



State of Rhode Island and Providence Plantations
Department of Environmental Management
Office of Waste Management
235 Promenade Street
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James Shaffer, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
Lester, PA 19113-2090

RE: Draft Final, Offshore Derecktor Shipyard Ecological Risk Assessment, Naval Education and Training Center, Newport, Rhode Island

The Division has reviewed the Draft Final Ecological Risk Assessment for Derecktor Shipyard. Attached are comments generated as a result of this review.

In general, the majority of the text changes requested by this office have been addressed by the Navy. However, the document has not adequately addressed the State's concern with respect to resuspension events at the site. As stated, in previous correspondence and during Ecological Advisory Board meetings, the failure to address resuspension at the site will limit the utility of this document should the present inactive condition at the site change. As this issue was not addressed in this document it is assumed that it will be addressed in any Feasibility Study for the site.

If the Navy has any questions concerning the above, please contact this Office at (401) 277-2797.

Sincerely,

Paul Kulpa

Paul Kulpa, Project Manager
Office of Waste Management

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**Comments on the
Draft Final Derecktor Shipyard
Marine Ecological Risk Assessment Report**

1. General Comment

As previously discussed, the report had not adequately addressed resuspension issues at the site. Specifically, changes in site conditions from its present inactive state may result in the release of contaminants which will require a reevaluation of the ecological risk assessment. Risk assessments normally address probably reuse scenarios. The document should acknowledge this fact and clearly note that the current assessment only addresses the current inactive status of the site. The document should also note that the reuse scenario and associated resuspension events will be addressed in detail in the Feasibility Study for the site. Please be advised that the Office will consider this aspect of the Feasibility Study as being part of the Ecological Risk Assessment. Accordingly, the Office reserves the right for the full review time associated with these independent submittals. In addition, the Office will not consider the Ecological Risk Assessment as being finalized until this issue is addressed.

2. General Comment

The Office requested that the Navy expand the discussion of the various test parameters. That is, the report should discuss the function of the test parameters, their limitations, factors which produce false positive/negatives, etc. This discussion was not found for the various diversity and condition indexes conducted at the site. Please indicate which sections address this request.

3. General Comment

This Office, in previous correspondence and during EAB meetings, requested that information from historic investigations be included in this document. As an illustration, based upon information provided in the appendixes of the Preliminary Assessment Report, it is known that, the area in the vicinity of the dry docks was subject to periodic releases of contaminated sand blast grit. Samples taken revealed that high levels of copper/zinc (> 400 ppm) and lead (> 200 ppm) were found in thirteen of the twenty sample taken at the site. In addition, elevated levels of TPH, PAHs and PCBs (6,000 ppb) were also discovered. A number of these sample stations were located in areas not sampled or addressed by the current study and therefore it is important that they are included in the report as it may have a bearing on any remedial activity in the area. Please include the requested information in report.

4. General Comment

The report has compared the results of the diversity indexes, and other test to the background sampling locations. It is important to know whether the results of these indexes or other test indicate that the background sampling locations are impacted. Please indicate which pages of the report include this discussion as it is pertinent to any comparisons to onsite sampling locations.

**5. Section 1.6, Impact on Benthic Communities;
Page 1-26, Paragraph 2.**

Shallow depths of sediment oxygenation (redox depth) were found in surface sediments at Stations DSY-25, DSY-29, DSY-40 and DSY-41 suggesting that near-bottom hypoxia or sewage-associated organic enrichment may contribute somewhat to the altered benthic community structure at these stations.

The report indicates that Station DSY-40 and 41 are subject to hypoxia. Information presented in an earlier section of the report described these stations as having sandy bottoms and no oxygen deficiency problems. Please explain.

6. Table 5.3-1, Biological Condition Scoring Criteria for assessment of

This table uses quantiles for the biological condition scoring criteria. The report should include a detailed discussion describing how the values for the quantiles were chosen.

7. Table 5.3-2, Distribution of the 20 most common benthic invertebrate.....

The calculated values for Stations DSY-27 and DSY-32 appear to be less than 29. The report should be modified accordingly and the designation changed for these locations.

**8. Table 6.6-3, Summary of Effects based Weights.....
Table 6.6-3, Overall Summary of Exposure.....**

Table 6.6-2 summarizes the results of the individual test to produce an overall risk ranking for each group of tests. Based upon the information presented in this table, lobster and cunner test were prominent factors in determining the overall effects ranking for tissue residue effects (the results from the other test in this grouping were approximately equal). Cunner and lobster samples were not collected in Stations DSY-40, DSY-41. This lack of analysis skewed the overall evaluation. In addition, since these stations are known to be devoid of life it is likely that the aforementioned skewed analysis resulted in these stations receiving an overall lower ranking. Furthermore, Stations DSY-40 and DSY-41 were differentiated from each other by the results of fecal analysis in the blue mussel. This analysis was not conducted at Station DSY-41, which once again skewed the

analysis. The report should discuss this lack of analysis. In addition, the Office recommends that the overall ranking for these stations in Table 6.6-3 be changed to intermediate or high.

**9. Section 7.1, Synthesis of Study Findings;
Page 7-2, Whole Section.**

This section of the report delineates which stations are considered to be low, medium and high risk stations. As previously stated, evaluation of resuspension events may alter the conclusions in the report and the associated risk ranking. This should be clearly noted in this Section and in Section 7.3 of the report.