### Item No. 08 Doc. No. 16

#### SAN DIEGO REGIONAL BOARD RESPONSES TO COMMENTS TENTATIVE TO ORDER NO. R9-2008-0049 PART II

## I. Comments submitted by Brian S. Gordon, Director, Compliance and Technical Division, Department of the Navy, on June 11, 2008

COMMENTS	REGIONAL BOARD RESPONSES
Recital No. 1	The Regional Board staff agrees with the comment, the text will be revised to include the following:
1. High risk areas (Definitions, Page A.3): The definition is broad, nonspecific, and could arguably be applied to any industrial area. The term "significant quantities" needs to be added to the definition for high risk areas. Significant quantities is already defined in the permit as "volumes, concentrations, or masses of pollutants that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and/or cause or contribute to a violation of any applicable water quality standard for the receiving water or any receiving water limitation."	Definitions, Page A-3.  High Risk Areas Areas where wastes or pollutants of significant quantities from ship construction, modification, repair, and maintenance activities (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleansers, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances of water quality significance) are subject to precipitation, run-on, and/or runoff.
Recital No. 2  2. Split Sample (Monitoring and Reporting Program,	The Regional Board staff agrees with the comment, the text will be revised to include the following:  Monitoring and Reporting Program
Attachment E, Page E-3): A split sample is required each year to determine the most sensitive species. The permit should state clearly that only a single sample must be split not all of the samples collected.	Attachment E, Section V.A.  Once each year (July-June), at a different time of year from the previous years, the permittee shall split an <u>a</u> <u>single</u> effluent sample and concurrently conduct two

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	toxicity tests using a fish and an invertebrate species; the permittee 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 must be from a sample location which most toxicity is expected and, if possible, at a different location from the previous years.
Recital No. 3  3. Species List (Monitoring and Reporting Program, Attachment E, Page E-4): A list of species is provided. The permit should clearly state that only one of the species may be selected for testing and not all of them at once.	See Response to Comment H. Recital 9 and 10. (Regional Board staff Responses to Comments, Supporting Document No. 13)
Recital No. 4  4. Next Qualifying Storm Event (Monitoring and Reporting Program, Attachment E, Page E-5): Permit states that sampling is required within 14 days, if test is not acceptable. This cannot be completed if there is no qualifying storm event. The permit needs the following statement added "within 14 days or the next qualifying storm event".	The Regional Board staff agrees with the comment, the text has already been modified in the underline/strikeout tentative order.

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Recital No. 5  5. Constituent Table (Monitoring and Reporting Program, Attachment E, Page E-9): Permit shows a table of constituents that must be sampled for each storm event. The tentative permit did not include a condition or methodology to reduce monitoring or eliminate constituents when the constituents are not found in the storm water samples.	The Regional Board staff does not agree with the comment.  The likelihood of detecting at least one exceedance remains quite low with only 5 samples or none, but increases with more samples, as recommended by US EPA, see Comment H. Recital 7.
We recommend that monitoring be reduced to once every year if the constituent is not detected after the first two storm events, and eliminated if not detected in the second year of monitoring. This eliminates unnecessary monitoring requirements and allows resources to be redirected to implementation of Best Management Practices to prevent and minimize pollutants in storm water discharges.	

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Recital No. 6	The Regional Board staff agrees with the comment, the text will be revised to include the following:
6. Spills Definition (Monitoring and Reporting Program, Attachment E, Page E-II): Tentative permit requires reporting all spills/illicit discharges each quarter without defining what constitutes a spill. Reporting should be limited to reportable spills (into a storm drain, receiving water, above an RQ, or reportable in accordance will any other applicable law/regulation). As currently written, this requirement could be applied to a drop of oil and at some point would be infeasible to implement for large, complex facilities. In addition, the use of the term "Significant Materials", which is defined in the permit, would add clarity to what types of spills must be reported.	Monitoring and Reporting Program Attachment E, Section IX.B.  The Discharger shall log and report all spills of significant quantities and all illicit discharges of any quantity within and from the Facility each month, including spills and illicit discharges from vessels that are in the yard for service.
Recital No. 7	
7. Economic Considerations (Monitoring and Reporting Program, Attachment E# Page E-6 & E-10): The tentative permit requires sampling the next 4 storm events if there is a failure in acute toxicity (Page E-6). In addition, the permit no longer limits storm water sampling to normal operating hours (Page E-10). The large number of additional samples and the potential for sampling during non-normal business hours present a large cost increase and logistical issues. These requirements are very expensive and may impose undue economic hardship.	Storm events are intermittent, so a time frame for follow-up, which is generally used for continuous discharges, is not appropriate. Storm water discharges are not always consistent, the characteristics of storm water is based on the activities and materials at the contact area at the time of the event.  Only one monitoring event is required if the toxicity source is known. The cause can be resolved and monitored once more to confirm it did not occur again.  Four monitoring events was enough sampling to determine

#### COMMENTS

Before a Regional Board imposes these requirements, the Porter-Cologne Act, Section 13241 requires that the RWQCB shall take into consideration" factors including "economic considerations" and "water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." "Through Porter-cologne the California Legislature required consideration of economics and environmental benefits when establishing water quality standards, and again when issuing discharge permits. The cost of these additional monitoring requirements within the tentative permit, do nothing directly to improve water quality within San Diego Bay nor protect the beneficial uses of the bay, and are not reasonable requirements to improve the water quality.

A statement of the goals to be achieved by the proposed monitoring and an explicit consideration of these goals given the costs should be presented by the RWQCB. The reasons for choosing the next 4 storm events, rather than a lesser number, for example 1 or 2 storm events should be provided. Reducing the monitoring requirements allows resources to be directed toward structural and/or procedural BMPs while providing adequate monitoring to demonstrate the BMPs are effective and the discharge is in compliance with the permit conditions. The Navy requests that the RWQCB provide an economic analysis of these monitoring conditions as required under Porter-

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if the exceedances was a one time event or occurring with some regularity, maybe due to a change in BMPs or a leaking pipe, etc. Four monitoring events is only required if the toxicity source is unknown, the additional sampling will ensure it is not reoccurring.

Requiring the discharger to sample all the storm events may be considered an excessive amount; however, four monitoring events is an appropriate amount of follow up to determine if the problem has been addressed adequately. Four monitoring events is not an excessive amount of sampling considering the fact that toxicity has been identified in the discharge.

A follow up of 4 monitoring events is a good balance between being cautious and not being excessive. Considering all the potentially toxic materials used in ship repair (zinc, copper, paints, cleaners), and how BMP dependent controlling the storm water is, being on the more cautious side seemed reasonable.

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Cologne Section 13241. This economic analysis makes the regulatory process more transparent.	
8. Acute toxicity standard (Section VII, Compliance Determination, Page 23): The proposed standard includes a statistical one-tailed hypothesis t-test and also requires that Continental Maritime pass the t-test each and every time at the end of the pipe. The previous toxicity standard was based on a 90% survival threshold 50% of the time. Modification of the toxicity threshold from 90% survival to a t-test acknowledges the appropriate use of statistical evaluations in identifying when a test result is different from a set of controls. However, the t-test alone does not take into account the fact that each toxicity test method has inherent variability not captured by the t-test. The method variability, described by the Minimum Significant Difference (MSD), is the smallest difference that is measurable between a control sample and another test treatment and is specific to each species and endpoint. The EPA has described the MSD at length (EPA, 2000) and identifies the use of MSD as part of test acceptability criteria. In this document, the EPA stated: "The most significant recommendation is to use and report the values for the percent minimum significant difference (PMSD) with all WET data results Using this information, the regulatory authority and permittees can better evaluate WET test results." The 90th percentile MSD value describes a significant difference from control that 90% of laboratories would be able to correctly identify. Thus, the 90th percentile MSD value should be included as part of	The tentative Order does use the 90th percentile PMSD as the comment is recommending.  See Monitoring and Reporting Program Attachment E, Section V.D.7.  No changes to the tentative Order are necessary.

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the statistical evaluation. Doing this will account for the full range in method variability and will more accurately reflect when a result can be declared significantly toxic.	
TOXICITY RECOMMENDATION:	
a) Use the 90th percentile PMSD test statistic when declaring a toxicity test result as "toxic"	
The modification of passing toxicity 50% of the time requirement to passing toxicity 100% of the time is overly conservative. The underlying assumption for Whole Effluent Toxicity (WET) testing is that the toxicity measurement is representative of the exposure conditions expected in the receiving environment. The Navy's four-year study (Katz et al., 2006) showed that less than 1% of receiving water samples measured directly outside outfalls exhibited toxicity and that exposure conditions (spatial extent and duration) in the receiving environment were clearly less than those represented by first flush samples collected at the end-of-pipe. Thus the 50% of the time criterion is still a conservative requirement to ensure that receiving waters are protected.  TOXICITY RECOMMENDATION: b) Use the 50% of the time criterion to identify when a receiving water impact is likely to occur	The Regional Board staff does not agree with the comment.  Toxicity in storm water discharges should not be ignored because the causative agent is diluted in bay water. The Regional Board must ensure that the variability inherent to storm water discharges is not causing low level toxicity that may be missed in an acute test.  The requirement of passing toxicity 100% of the time will demonstrate that the bay has been maintained free of toxic substances in concentrations that are toxic, as required by the Basin Plan (p. 3-15).  The tentative Order will not be revised.

J. Comments submitted by Comments submitted by Gabriel Solmer, Legal Director and Mary Kate Oehrlein, Legal Intern, San Diego Coastkeeper on August 5, 2008

COMMENTS	REGIONAL BOARD RESPONSES
Recital No. 1	Comment Noted.
Conclusion	
Coastkeeper is very concerned with establishing the precedent that storm water discharges are in effect being exempted from NPDES permit regulation. For the reasons previously stated, Coastkeeper supports the changes made in the most current draft of the proposed CMSD NPDES permit applying CTR to storm water discharges.	