

Staszak, Janna/VBO

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Sent: Thursday, October 11, 2007 12:00 PM
To: timothy.reisch@navy.mil; Staszak, Janna/VBO; Henderson, Kimberly/VBO; kmdoran@deq.virginia.gov
Cc: Barber.Joshua@epamail.epa.gov
Subject: Draft Removal Action Work Plan Site 5 Waste/Burnt Soil Area; St. JuliensCreek Annex

SJCA Partnering Team.

EPA has completed it's review of the subject document and submits the following comments:

Editorial Comments:

Erosion and Sediment Control Plan

Scope of Work, 1st paragraph. Two spaces are needed b/w the 4th and 5th sentences.

Scope of Work, 1st paragraph, 6th sentence. Please change the beginning of the sentence to read, "Around the emergent wetland..."

Scope of Work, 1st paragraph, last sentence. Please change the end of the sentence to read, "...area will eventually become dominated by phragmites."

Erosion and Sediment Control Measures, 4th paragraph, 1st sentence.
Please change the sentence to read, "...not to affect the surrounding site due..."

Erosion and Sediment Control Measures, 4th paragraph, 2nd sentence.
Please change the beginning of the sentence to read, "The silt fence..."

Compensatory Mitigation Plan

Background, 4th sentence. The sentence states that the removal action is planned to be conducted over the next 5 years, please correct this as the timeframe is on the order of the next 5 months.

Compensatory Mitigation, 2nd paragraph, 3rd sentence. Please change the sentence to read, "...to be present that connects Wetlands 1 and 3..."

Compensatory Mitigation, 6th paragraph, 1st sentence. Please change the sentence to read, "Because the area where the culvert is believed..."

Goose deterrents, 2nd paragraph, 2nd sentence. "through" is misspelled.

Monitoring and Maintenance, second sentence. Please insert a comma between "mice" and "burrowing."

Technical Comments:

General Comment

Previous discussions involving the removal action at Site 5 included potential use of the site by the Virginia Port Authority as a mitigation site for the expansion of Craney Island. The intended mitigation would be for tidal wetlands. The report should provide a summary and update, if any, of these discussions. If it is anticipated that further excavation to construct tidal wetlands at the site will occur, then the revegetation plan need only include the emergent and upland seed mix. If it is not anticipated that further excavation will occur, the specific comments included below regarding revegetation of the site must be addressed. The Navy should also consider spraying the Phragmites adjacent to the restoration areas if

no further excavation is anticipated in order to allow for successful establishment of the species in the seed mixes. If the Navy Installation Restoration (IR) Program is concerned with inherent costs associated with committing to longer-term wetland monitoring and management activities, e.g. phragmites suppression, it may be possible to transfer these responsibilities, after the initial 2 years, to the Navy's Natural Resources Trustee as was done for NAB Little Creek's Site 8.

Specific Comments

1. Section 3.8.2 discusses the establishment of vegetation following completion of the removal action. There is additional information presented in Tables 1 and 2 in the Wetland Mitigation Plan in Appendix F. BTAG recommends the following changes and additions to the planting plan:

- Planting Zone B: add black willow (*Salix nigra*) and buttonbush (*Cephalanthus occidentalis*). This will provide additional diversity to the wetland.
- Planting Zone C: add green ash (*Fraxinus pennsylvanica*), willow oak (*Quercus phellos*), and sycamore (*Platanus occidentalis*). These are all fast growing and will add additional diversity to the wetland.
- In those areas of Zone A that have standing water and cannot be seeded with the wetland seed mix, plugs of the following species should be planted on 2 foot centers: lesser bur-reed (*Sparganium americanum*) and blueflag iris (*Iris versicolor*) in areas with up to 6 inches of standing water, arrow arum (*Peltandra virginica*) and pickerelweed (*Pontederia cordata*) in areas with up to 1 foot of standing water, duck potato (*Sagittaria latifolia*) in areas with up to 2 feet of standing water, and spatterdock (*Nuphar lutea*) in areas with 1 to 3 feet of standing water.

2. Section 3.8.2 discusses the establishment of vegetation following completion of the removal action. The upland seed mix provided in Table 3-1 is acceptable as this is the mix provided previously by BTAG. However, this seed mix should only be planted in the non-wetland portions of the site (Zone D). This mix is different than the one shown in Table 3 of the Wetland Mitigation Plan in Appendix F, and should be changed to reflect the mix found in Table 3-1 of the main report. If the Navy wants pre-mixed seed instead, suitable mixes are commercially available.

3. The Wetland Mitigation Plan in Appendix F states that an emergent wetland seed mix will be planted in Zones A and B. A wetland seed mix should also be planted in Zone C, instead of the upland seed mix as proposed. Instead of the wetland seed mix found in Table 2 of the Wetland Mitigation Plan, BTAG recommends that the Navy purchase seed mixes available from seed companies. These prepared seed mixes have much higher diversity than what is listed in Table 2. In addition, seed mixtures are available that are specific to the type of wetland being restored. BTAG recommends that an OBL wetland mix be used in Zones A and B, and a specialized wetland mix for shaded OBL-FACW areas be used in Zone C. Recommended seeding rates are 15 pounds per acre, which is much less than 100 pounds per acre specified in Table 2.

4. The Wetland Mitigation Plan in Appendix F provides information on the transportation, storage and planting methods of trees and shrubs. The time of year when these plants would be planted is not provided. BTAG recommends that trees and shrubs be planted between October and April, preferable when soil is moist. Planting outside of this

period (late spring/summer) or during drought could result in significant mortality. If planting must be done during the summer months, it should only consist of a cover/nurse crop. The species and seed mixes described in the mitigation plan should only be planted at the appropriate time.

5. The Wetland Mitigation Plan in Appendix F provides a short summary of the monitoring and maintenance of the wetland. The section states that there will be two years of monitoring. Two years may not be sufficient. Specific success criteria should be developed and monitoring should continue until success criteria have been achieved. A wetland monitoring plan should be developed that presents specific success criteria that need to be met. The section states that monitoring will verify that sufficient vegetation has been established (i.e., 85% coverage). This criteria is not appropriate for trees and shrubs. For woody vegetation, percent survival of planted material should be presented.

Thank you for the opportunity to comment. Please feel free to contact me with any questions.

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