

N60200.AR.002672  
NAS CECIL FIELD, FL  
5090.3a

U S NAVY RESPONSES TO UNIVERSITY OF FLORIDA COMMENTS ON DEVELOPMENT  
OF ECOLOGICALLY-BASED REMEDIATION GOALS FOR LEAD IN SOIL AT OPERABLE  
UNIT 5 (OU 5) SITE 15 NAS CECIL FIELD FL  
9/13/2000  
NAVAL FACILITIES ENGINEERING COMMAND SOUTHERN DIVISION

## RESPONSES TO UNIVERSITY OF FLORIDA COMMENTS OF 13 SEP 2000

### COMMENT 1:

RESPONSE TO FIRST PARAGRAPH: The approach for evaluating PAHs has been revised. The determination of PAH concentrations in clay pigeons is no longer proposed. Instead, the soil-to-invertebrate pathway is assumed to be complete for PAHs and remedial goals for PAHs will be generated through the use of soil toxicity tests in which the survival of laboratory-reared earthworms (*Eisenia fetida*) will be measured (Sections 2.4.2, 3.2, and 4.3).

RESPONSE TO SECOND PARAGRAPH: The reviewers state that "...the previous assessment by Tetra Tech NUS found that PAH concentrations in soils at Site 15 in some areas were more than four times the calculated, risk based, site-specific, preliminary remediation goal (481 vs. 106 mg/kg)." However, the preliminary remediation goal of 106 mg/kg was generated using a generic (not "site specific") food-chain model using the conservative assumption that 100 percent of ingested PAHs are absorbed from the gastrointestinal tract. The actual absorption is probably considerably less than 100 percent. This and other conservative assumptions in the food chain model tend to overestimate risk.

### COMMENT 2:

RESPONSE: It is often not practical or necessary to directly evaluate risks to all of the individual components of the ecosystem (EPA, 1997). Instead, it is frequently possible to reduce the number of exposure pathways that need to be evaluated to one or a few critical exposure pathways (EPA, 1997). This approach is attempted in the document that has been revised in response to comments by EPA and FDEP (Section 2.4.1, fourth paragraph).

### COMMENT 3:

RESPONSE: The text discussing vascular plants (last paragraph of Section 3.1.1) and omnivorous mammals has been revised (last paragraph of Section 2.4.1). Also, see the response to Comment 2. With regard to the reviewers' comments on amphibians, it would be helpful if the reviewers could specify which species and tests they are requesting and the relevance of their proposal as compared to the current proposal.

### COMMENT 4:

RESPONSE: The approach has been revised so that no distinction is made between earthworms and other soil invertebrates; all soil invertebrates available in the soil-duff interface will be collected (Sections 2.4.1 and 3.1.3.1).

### COMMENT 5:

RESPONSE: The approach has been revised so that a soil-to-duff BAF will not be derived. Also, see responses to Comments 2 and 4.