supported 3rd Fleet Force Protection in San Diego Bay (Attachment 2).

f. In the event a Case by Case Exception is granted, no further monitoring would be required and, therefore, no timeline for compliance would be necessary. However, the Discharger acknowledges its responsibility to notify the Regional Water Quality Control

Board (RWQCB) of any changes in operations or discharges that may have the potential to compromise the receiving waters in San Diego Bay.

g. Beneficial uses designated in the Water Quality Control Plan for the San Diego Bay include industrial service supply (IND), navigation (NAV), water contact recreation (REC-1), non-contact recreation (REC-2), commercial and sport fishing (COMM), preservation of biological habitats of special significance (BIOL), estuarine habitat (EST), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), marine habitat (MAR), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and shellfish harvesting (SHELL) activities. Based on the results of data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, the total volume of discharge from all Dolphin Pools at NBPL, the frequency with which discharges are made, and the fact that the bay water is not processed (with no addition of chemicals), it can be concluded that the potential for impact to the beneficial uses of water in San Diego Bay due to Dolphin Pool discharges is negligible.

h. The Dolphin presence at NBPL serves the public interest not only by providing coastal security, as discussed in section "e" above, but also environmentally. Research conducted by the Marine Mammal Environmental Support Program Office (MMESPO), established in 2000, provides valuable information by measuring and predicting possible interactions between Navy activities and marine mammals at sea and by determining at what levels sound affects the mammals. When no longer on active duty, many dolphins go on to aid in research that includes studies on hydrodynamics, diving, marine mammal health, dolphin sound production, toxicology, nutrition, and cetacean hearing ranges (Attachment 2).

i. Data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR shows that analyte concentrations are similar to the Dolphin Pool in-take water from San Diego Bay (Attachment 1). Therefore, it is unlikely that the discharges from the Dolphin Pools would result in the lowering of water quality, or impact beneficial uses in San Diego Bay.

Unused Bay Water

a. The United States Department of the Navy (Discharger) is currently discharging pursuant to Order No. R9-2002-0002, and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109363. The Discharger submitted an application for an NPDES permit renewal for various non-storm water discharges including discharges associated with Unused Bay Water that originates from Building 111 at the Space and Naval Warfare Systems Center, Pacific, Point Loma Campus (SSC Pacific PLC), one of eight installations located at Naval Base Point Loma (NBPL) San Diego. One sampling location was identified at SSC Pacific PLC associated with Unused Bay Water (32° 42'19" N; 117°14'11" W). The application was deemed complete on March 27, 2008. The discharger's office is located at 937 North Harbor Drive, Box 81, San Diego, CA 92132. The point of contact (POC), Theresa Trost, can be reached by phone at (619) 532-3709 or fax at (619) 532-2283.

b. Unused Bay Water originating from a flow-through tank on the roof of Building 111 at SSC Pacific PLC is discharged, via a storm drain that discharges to the San Diego Bay.

c. The specific SIP provision for which the Discharger is requesting a Case by Case Exception is contained in Section 1 and 2, of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Section 1: Establishing Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives; and Section 2: Determining Compliance with Priority Pollutant Critera/Objectives and Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives, include the calculation of effluent limitations and compliance schedule for monitoring, and reporting of discharges. An exception from these requirements will not compromise the beneficial uses of San Diego Bay.

d. The Discharger requests a Case by Case Exception from the San Diego Regional Water Quality Control Board (RWQCB) for exclusion of Unused Bay Water (originating from a laboratory tank located at SSC Pacific PLC on Naval Base Point Loma), from impending requirements contained in Order No. R9-2008-0060; NPDES No.CA0109363. The costly monitoring of Unused Bay Water discharges that have negligible potential impact on the San Diego Bay, will divert limited funding away from other important environmental programs. These funds could potentially support other Navy monitoring efforts within the San Diego watershed or be focused on the further reduction of pollutants by developing advanced best management practices that can be used by other dischargers.

e. Seawater from San Diego Bay is used in Building 111 laboratories. To prevent stagnation, San Diego Bay water is continuously pumped from the bay, via a 2-inch diameter PVC pipe, into a 500-gallon flow-through poly-tank located on the roof of the building. A portion of the flow through the tank is used by the laboratories and subsequently discharged to the sanitary sewer. A portion of the continuous flow is never used by the laboratories but instead cycles through the tank and is discharged via a 2-inch

PVC pipe to a storm drain which ultimately discharges to the Bay. This Unused Bay Water, approximately 13 million gallons per year, is not treated or processed prior to discharging back into the San Diego Bay. Because the sole source of seawater cycled through the 500-gallon tank on the roof of Building 111 is obtained directly from San Diego Bay, it can be concluded that priority pollutants found in this discharge originate from the San Diego Bay.

Comparing priority pollutant test results from Unused Bay Water discharge and receiving water samples (April 2007), collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, show that analytical testing results do not differ significantly between the discharge and receiving water samples (Attachment 1). This comparison also shows that the potential impact to the receiving water is negligible and does not compromise the beneficial uses of San Diego Bay.

Monitoring results show that, in most cases, when analytes are present in the samples, their concentrations could not be adequately quantified (Attachment 1). This results in the reporting of only estimated concentrations; i.e. the results are either in the detected, not quantified (DNQ) category, annotated with a "3", or designated by a "U" (result is less than the estimated detection limit) or a "J" (the result is equal to or greater than the estimated detection limit and less than the reporting limit). Often the receiving water had higher measured analytes than the discharge water. Again it is evident from the data, that the source of these analytes must originate in the seawater obtained from San Diego Bay, that the Unused Bay Water is not contributing to the degradation of San Diego Bay, and that the detection levels of these analytes can not be adequately quantified.

In support of the public interest SIP provision, technically defensible documentation and technical papers demonstrate the invaluable information gathered through water quality research at SSC Pacific PLC (Attachment 2). Information includes, but is not limited to, technologies affecting storm water toxicity evaluations, TMDL sediment evaluations, and development of toxicity assessment technology. Although these technologies were initially developed for the protection of military personnel, they are now focused on civil protection of people and the environment by determining water quality for consumers and users, therefore, serving the public interest.

- Bay water supports the bioassay laboratory at SSC Pacific PLC which develops and uses both standard and innovative toxicity and bioaccumulation methods for evaluation of effluents, receiving water, and sediment samples as well as other environmental samples.

  - One unique test, called QwikLite, rapidly screens samples using dinoflagellate bioluminescence reduction as a measure of toxicity. Dinoflagellate plankton can be used as a bio-indicator for toxicity in water samples, and they are more sensitive than shrimp and juvenile minnows used in traditional bioassays at a fraction of the cost. QwikLite has been hailed as "technology that revolutionizes water toxicity testing" as it is a field-deployable bioassay system. The test unit, developed at

SSC Pacific PLC, is currently being commercialized by Assure Controls, Inc. (Attachment 2).

- Based on the same principal of dinoflagellate bioluminescence, scientists at SSC Pacific PLC have developed a rapid and cost-effective bioassay system for sediment toxicity called QwikSed. QwikSed is proving to be a valuable asset for conducting bioassays on contaminated marine sediments and can be used in TMDL sediment evaluations (Attachment 2).

- Copper levels and their effects are and have been a concern for scientists at SSC Pacific PLC. Mussels, which are economically and recreationally important in San Diego Bay, and sea urchins, are particularly sensitive to elevated copper concentrations and their embryo-larval development tests have become a common means of evaluating toxicity of industrial discharges, urban runoff, and marine surface water and sediment quality. Several testing approaches have helped SSC Pacific PLC scientists derive key data for understanding the bioavailability of copper and its potential toxicity to sensitive organisms in water bodies such as San Diego Bay, Pearl Harbor, HI, and Sinclair & Dyes Inlets, WA, (as well as the potential for environmental effects associated with munitions constituents). It is anticipated that the results of this testing will hone the EPA water quality criterion for copper that currently may be overprotective at these sites (Attachment 2).

- Concentrations of heavy metals such as copper, zinc, cadmium, mercury and lead, occur in many marine and freshwater environments as a result of industrial activities. The mobile forms of these metals are considered toxic (depending on pH, salinity and water hardness) and can bioaccumulate in members of the benthic community. Since heavy metals cannot be degraded, they become a challenge for in-situ remediation. Ongoing research using various amendments, such as calcium phosphate, will provide a scientific basis for understanding the effects of sediment amendments on benthic biota and the potential for metal immobilization. Results of this research could precipitate new strategies for controlling and/or remediating heavy metal contamination in estuarine and marine harbor sediments without posing risks to the benthic community (Attachment 2).

f. In the event a Case by Case Exception is granted, no further monitoring would be required and, therefore, no timeline for compliance would be necessary. However, the Discharger acknowledges its responsibility to notify the Regional Water Quality Control Board (RWQCB) of any changes in operations or discharges that may have the potential to compromise the receiving waters in San Diego Bay.

g. Beneficial uses designated in the Water Quality Control Plan for the San Diego Bay include industrial service supply (IND), navigation (NAV), water contact recreation (REC-l), non-contact recreation (REC-2), commercial and sport fishing (COMM), preservation of biological habitats of special significance (BIOL), estuarine habitat (EST), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), marine habitat (MAR), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and shellfish harvesting (SHELL) activities. Based on the results of data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, the total volume of discharge from Unused Bay Water at NBPL, and the fact that the bay water is not treated or processed, it can be concluded that the potential for impact to the beneficial uses of water in San Diego Bay due to Unused Bay Water discharges is negligible.

h. Development of technologies such as QwikLite and QwikSed in the SSC Pacific PLC bioassay laboratory will provide public and environmental protection by allowing for rapid, accurate and cost effective water quality and sediment toxicity measurements in the field. Results will be obtained in a matter of hours, rather than days, as in current traditional bioassays, therefore, early detection will facilitate a rapid response resulting in the difference between simple prevention and costly cleanup. The use of bioluminescent dinoflagellates, rather than higher maintenance organisms, does not require specialized facilities for successful assessment of samples (Attachment 2).

Laboratory testing to determine the bioavailability of metals may help scientist's understanding of the bioavailability of copper and its potential toxicity to sensitive organisms in water bodies such as San Diego Bay, and could precipitate new strategies, such as adding amendments for controlling and/or remediating heavy metal contamination in estuarine and marine harbor sediments without posing risks to the benthic community (Attachment 2).

i. Data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR shows that analyte concentrations in San Diego Bay are similar to the Used Bay Water discharged from bioassay tanks into San Diego Bay (Attachment 1). Therefore, it is unlikely that the discharges from the Unused Bay Water would result in the lowering of water quality or impact beneficial uses in San Diego Bay.

Abalone Tank and Bioassay Trailer

a. The United States Department of the Navy (Discharger) is currently discharging pursuant to Order No. R9-2002-0002, and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109363. The Discharger submitted an application for an NPDES permit renewal for various non-storm water discharges including discharges associated with the Abalone Tanks and Bioassay Trailer, two operations at the Magnetic Silencing Facility (MSF), one of eight installations located at Naval Base Point Loma (NBPL) San Diego. One sampling location was identified at SSC Pacific PLC associated with Abalone Tanks and Bioassay Trailer Discharges (32° 41'33" N; 117°14'22" W). The application was deemed complete on March 27, 2008. The discharger's office is located at 937 North Harbor Drive, Box 81, San Diego, CA 92132. The point of contact (POC), Theresa Trost, can be reached by phone at (619) 532-3709 or fax at (619) 532-2283.

b. The unused portion of seawater that is continuously cycled through tanks associated with Bioassay Trailer operations and seawater continuously cycled through the Abalone Breeding Tanks is discharged onto rip rap and then directly to San Diego Bay.

c. The specific SIP provision for which the Discharger is requesting a Case by Case Exception is contained in Section 1 and 2, of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Section 1: Establishing Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives; and Section 2: Determining Compliance with Priority Pollutant Critera/Objectives and Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives, include the calculation of effluent limitations and compliance schedule for monitoring, and reporting of discharges. An exception from these requirements will not compromise the beneficial uses of San Diego Bay.

d. The Discharger requests a Case by Case Exception from the San Diego Regional Water Quality Control Board (RWQCB) for exclusion of discharges from the unused portion of seawater that is continuously cycled through tanks associated with Bioassay Trailer operations and seawater continuously cycled through the Abalone Breeding Tanks, from impending requirements contained in Order No. R9-2008-0060; NPDES No.CA0109363. The costly monitoring of these discharges, having negligible potential impact on San Diego Bay, will divert limited funding away from other important environmental programs. These funds could potentially support other Navy monitoring efforts within the San Diego watershed or be focused on the further reduction of pollutants by developing advanced best management practices that can be used by other dischargers.

e. Seawater from San Diego Bay is used in the trailer's bioassay operation and in the Abalone Breeding/Maturation Tanks. Seawater is continuously pumped into two, in-line poly tanks located on the roof of the bioassay trailer. Seawater flows into the first holding tank and then into the second tank that splits the water into 3 separate discharges:

unused bay water, water for the bioassay trailer and water for the abalone tanks. Water from the bioassay trailer is discharged into the sanitary sewer, while the continuously flowing unused bay water and abalone tank water is discharged to the San Diego Bay. The total daily discharge from the abalone tanks is approximately 13,000 gallons, while unused bay water flows into the Bay at approximately 8,640 gallons per day. Therefore, as the sole source of water being discharged into the San Diego Bay, from the Bioassay Trailer Unused Seawater and Abalone Breeding tanks, is obtained directly from San Diego Bay, it can be concluded that pollutants found in this discharge can only originate from the San Diego Bay.

Comparing priority pollutant test results from the Bioassay Trailer Unused Seawater and Abalone Breeding Tanks discharge and receiving water samples (April 2007), collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, show that analytical testing results do not differ significantly between the discharge and receiving water samples (Attachment 1). This comparison also shows that the potential impact to the receiving water is negligible and does not compromise the beneficial uses of San Diego Bay.

Monitoring results show that, in most cases, when analytes are present in the samples, their concentrations could not be adequately quantified (Attachment 1). This results in the reporting of only estimated concentrations; i.e. the results are either in the detected, not quantified (DNQ) category, annotated with a "3", or designated by a "U" (result is less than the estimated detection limit) or a "J" (the result is equal to or greater than the estimated detection limit and less than the reporting limit). Often the receiving water had higher measured analytes than the discharge water. Again it is evident from the data, that the source of these analytes must originate in the seawater obtained from San Diego Bay, that the Bioassay Trailer unused seawater and Abalone Tank discharges are not contributing to the degradation of San Diego Bay, and that the detection levels of these analytes can not be adequately quantified.

1. In support of the public interest SIP provision, technically defensible documentation and technical papers demonstrate the value of research activities conducted in the Bioassay Trailer and Abalone Breeding Tanks located at the MSF (Attachment 2). This project is dedicated to the repopulation/reseeding of abalone, not only along the San Diego County shoreline but northward to San Francisco. After decades of decimation by overfishing combined with recently identified diseases, the red, green, and pink abalone harvest is at an all time low. Reseeding is one method of restoring the abalone population and serves the public interest by reviving the dying abalone industry.

Reseeding is dependent on many factors, including planting location, temperature of the water, abundance and quality of kelp as a food source, the seed size, and potential predators. In addition, recent work appears to indicate that the dispersal of abalone larvae may not be as widespread as once thought indicating that closure of the depleted fishing ground may not be enough for recovery to occur. Research conducted at the MSF, NBPL, has shown that when constant elevated temperatures are maintained, growth rates

improve, especially for the red abalone. Scientists at MSF are currently culturing hatchery-produced red and green abalone seed for eventual planting in the U.S. Department of the Interior's Cabrillo National Monument. Reseeding success will be assessed by annual dive surveys to determine if planting larger animals increases survival of brood stock and increases the population within the monument area (Attachment 2).

f. In the event a Case by Case Exception is granted, no further monitoring would be required and, therefore, no timeline for compliance would be necessary. However, the Discharger acknowledges its responsibility to notify the Regional Water Quality Control Board (RWQCB) of any changes in operations or discharges that may have the potential to compromise the receiving waters in San Diego Bay.

g. Beneficial uses designated in the Water Quality Control Plan for the San Diego Bay include industrial service supply (IND), navigation (NAV), water contact recreation (REC-l), non-contact recreation (REC-2), commercial and sport fishing (COMM), preservation of biological habitats of special significance (BIOL), estuarine habitat (EST), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), marine habitat (MAR), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and shellfish harvesting (SHELL) activities. Based on the results of data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, the total volume of discharge from the Bioassay Trailer unused seawater and Abalone Breeding Tanks at the MSF, and the fact that the seawater used is not treated or processed in any way, it can be concluded that the potential for impact to the beneficial uses of water in San Diego Bay due to the Bioassay Trailer unused seawater/Abalone Breeding Tank discharges is negligible.

h. Reseeding the population of abalone from the San Diego County shoreline north to San Francisco will not only prevent the demise of the red, green, and pink abalone, but will eventually revive the failing abalone industry on a limited basis (Attachment 2).

i. Data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR shows that analyte concentrations in San Diego Bay are similar to the Bioassay Trailer unused seawater and Abalone Breeding Tank discharges into the San Diego Bay (Attachment 1). Therefore, it is unlikely that these discharges would result in the lowering of water quality, or impact beneficial uses in San Diego Bay.

Mammal Enclosure Cleaning

a. The United States Department of the Navy (Discharger) is currently discharging pursuant to Order No. R9-2002-0002, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109363 at Naval Base Point Loma (NBPL), and Order No.R9-2003-0008, NPDES Permit No. CA0109185, at Naval Base Coronado Complex (NBCC), Naval Amphibious Base (NAB). The Discharger submitted applications for NPDES permit renewals for various non-storm water discharges including discharges associated with Mammal Enclosure Cleaning at both Facilities. The applications were deemed complete on March 27, 2008.

The Magnetic Silencing Facility (MSF), and Space and Naval Warfare Systems Center, Pacific, Point Loma Campus (SSC Pacific PLC), are two of eight installations located at Naval Base Point Loma (NBPL) San Diego. One sampling location was identified at the MSF (32° 41'32" N; 117°14'20" W) and one at SSC Pacific PLC (32°42'13" N; 117°14'7" W). NBCC is comprised of eight installations, one of which is NAB. One sampling location was identified at NAB (32°40'50" N; 117°09'30"). The discharger's office is located at 937 North Harbor Drive, Box 81, San Diego, CA 92132. The point of contact (POC), Theresa Trost, can be reached by phone at (619) 532-3709 or fax at (619) 532-2283.

b. MSF, SSC Pacific PLC, and NAB have similar processes associated with the cleaning of Mammal Enclosures. Water from these cleaning processes, potable and seawater, discharge directly to San Diego Bay.

c. The specific SIP provision for which the Discharger is requesting a Case by Case Exception is contained in Section 1 and 2, of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Section 1: Establishing Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives; and Section 2: Determining Compliance with Priority Pollutant Critera/Objectives and Water Quality-Based Effluent Limitations for Priority Pollutant Criteria/Objectives, include the calculation of effluent limitations and compliance schedule for monitoring, and reporting of discharges. An exception from these requirements will not compromise the beneficial uses of San Diego Bay.

d. The Discharger requests a Case by Case Exception from the San Diego Regional Water Quality Control Board (RWQCB) for exclusion from discharges related to Mammal Enclosure Cleaning (located at the MSF and SSC Pacific PLC on NBPL and NAB), from impending requirements contained in Order No. R9-2008-0060; NPDES Permit No.CA0109363, and Order No. R9-2008-0062, NPDES Permit No. CA0109185. The costly monitoring of Mammal Enclosure Cleaning discharges, having negligible potential impact on San Diego Bay, will divert limited funding away from other important environmental programs. These funds could potentially support other Navy monitoring efforts within the San Diego watershed or be focused on the further reduction of pollutants by developing advanced best management practices that can be used by other dischargers.

e. Both potable and seawater are used in the cleaning of Mammal Enclosures located at MSF, SSC Pacific PLC, and NAB. High pressure heated potable water is used to remove fecal matter from deck areas within the sea lions' enclosures. Seawater obtained from San Diego Bay is used to clean decks leading up to and surrounding the Mammal Enclosures as well as Mammal Enclosure netting used by both the sea lions and dolphins. Mammal Enclosures are cleaned daily to provide a clean, sanitary environment for the mammals. No chemicals are used to clean the decks or netting.

High pressure cleaning of deck areas within the mammal enclosures is conducted approximately 2.0 hours per day discharging approximately 384 gallons per day. Decks leading up to and around the enclosures are cleaned daily with seawater for approximately 1.5 hours at a rate of 20 gallons per minute (gpm) or a total of approximately 18,000 gallons per day. Mammal netting below the water is cleaned with seawater as needed or an average of 1 hour per day at a rate of 250gpm or 15,000 gallons per day.

Comparing priority pollutant test results from Mammal Enclosure Cleaning discharge and receiving water samples (April 2007), collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR, show that analytical testing results do not differ significantly between the discharge and receiving water samples (Attachment 1). This comparison also shows that the potential impact to the receiving water is negligible and does not compromise the beneficial uses of San Diego Bay.

Monitoring results, from one representative sample location, show that, in most cases, when analytes are present in the samples, their concentrations could not be adequately quantified (Attachment 1). This results in the reporting of only estimated concentrations; i.e. the results are either in the detected, not quantified (DNQ) category, annotated with a "3", or designated by a "U" (result is less than the estimated detection limit) or a "J" (the result is equal to or greater than the estimated detection limit and less than the reporting limit). Often the receiving water had higher measured analytes than the discharge water. Again it is evident from the data, that the source of these analytes must originate in the seawater obtained from San Diego Bay, that the Mammal Enclosure Cleaning discharges are not contributing to the degradation of San Diego Bay, and that the detection levels of these analytes can not be adequately quantified.

In support of the public interest SIP provision, technically defensible documentation and technical papers demonstrate the invaluable service provided by the sea lions occupying the Mammal Enclosure (Attachment 2). They are part of the extensive Marine Mammal Program conducted at the MSF, SSC Pacific PLC, and NAB, whose existence is focused primarily on the best interest of the public and our national security. In addition to national security, sea lions are also a part of ongoing research addressing environmental concerns. They are used to measure and predict possible interactions between Navy activities and marine mammals at sea and to share in the advancement of the Navy ocean stewardship policy.

- The hearing of dolphins and sea lions is being tested to find out what sounds they can be exposed to without changing their hearing abilities. Data from previous and ongoing projects will help researchers and the scientific community, understand if, and at what levels, sound affects marine mammals in the wild (Attachment 2).

- Sea lions are also an asset to the Marine Mammal Program because they have very sensitive underwater directional hearing and low-light-level vision and are capable of repetitive deep diving. These attributes allow sea lions to be trained in mine recovery systems to locate pingered training mines. The sea lions can locate these mines to depths of 1000 feet and attach a grabber device for recovery (Attachment 2).

f. In the event a Case by Case Exception is granted, no further monitoring would be required and, therefore, no timeline for compliance would be necessary. However, the Discharger acknowledges its responsibility to notify the Regional Water Quality Control Board (RWQCB) of any changes in operations or discharges that may have the potential to compromise the receiving waters in San Diego Bay.

g. Beneficial uses designated in the Water Quality Control Plan for the San Diego Bay include industrial service supply (IND), navigation (NAV), water contact recreation (REC-l), non-contact recreation (REC-2), commercial and sport fishing (COMM), preservation of biological habitats of special significance (BIOL), estuarine habitat (EST), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), marine habitat (MAR), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and shellfish harvesting (SHELL) activities. Based on the results of data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR (Attachment 1), the total volume of discharge from Mammal Enclosure Cleaning activities at the MSF, SSC Pacific PLC, and NAB (especially the small amount of high pressure heated potable water), and the fact that no chemicals are added to the potable or seawater used during the cleaning process, it can be concluded that the potential for impact to the beneficial uses of water in San Diego Bay due to Mammal Enclosure Cleaning discharges is negligible.

h. Similar to the dolphins, sea lions occupying the Mammal Enclosures can be trained to locate and retrieve inert training mines as part of the Marine Mammal Program that is focused on national security. Environmentally, the sea lions are used in research to help determine the levels of sound they can be exposed to without changing their hearing abilities which serves the public interest and concerns about marine mammals and Navy activities in coastal areas (Attachment 2).

i. Data collected in support of the Application for Renewal of the NBPL NPDES Permit and WDR shows that analyte concentrations from discharges from Mammal Enclosure Cleaning activities are similar to the seawater from San Diego Bay (Attachment 1). Therefore, it is unlikely that the discharges from Mammal Enclosure Cleaning would result in the lowering of water quality, or impact beneficial uses in San Diego Bay.