



Department of Environmental Protection

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David B. Struhs
Secretary

May 8, 2000

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Mr. B.K. Moring
Code 1855
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
P.O. Box 190010
North Charleston, South Carolina 29419-9010

RE: Revised Draft Statement of Basis, Coastal Systems Station
Panama City, Florida

Dear Mr. Moring:

I have completed the technical review of the Revised Statement of Basis (SOB) dated February 4, 2000 (received February 7, 2000). I have the following comments that should be addressed:

- (1) In the Summary of Facility Risks section, it should be stated that the USEPA evaluates acceptable carcinogenic risk based on a range of probability of 1 person in 10,000 to 1 person in 1,000,000 developing cancer over an estimated lifetime of 70 years. However, Florida requires that an acceptable carcinogenic risk should be no greater than 1 person in 1,000,000 based on the exposure parameters accepted for a particular land use. For residential and industrial land use, the FDEP has developed default Soil Cleanup Target Levels (SCTLs), listed in Chapter 62-777, Florida Administrative Code, that should be used as cleanup criteria unless alternative exposure parameters can be derived and the land use be restricted to that exposure level. The Statement of Basis should state that Florida requires corrective actions to remediate sites so as not to pose carcinogenic risks greater than 1×10^{-6} or a hazard index of 1.0.
- (2) In the discussions on risks associated with the sites, the specific current and future land-use conditions, whether residential or industrial, should be stated with each calculated risk number. It should also be stated that when land and water use restrictions are to be enacted on a site,

that the risks from exposure to a particular media will be managed by those restrictions to a 1 in 1,000,000 carcinogenic risk or a hazard index of 1.

- (3) While it is correct to state that FDEP and EPA have not promulgated media protection standards (MPSs) for surface soil, subsurface soil and sediments, both FDEP and EPA have developed guidance concentrations for those media that are to be considered in developing corrective action objectives for the various sites.
- (4) The RFI data used to support the decision to monitor surface water, sediments and effects to biota at SWMU 3 is very old (December 1993/January 1994). Also, all five stations tested for benthic macroinvertebrate diversity and sediment toxicity showed either an impacted benthic community, sediment toxicity or both. Additionally, there does not appear to have been an effort to define the extent of this problem at this site. For these reasons, the Department does not feel confident in committing to only monitoring benthic macroinvertebrate diversity, sediment toxicity and sediment and surface water concentrations without a well-defined contingency that would be implemented upon discovery that the benthic community continues to be adversely impacted.
- (5) The SOB identified unacceptable potential cancer risk at SWMU 3 under current land-use conditions based on exposure to surface soil. Under future land-use conditions, unacceptable potential cancer risks were predicted based on lifetime exposure to surface soil, groundwater, surface water and sediments. It should be clearly identified how the corrective actions to be implemented will reduce risks to 1×10^{-6} .
- (6) The risk calculations for groundwater at SWMU 3 (2 in 1,000 carcinogenic risk, HI = 8) would indicate a need for groundwater to be addressed by some form of corrective action. In reviewing the RCRA Facilities Investigation (RFI), it was found that the risks calculated were based upon unfiltered samples. Filtered samples contained contaminant concentrations much lower. If risk had been calculated from the filtered data, a much lower risk would have been calculated. Also, several contaminants of concern were only detected at elevated concentrations in a well

upgradient of the site. This information should be included in the SOB to explain why a corrective action was not identified for groundwater at this site. Otherwise, an unacceptable risk identified in the "Summary of Facility Risks" goes unaddressed.

- (7) Unacceptable risks were identified in surface soil at SWMU 9 in the "Summary of Facility Risks" section. Those risks were to have been addressed in an Interim Removal Action. Further groundwater assessment has also been requested at this site in the past, including an investigation of an exceedance of the primary groundwater standard for benzene in a well possibly not related to the site. Because low levels of contaminants (mainly petroleum) have been detected in groundwater at this site, a corrective action alternative of monitored natural attenuation would appear to be appropriate. A corrective action for groundwater at SWMU 9 needs to be stated in the SOB.
- (8) The Proposed Remedy for surface and subsurface soils at SWMU 9 is excavation and offsite disposal. It should specify whether the corrective action objectives (CAOs) were to clean up to FDEP residential or industrial SCTLs for surface soil and leachability SCTLs for subsurface soils. If contaminants have been left in surface and subsurface soils at levels exceeding residential SCTLs, a land use restriction will be required on the site. The soil removals have already occurred as an Interim Removal Measure but the Removal Report has not as yet received regulatory approval.
- (9) Unacceptable risks at SWMU 10 were identified under future land-use conditions (assumed to be residential) from exposure to surface soil, groundwater and surface water. Land-use restrictions would be required to restrict exposures from these media. Also, groundwater contamination is not addressed for corrective action. An interim removal action was implemented on this site to remove light non-aqueous phase liquid and has been determined to have been a success. As part of the interim action, groundwater was to have been monitored quarterly for a year to determine trends in dissolved groundwater contaminant concentrations. As this monitoring was not implemented, there is a lack of current data with which to contemplate whether corrective actions for groundwater are warranted or whether a monitoring plan may be implemented.

- (10) It's stated in the SOB that at SWMU 10, "For ecological receptors, sediment in the wetland may impair the benthic community or be toxic to certain aquatic organisms, . . ." The lack of correlation between benthic community impairment/toxic effects and contaminant concentrations is not an acceptable argument for dismissing ecological effects. A credible argument for not addressing sediments in the wetland in light of the above statement needs to be made in the SOB.
- (11) The SOB states that there may be adverse effects to terrestrial plants from exposure to chemicals in surface soil at SWMU 10. The determination whether surface soil contaminants pose a risk to terrestrial plants should have been made in the RFI. Apparently, surface soil was not identified as a medium to be addressed in the Corrective Measures Study. The rationale for not addressing surface soil needs to be made in the SOB in light what is stated in the "Summary of Facility Risks."
- (12) An interim remedial measure has been implemented and lately discontinued at AOC 1. The interim measure, bioslurping, was implemented to remove measurable free product from the site. It was discontinued because of greatly diminished returns from the system while also being costly to operate. Free product recovery continues by bailing of the wells on site. This needs to be mentioned in the SOB.
- (13) As has been mentioned in previous correspondence, monitored natural attenuation of groundwater at AOC 1 is not an acceptable option based upon the data that has been received. Free product is still present, contaminants in groundwater are migrating and discharging to St. Andrew Bay, the latest groundwater sampling and analysis has shown an increase in contaminant concentrations, and two wells adjacent to St. Andrew Bay exceeded applicable surface water standards for 1,1-DCE. The latest groundwater sampling event was in June 1997.
- (14) The CAO for AOC 1 should also be to address groundwater with contaminants at levels greater than Florida groundwater cleanup target levels (GCTLs). For groundwater that is discharging to surface water, groundwater would also need to

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be addressed that contains contaminants in excess of Florida surface water standards.

- (15) Florida primary and secondary drinking water standards and surface water standards are MPSS for VOCs at AOC 1 and should be listed as such. Florida GCTLs are also to be considered in developing corrective action objectives at this site.
- (16) A signed Memorandum of Agreement implementing a Land Use Control Assurance Plan (LUCAP) has not been received from the Navy. Land use and groundwater use controls cannot be implemented until a LUCAP is in place.

If I can be of any further assistance with this matter, please contact me at (850) 488-3693.

Sincerely,



David P. Grabka
Remedial Project Manager

cc: Liz Wilde, USEPA Region IV
Arturo McDonald, Naval CSS Panama City
Charles Goddard, FDEP Northwest District

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