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From: Director, Energy and Environmental Readiness Division (N45)
To: Commander, Naval Facilities Engineering Command (ENV)

Subj: POLICY FOR CONDUCTING FIVE-YEAR REVIEWS

Ref: (a) United States Environmental Protection Agency Comprehensive Five-Year Review Guidance, EPA 540-R-01-007, Office of Solid Waste and Emergency Response (OSWER) No.9355.7-03B-P, June 2001
(b) Navy/Marine Corps Policy for Optimizing Remedial and Removal Actions Under the Environmental Restoration Program, April 2004
(c) Office of the Under Secretary of Defense (OUSD) Memorandum on Consideration of Green and Sustainable Remediation Practices in the Defense Environmental Restoration Program, August 10, 2009

Encl: (1) Navy/Marine Corps Policy for Conducting Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Reviews, May 2011

1. Enclosure (1) cancels and replaces "Navy and Marine Corps Policy for Conducting Five-Year Reviews Under the Installation Restoration Program", dated May 2004.

2. The revised policy clarifies when Five-Year Reviews are necessary, describes the scope and format of the reviews, defines the trigger date, and identifies the signature authority. Final Five Year Review reports for an installation must be completed and signed out within five years of the established trigger dates including the time to undertake appropriate regulatory reviews.

3. This policy has been coordinated and concurred with by the U.S. Marine Corps.

4. My staff point of contact on this matter is Mr. Jay Newbaker N453C, at (703) 695-5266, DSN 225-5266 or via e-mail at edward.newbaker@navy.mil.

A handwritten signature in black ink, reading "John P. Quinn".

J. P. QUINN
Deputy Director,
Energy and Environmental
Readiness Division

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**NAVY/MARINE CORPS POLICY FOR
CONDUCTING COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION,
AND LIABILITY ACT (CERCLA) FIVE-YEAR REVIEWS**

1. PURPOSE

This policy clarifies when the Department of Navy (DON) will conduct Five-Year Reviews for remedial actions conducted under DON's CERCLA authority (including joint CERCLA and RCRA actions) and describes the scope and format of those reviews. It also defines the "trigger date" that initiates the requirement for Five-Year Review for an installation and identifies the signature authority for Five-Year Review reports.

2. BACKGROUND

The requirement for Five-Year Reviews of Post Record of Decision (ROD) remedial actions was added to CERCLA as part of the Superfund Amendments and Reauthorization Act of 1986 (SARA). CERCLA §121(c), as amended by SARA states:

"If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five-years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews."

This requirement was interpreted further in the National Contingency Plan (NCP) (40 CFR §300.430(f)(4)(ii)) which states:

"If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action."

Consistent with Executive Order 12580, the Secretary of Defense is responsible for ensuring that Five-Year Reviews are conducted

at all qualifying Department of Defense (DoD) cleanup sites. The DON is the lead agency for conducting Five-Year Reviews at Navy and Marine Corps installations.

3. APPLICABILITY

Policies and procedures contained herein apply to all response actions at Navy/Marine Corps Installation Restoration (IR) and Munitions Response (MR) sites funded under Environmental Restoration, Navy (ER,N) and Base Realignment and Closure (BRAC) accounts.

4. DEFINITIONS

a. **Site** - a distinct area on an installation containing one or more releases or threatened releases of hazardous substances/munitions and explosives of concern (MEC) treated as a discrete entity or consolidated grouping (e.g. Operable Unit (OU)) for CERCLA response purposes. This includes areas off the installation where contamination resulting from DON activities may have migrated.

b. **Unlimited Use and Unrestricted Exposure (UU/UE)** - means that there are no restrictions on the use of the land or other natural resources.

c. **Emerging Contaminant** - a chemical or material that is characterized by a perceived or real threat to human health or the environment with either no published health standard or an evolving standard.

5. POLICY

a. A Five-Year Review shall be conducted at an Environmental Restoration (ER) site (IR and MR) if the remedial action objectives (RAO) selected for a remedial action will result in any hazardous substances, pollutants, contaminants, or MEC remaining at the site above levels that allow for UU/UE.

b. If a remedial action will result in UU/UE, but the response action will not be completed within five years (if the first remedial site on an installation) or before the next five-year review for other sites on the installation, then DON will conduct Five-Year Reviews during the remedial action operations (RA-O) phase, as appropriate. When UU/UE is achieved, it will be documented in one subsequent Five-Year Review.

c. Five-Year Reviews are not required for removal actions conducted under CERCLA.

d. Existing Interim Remedial Actions conducted under an Interim ROD shall be included in Five-Year Reviews.

e. Five-Year Reviews are not required if environmental restoration of a site is addressed solely under RCRA corrective action. In cases where both RCRA and CERCLA authorities are used to address different sites on an installation, a Five-Year Review is required for those portions of the installation being addressed under CERCLA that meet the criteria for Five-Year Reviews. When a RCRA action is included as a portion of a CERCLA ROD or Decision Document (DD), the RCRA action should be included in the Five-Year Review.

f. National Priority List (NPL) status has no bearing on the need for Five-Year Reviews. Both NPL and Non-NPL sites addressed under CERCLA authority are subject to Five-Year Review requirements.

5.1 Five-Year Review "Trigger"

a. In keeping with the requirements of CERCLA §121(c) and the NCP, initiation of the first remedial action that will result in hazardous substances, pollutants, contaminants, or MEC remaining at the site above UU/UE levels is the "trigger" that starts the Five-Year Review clock. For most DON sites, this "trigger" is the onsite mobilization for commencement of the remedial action-construction (RA-C) phase. For remedies that do not require a RA-C phase (e.g., monitored natural attenuation using existing wells or a remedy only implementing institutional controls), the "trigger" is the ROD or DD signature date.

b. The first site on an installation that triggers the Five-Year Review clock initiates the Five-Year Review process for the entire installation. As RODs or DDs are signed for subsequent sites requiring Five-Year Reviews, the performance and protectiveness of these remedies will all be addressed in a single, installation-wide Five-Year Review report, whose timing shall be based on the initial site trigger date described above. Although a single Five-Year Review report will be produced for the installation, the performance and protectiveness of the remedy at each site will be individually reviewed and documented.

5.2 Five-Year Review Due Dates

a. In accordance with CERCLA, the Five-Year Review and report for a site shall be completed and signed by the DON within five years of the trigger date for that site. Subsequent Five-Year Review reports shall be signed by the DON no later than five-years after the signature date of the previous Five-Year Review report. Thus, the signature date on each Five-Year Review becomes the "trigger" for the next Five-Year Review.

b. DON uses the Normalization of Data (NORM) database to track Five-Year Reviews. The Facility Engineering Commands (FECs) are responsible for entering dates into NORM after the first Five-Year Review trigger date is established. EPA uses the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database to track the status of Five-Year Reviews, and they periodically ask for verification of the status of DON installations. DON should provide to EPA the NORM Five-Year Review dates for inclusion into their CERCLIS database. In all cases, the Five Year Review date requirements shall be controlled by the NORM information.

5.3 Scope of the Five-Year Review

a. Five-Year Reviews are conducted to evaluate the implementation and performance of a remedy in order to determine if the remedy is or will be protective of human health and the environment.

b. While the Five-Year Review is not intended to reconsider decisions made during the selection of the remedy (as specified in the ROD or DD), the DON may use the Five-Year Review process to support the continued evaluation and optimization of remedies, including optimization strategies that result in a more green and sustainable remedy as described in References (b) and (c). However, the Five-Year Review should not be viewed as a substitute for an optimization evaluation. DON should allow adequate time to complete optimization reviews prior to preparing the Five-Year Review report. Under no circumstances shall completing an optimization review delay the timely completion of a Five-Year Review report.

c. Evaluation of the remedy and the determination of protectiveness should be based on and sufficiently supported by data and observations. Sites may require additional data collection to support the protectiveness determination. DON should allow adequate time for data collection prior to preparing the Five-Year Review.

d. If during the Five-Year Review process DON finds that insufficient data is available to make the protectiveness determination, then the Five Year Review report should be completed and signed on time and immediate efforts should be taken to obtain this necessary information. A Five-Year Review Addendum with the protectiveness determination shall be completed within one year. If extenuating circumstances on the project preclude the Addendum from being completed within one year, NAVFAC HQ should be contacted and justification provided as soon as it is known that a time extension is required.

e. If the Five-Year Review determines that the remedy or the RAOs are no longer protective, then the Five-Year Review Report will make recommendations concerning the steps necessary to achieve protectiveness.

f. If the Five-Year Review identifies a need for a significant or fundamental change in a remedy, DON shall prepare further documentation, such as an Explanation of Significant Differences or ROD amendment, consistent with 40 CFR subpart 300.435.

5.4 Scheduling

a. A realistic schedule shall be prepared to ensure that the statutory deadline for Five-Year Review completion is met.

b. If additional information is needed to assess protectiveness, then RPMs should plan and perform this data collection prior to initiating the Five Year Review.

c. Any optimization reviews should be completed prior to beginning preparation of the Five-Year Review report if possible. Recent optimization review reports may simplify the assessment of remedy implementation and performance in the Five-Year Review.

d. There are numerous steps involved in planning, preparing, reviewing, and finalizing a Five-Year Review. Some approximate timeframes for these steps are given below for planning purposes; these timeframes can be varied to meet site-specific needs. The schedule for preparing a Five-Year Review should allow sufficient time for:

1. Preparing a Scope of Work and awarding a contract (time necessary for contracting may vary by FEC)
2. Assembling all necessary documentation
3. Notifying stakeholders

4. Conducting Five Year Technical Assessment & Preparing Draft Five-Year Review Report (2-4 months for typical Five-Year Review with no complications and adequate documentation to support technical assessment of protectiveness)

i. Reviewing site documents and conducting site inspections and interviews

ii. Evaluating remedy implementation and performance

iii. Assessing protectiveness of the remedy

iv. Documenting Five Year Review results

5. Completing internal document reviews (technical, legal, installation, etc.) and subsequent document revisions per local FEC requirements (1-3 months)

6. Regulatory agency and stakeholder review of Draft Five-Year Review Report (2-3 months)

7. Comment resolution (1-2 months)

8. Document revision and management review (1-2 months)

9. Finalizing report, obtaining required DON signature and providing to the regulatory agencies for information (1 month)

e. The level of effort for Five-Year Reviews is site-specific and should be tailored for the remedial action and its stage of implementation. DON recommends allowing a minimum of one year to complete a Five-Year Review and obtain necessary signatures by the statutory deadline. Allow extra time for Five-Year Reviews at installations with 1) many sites to review, 2) uncertainty concerning implementation, remedy performance, or protectiveness of the current remedy, or 3) other factors that may extend preparation or review times.

5.5 Five-Year Review Technical Assessment

a. One of the primary objectives of a Five-Year Review is to determine if the remedy is functioning as intended to protect human health and the environment. The basic steps to determine if the remedy is functioning as described in the decision document are provided in Reference (a). Reference (b) requires that RA-0 systems should be evaluated as a component of remedy evaluation. DON should review available optimization data to see if active remediation systems are effective and cost-efficient.

b. When the Five-Year Review indicates that the remedy is not performing as designed, the report should recommend actions to improve performance.

c. Five-Year Reviews are conducted to ensure that remedies that leave contamination in place remain protective over time. Interpreting the meaning of "protectiveness" may vary depending upon the remedial phase.

1. Where a site has a remedial action that is still in the RA-C or RA-O phase, a Five-Year Review should confirm that immediate threats have been addressed and that the remedy is expected to be protective when complete.

2. Where a site is in the Long Term Management (LTMgt) phase, the Five-Year Review should confirm whether the selected remedy remains protective.

d. For remedies in-place that are operating as intended, the DON will not reopen remedy selection decisions contained in RODs or DDs unless the protectiveness of the in-place remedy is in question. DON should follow the guidance of Section 4 of Reference (a), which provides detailed instructions regarding how to evaluate whether a remedy is protective of human health and the environment. The following key points should also be considered when evaluating protectiveness during the Five-Year Review process at DON sites.

1. Remedies will only be modified to attain a new Applicable or Relevant and Appropriate Requirement (ARAR) if DON finds that it is necessary to ensure that the remedy is protective of human health and the environment. In conducting a Five-Year Review, the effect of a newly promulgated or modified standard on the protectiveness of the remedy originally selected in the ROD or DD should be determined in accordance with Appendix G of Reference (a).

2. In some cases, the protectiveness determination may require revisiting aspects of the human or ecological risk assessments to determine if the understanding of site risk has changed as a result of changing site conditions, changes in land use, changes in exposure assumptions, new contaminants identified at the site, the identification of significant new exposure pathways, or new toxicity criteria for site contaminants of concern (COCs). The remedy will only be modified to address new risk assessment results if the DON finds that it is appropriate and necessary to ensure that the remedy is protective of human health and the environment. Direction concerning when to re-evaluate risk for new

exposure pathways and emergent contaminants is given below:

- i. New exposure pathways (e.g. vapor intrusion) will be assessed if DON determines they are relevant to the site and believes that they could call into question the protectiveness of the current remedy
- ii. Emerging contaminants which have not been previously investigated will only be assessed if (1) the contaminant is known or suspected due to site history, (2) peer reviewed toxicity criteria that can be used for risk assessment have been published, and (3) the contaminant may call into question the protectiveness of either the remedy or the RAOs.
- iii. Risk should be recalculated for known site contaminants whose toxicity criteria have changed significantly if the changes are likely to call into question the protectiveness of the remedy or the RAOs.

5.6 Five-Year Review Report

The results of the Five-Year Review are presented in a Five-Year Review report. The preferred report structure can be found in Reference (a).

a. The Five-Year Review report should:

1. Clearly state whether the remedy is or is expected to be protective,
2. Document any deficiencies in the implementation or performance of the remedy that may have been identified during the review,
3. Where necessary, recommend specific follow-up actions to ensure that the remedy will be or will continue to be protective, and
4. Include a statement of when the next review is to be completed, or explanation of why no further Five-Year Reviews are needed.

b. Along with these recommendations, the report should list a timetable for performing any follow-on actions and the parties responsible for implementation. However, if the recommendations include making potential changes to the selected remedy, these

changes must be documented in a suitable decision document before they can be scheduled or implemented.

c. If it is determined that cleanup levels or RAOs cannot be achieved by the selected remedial action, the recommendations may suggest the type of decision document (e.g., ROD or DD, ROD or DD Amendment, Explanation of Significant Differences (ESD), or memo to file) needed to make changes to the remedy, cleanup levels, or RAOs. Implementation of these recommendations should be accomplished separately from the Five-Year Review report and should in no way delay the completion of this Five-Year Review report by the date required under Section 5.2, above.

5.7 Funding

a. Environmental Restoration, Navy (ER,N) funds will be used to conduct Five Year Reviews at active Navy and Marine Corps installations

b. Base Realignment And Closure (BRAC) funds will be used to conduct Five-Year Reviews at installations closed under BRAC law where DON retains responsibility for this function. DON should work with future property recipients to transfer Five-Year Review responsibility to the receiving entity. Where this is successful, the new property owner shall conduct Five-Year reviews and submit Five-Year Review report to DON for approval. DON should ensure that this responsibility is conducted by new property owners and coordinate with the appropriate regulatory agencies since ultimate CERCLA liability is retained by DON.

c. At installations being closed outside of the BRAC program, ER,N funds will be used to conduct Five-Year Reviews prior to property transfer. DON should work with future property recipients to transfer Five-Year Review responsibility to the receiving entity. Where this is successful, the new property owner shall conduct Five-Year reviews and submit Five-Year Review report to DON for approval. DON should ensure that this responsibility is conducted by new property owners and coordinate with the appropriate regulatory agencies since ultimate CERCLA liability is retained by DON.

5.8 Keeping the Community Informed

a. Because the Five-Year Review addresses the status and protectiveness of a remedy, it should be used to communicate this information to the community. If the Restoration Advisory Board (RAB) is still active at the installation, preparation for and conduct of the Five-Year Review should be an agenda item at

appropriate RAB meetings. If the RAB is inactive or has disbanded, the DON shall determine the most effective approach to informing the community. At a minimum, community involvement activities during the Five-Year Review should include notifying the community that the Five-Year Review will be conducted, notifying the community that the Five-Year Review has been completed, and providing a copy of the Five-Year Review report in the local site information repository.

b. The DON installation or FEC Public Affairs Officer can recommend appropriate methods of communication (e.g., public notices, fact sheets) for notifying the public.

5.9 Records Management

Five year reviews are not Administrative Record material and are not to be included therein. However, the RPM should ensure that the signed Five-Year Review report is placed in the information repository. The Five-Year Review report is a public document that should be submitted to the Post-Decision File, which is a component of the Restoration Record File maintained by NAVFAC.

5.10 Review and Signature

a. Pursuant to the delegations of authority in sections 2(d) and 11(g) of Executive Order 12580, and DoD Instruction 4715.7 of 22 April 1996, DON is the approval authority for CERCLA Five-Year Reviews conducted at sites under its jurisdiction, custody or control.

b. Five-Year Reviews should be submitted to the appropriate regulators for their review and comment. Adequate time should be allowed for regulatory review. DON shall address substantive comments and finalize the five-year report by the date specified under Section 5.2, above. Regulatory signature is not required.

c. For active installations, Five-Year Reviews will be signed by the installation Commanding Officer/Commanding General, or their designated representative.

d. For non-BRAC closed bases, Five-Year Reviews will be signed by the Commanding Officer of the supporting FEC, or their designated representative.

e. For BRAC installations, Five-Year Reviews will be signed by the BRAC Environmental Coordinator (BEC).

5.11 Discontinuing Five-Year Reviews

a. There is no statutory provision for the discontinuation of statutory reviews. However, EPA acknowledges in Reference (a), paragraph 1.2.4, that Five-Year Reviews are no longer needed when no hazardous substances, pollutants, or contaminants remain on site above levels that allow for UU/UE.

b. When a site meets the conditions that allow UU/UE, the DON RPM shall determine the appropriate documentation in accordance with Reference (a) to present these findings and discontinue future Five-Year Reviews for that site. These findings may be presented in Site Closeout Documents (Remedial Action Completion Report (RACR), RACR Amendment, Final RACR (per Reference c)) or a subsequent installation Five-Year Review report.