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NAS PENSACOLA
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LETTER AND COMMENTS FROM U S EPA REGION IV REGARDING REVIEW OF DRAFT
PROPOSED PLAN SITE 42 NAS PENSACOLA FL
10/22/1997
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-3104

MEMORANDUM

DATE: October 22, 1997

SUBJECT: Review of OU 17 - Site 42 Draft Proposed Plan
Naval Air Station - Pensacola

FROM: Judy K. Marshall
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Office of RCRA and Federal Facilities Legal Support

THRU: V. Anne Heard, Chief
Office of RCRA and Federal Facilities Legal Support

TO: Gena Townsend
Senior Project Manager
DOD Remedial Section

The Office of RCRA and Federal Facilities Legal Support has reviewed the draft Proposed Plan for Operable Unit 17 - Site 42 dated September 1997, submitted by the U.S. Navy for the Naval Air Station in Pensacola, Florida, and has the following comments. The comments are based on OSWER Directive 9355.3-02 and the National Contingency Plan, and the information requested is deemed necessary to provide a reasonable explanation of the proposed plan and alternative proposals considered, as required by CERCLA § 117(a).

The "Site Background" section must include a history of the wastes generated and disposed of at OU 17 - Site 42, and must describe the major contaminants of concern, the contaminated media, and the extent of contamination. **(State: why this area was investigated)**

There is no discussion on the scope and role of OU 17 - Site 42. This section must summarize the overall strategy for remediating the entire NAS site and describe how the action (or non-action) being considered in the Proposed Plan for OU 17 - Site 42 fits into that overall strategy. The purpose of each operable unit and their sequence should also be described, or at a minimum, referenced to a document in the Administrative Record. **[Add the following and reference the SMP for the purpose of each OU, (example language: Operable Unit Number 17 is one of ___ Operable units within NAS Pensacola and consist of site 42.)]**

The summary of the Final Remedial Investigation Report in the "Remedial Investigation Findings" and "Risk" sections is insufficient. The summary must identify all contaminated media and contaminants of concern. Also, it is not clear what is meant by the last sentence on page 2 of the Proposed Plan: "The areas of contamination are surrounded by non detects in all directions." Because this document is for public review, please expand on this point as nontechnically as possible (Explain "non detects." What is the extent of contamination? At what point do "non detects" occur?). The exposure levels, associated risks and hazard indexes must be described and compared to remediation goals for carcinogens and non-carcinogens. What are the cancer risks? What is the hazard index? The risk numbers must be presented in the Proposed Plan, (**SEE ATTACHMENT 1**) accompanied by a discussion that explains what the risks mean if the site is not cleaned up. This is especially important when a "no further action" alternative is proposed.

The proposed plan is also missing some basic statutory requirements which are required to be in such plans if the exposure levels are outside the acceptable risk range or hazard index as specified at 40 C.F.R. § 300.430(e)(2)(i)(A). Specifically, the proposed plan does not contain a summary of site risks, a summary of alternatives, an evaluation of the alternatives, a discussion for each alternative of the nine evaluation criteria, and a discussion of ARARs.

The proposed "No Action" alternative must be supported by the administrative record, and should be summarized in the Proposed Plan. The Proposed Plan should state that the "No Action" alternative takes into account both the current and reasonable maximum exposure scenarios, and allows for unrestricted use of, or unlimited access to, the area, or describes pre-existing institutional controls that are in place to ensure that no unacceptable exposures will occur.

SUMMARY OF SITE RISKS

As part of the RI, a Baseline Human Health Risk Assessment and an Ecological Risk Assessment were conducted to evaluate the current and future potential risks to human health and the environment resulting from the presence of contaminants identified at OU No. 4, Sites 41 and 74. The following sections summarize the key findings of these assessments.

Human Health Risk Assessment

Several environmental media were identified for the risk assessments conducted for each site. Soil/landfill material was identified as a medium of concern for both sites, while shallow groundwater was identified as a medium of concern for Site 74. Likewise, the combination of shallow groundwater and seep surface water was identified as a medium for concern for Site 41.

Contaminants of Concern (COCs) were selected and evaluated on the basis of frequency of detection, prevalence above background concentrations, toxicity and comparison to established criteria or standards. Table 1 lists the COCs for each medium of concern for Sites 41 and 74. The COCs identified at Site 41 for the soil/landfill material, groundwater, and seep surface water include PAHs, pesticides, PCBs, and inorganics. Additionally, volatile organics were identified in the groundwater and seep surface water, and semivolatile organics were detected in the soil/landfill material at Site 41. Volatile organics, inorganics and pesticides were identified as the COCs for the soil/landfill material and shallow groundwater at Site 74.

The Baseline Human Health Risk Assessment was based on possible exposure pathways under the current and future potential exposure scenarios. Under current conditions, the exposed population considered Base personnel who may be exposed to site contaminants during military training operations. Future potential exposure scenarios involved construction activities and residential use. It should be noted; however, that the future residential exposure pathway to soil or groundwater is extremely unlikely given that Site 41 is suspected of containing UXO, and both Sites 41 and 74 are suspected of containing buried CWM.

Incremental cancer risk (ICR) refers to the cancer risk that is over and above the background cancer risk in unexposed individuals. ICRs are determined by multiplying the intake level with the cancer potency factor. The calculated risks are probabilities which are typically expressed in scientific notation (e.g., $1E-4$). For example, an ICR of $1E-4$ means that one additional person out of ten thousand may be at risk of developing cancer due to excessive exposure at a site if no actions are conducted. The USEPA acceptable target risk range is $1E-4$ to $1E-6$. Potential concern for noncarcinogenic effects of a single contaminant in a single medium or across all media to quotient (HQ). By adding the HQs for all contaminants within a medium or across all media to which a given population may reasonably be exposed, the hazard index (HI) can be generated. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. The HI refers to noncarcinogenic effects and is a ratio for the level of exposure to an acceptable level for all contaminants of potential concern. An HI greater than or equal to unity (i.e., 1.0) indicates that there may be a concern for noncarcinogenic health effects. Table 2 presents a summary of the total ICRs and HIs calculated for the various media at Sites 41 and 74.

Copied from Proposed PLAN. CAMP LEJEUNE
 Example: for EXPLAINING RISK AND USING A TABLE TO PRESENT CANCER
 RISK AND HIs.

TABLE 2

**TOTAL SITE INCREMENTAL LIFETIME CANCER RISK AND
HAZARD INDICES
OPERABLE UNIT NO 4 - SITES 41 AND 74
PROPOSED REMEDIAL ACTION PLAN
MCB CAMP LEJEUNE, NORTH CAROLINA**

Receptors	Site 41		Site 74	
	Total ICR	HI	Total ICR	HI
Current Military Personnel	6E-07	0.02	8E-08	<0.01
Child Resident (Future)	3E-04	16	2E-04	308
Adult Resident (Future)	1E-03	8	3E-04	50
Construction Worker (Future)	1E-07	0.2	2E-08	<0.01

Notes: ICR: Incremental Lifetime Cancer Risk
HI: Hazard Index

Shaded areas indicate that risk level exceeds acceptable levels.