STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WATER MANAGEMENT

Permitting, Enforcement and Remediation Division

August 2, 2001

Mr. John Burleson
BRAC Environmental Coordinator
Stratford Army Engine Plant
550 Main Street
Stratford, CT 06497

Re: SAEP Causeway NCRA 90% Design

Dear Mr. John Burleson:

I have reviewed the "Non-time Critical Removal Action, Basis of Design, Causeway Design, (90% Phases I and II), Stratford Army Engine Plant, Stratford Connecticut", dated June 2001, prepared by Harding ESE for the US Army Tank-automotive & Armaments Command. Also, I have reviewed the Phase II supplement dated July 2001. As we discussed at the BCT meeting, I apologize for the delay in this review. I am providing the following comments, roughly grouped by topic. I understand that additional comments on the phase I activity have already been provided by Margaret Welch, Office of Long Island Sound Programs, and that she will shortly be providing comments on the Phase II activity.

Soil removal

Provide for contingent further evaluation of any gross pollution that is encountered, as it may be evidence of a previously undocumented release.

In addition to the "gross pollution" trigger, further evaluate any areas that appear anomalous in comparison to the existing characterization record for the causeway soils.

The Army should include spot removal of soil where PCBs greater than 1 ppm have been identified.

Provide for removal as necessary of grossly polluted soil at the plant-side staging areas if such soil is encountered during site preparation.

Geotechnical

Describe how erosion/piping of material at the side joints between marine mattresses will be limited.

Discuss effectiveness of the self-sealing aspect of the toe area of the polymeric marine mattresses system in the presence of the proposed underlying geogrid/rock systems of type 1 and type 2 toe details.

Use of recycled/processed concrete material in rock fill (marine mattresses) should not be authorized without evaluation of its resistance to the marine environment of proposed placement.

State regulations may require a licensed monitor well contractor be used to abandon and reconstruct monitoring wells.

Retained groundwater monitoring well actual condition, including casing elevation and depth, should be documented prior to construction. Also, wells should be monitored for settlement effects.

Provide for appropriate outer well casing drainage and well seals to limit potential for storm-tide waters to enter monitoring wells or be trapped between casings.

Material handling

To the extent possible, use dry methods for segregation of fine material from oversize debris. In one place the specifications seem to indicate that a washing area with a discharge to surface water will be established; such discharge would require a permit and is not recommended.

Use of detergents for decontamination should be avoided if the discharge is to the chemical wastewater treatment plant. If detergents are used, consider obtaining sanitary sewer discharge authorization.

No location or process detail for oversize debris size reduction is identified. Note that rock crushing may require an air program permit.

Ensure fugitive dust associated with oversize debris size reduction is controlled. Fugitive dust potentially containing metals and air toxics are of regulatory concern to DEP's Air Management Bureau.

Describe the stockpile berm's design function and include in stockpile performance requirements the prevention of runoff of liquids and silt. Identify a regular stockpile inspection protocol.

Brush chipped into soil should be diffuse and not concentrated, to limit geochemical and geotechnical effects. Evaluate if the chips will adversely impact the cover and describe how their migration during any construction period flooding will be minimized.

Identify specific decision criteria for material characterization for disposal consistent with state requirements.

Note that materials handled as state regulated special wastes have specific requirements for transportation.

DEP recommends that soil over the block cover system also be evaluated for pollution before acceptance.

Erosion and Sediment Control

Include Connecticut's Erosion and Sediment Control Guidelines in the appropriate reference sections.

Erosion mulch is unlikely to be required to control silt release for closed depressions resulting from spot remediation and grubbing.

Describe how the use of straw mulch will be effective in a potential tidal flooding situation, and how its migration will be limited.

Provide contingent plans to ensure erosion and release of sediment from the site is minimized in the event of a hurricane or major winter storm during the construction period.

EA 5 should have a supplemental silt fence installed as necessary between it and the tidal flat.

Identify how any exposed soil surfaces will be stabilized during winter shutdown and between the end of construction and when spring seeding is possible.

The seeding specification identifies April 1 to May 30 as the preferred seeding time yet the project timeline indicates seeding will occur in mid-November. Adjust the project schedule to ensure topsoil will be spread and seeded at an appropriate time to allow establishment of a vegetative cover.

Describe acceptance criteria and inspection and repair measures to ensure an effective final grass cover is established. Ensure that inspection of vegetative cover integrity is conducted after every significant rainfall event until grass growth is sufficient to provide an interlocking root mat.

Editorial

Attachments D, E and F to Appendix C are not included; opportunity for review comments is reserved.

Ensure that the contractor's air monitoring plan includes evaluation of potential for impact on off-site receptors.

The specifications seem inconsistent in stating clearly the requirement to characterize all material leaving the site for disposal. DEP expects that any excess material, even that defined as "uncontaminated", will be appropriately characterized and handled. Note that "uncontaminated" in the specifications is not identical to the state regulatory definition of "clean fill".

Table 2.1 describing ARARs was not included. DEP requires all state regulations be followed; a list has previously been provided. In all areas where federal regulations are cited there should also be citation of applicable state regulations, or, at a minimum, a general reference to applicable state regulations. State spill response requirements and contact information should explicitly be identified.

DEP reserves the right to review the contractor-prepared list of state regulations.

Details of the long-term care and monitoring program are not included in this submittal. DEP reserves the right to comment on both this and the specific Environmental Land Use Restriction language when these documents are developed.

It is DEP's understanding that modifications to the site plan will result from town input and negotiations regarding improvements needed to support the post-closure use. When such details are available, please forward them for review.

Sincerely,

Kenneth Feathers
Supervising Sanitary Engineer

KF:kf
cc: Nelson Walter, Harding ESE
Margaret Welch, DEP
Meghan Cassidy, EPA
RAB