

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



13 September 2000

John Burleson
BRAC Environmental Coordinator
Stratford Army Engine Plant
550 S Main St.
Stratford, CT

RE: SAEP Revised Draft EE/CA for Causeway and Dike

Dear Mr. Burleson:

DEP has reviewed the revised draft "Engineering Evaluation/Cost Analysis for the Causeway and Dike, Stratford Army Engine Plant, Stratford, Connecticut" dated July 31, 2000, prepared for the U.S. Army Corps of Engineers, New England District, Concord Massachusetts by Foster Wheeler Environmental Corporation and Harding Lawson Associates.

The preferred alternative appears to substantially address the Connecticut Remediation Standard Regulation requirements which explicitly apply to the described condition and location. DEP Permitting, Enforcement and Remediation Division offers the following comments; the DEP Office of Long Island Sound Programs has also separately forwarded comments.

Section 2.2 describes the RCRA closure as completed, including the drum storage area, however this has not yet been finalized.

The citation of ARARs is incorrect in detail for the Remediation Standard Regulations. The Connecticut General Statutes (CGS) Section 22a-133k required adoption of remediation standard regulations, which were promulgated as Regulations of Connecticut State Agencies (RCSA) Sections 22a-133k 1 to 22a-133k 3. Environmental Land Use Restrictions are statutorily defined in CGS Sections 22a-133n through 22a-133r, and the format for filing is detailed in RCSA Section 22a-133q.

Alternative 4 is the installation of a cover/structure which renders underlying soil inaccessible as specified in the definition of inaccessible soil at RCSA Section 22a-133k 1(a)(28). This definition should be cited. As provided in RCSA Section 22a 133k 2 (b)(3), the Direct Exposure Criteria do not apply to inaccessible soil which is subject to an Environmental Land Use Restriction (ELUR). Because of this exemption, the proposed remedy in alternative 4 is not strictly considered an engineered control under the Remediation Standard Regulations, thus many of the specific provisions of RCSA 22a 133k 2(f)(2) do not apply. However, DEP recommends that appropriate engineering design and postclosure care be included in the remedy to ensure long-term continued inaccessibility. The timing of and procedure for the ELUR placement should be indicated.

Note that the provisions for approval of an engineered control present at RCSA Section 22a 133k 2(f)(2) do apply to alternatives 1 and 2. DEP recommends that, to ensure implementation is not delayed in the event alternative 1 or 2 is selected as the remedy, the specified Section 22a 133k 2(f)(2)(A)(iv) public notification be concurrent with other public notifications for the project. Also, the detailed design and decision documents should address all the required elements at Section 22a 133k 2(f)(2)(B) if alternative 1 or 2 is selected.

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DEP notes that the activity specific ARARs will be identified during the design phase, and reserves comment until these ARARs are identified in detail. The EE/CA should include any consideration of activity specific ARARs which may affect the selection of the preferred remedy.

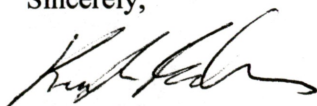
The 600 pound rip-rap proposed for the side slopes of the causeway can be viewed as "another existing permanent structure", rather than soil, under the provisions of RCSA Section 22a 133k 1(a)(28)(C)(ii), since it will be existing at the time the Environmental Land Use Restriction is established. DEP can accept a final designed rip-rap thickness of less than four feet, provided the design clearly is demonstrated to meet the objective of maintaining long-term inaccessibility. The conceptual diagrams and discussion should be modified accordingly. This may reduce the proposed widening of the causeway landform at the mean high water level.

DEP understands that groundwater quality will be addressed in a separate operational unit. RCSA section 22a 133k 3(b)(2) mandates that groundwater discharging to the tidal flat conform with surface water quality criteria. Note that these values are lower than the Remediation Standard Regulation Appendix D Surface Water Protection Criteria, which incorporate a default attenuation factor. To ensure the interim remedy is consistent with the final remedy, DEP recommends that the proposed spot removal of soils with mobile pollutants also consider potential impacts of leachable pollutants on surface water. This would limit the risk for further action in a final remedy to address soil as a pollutant source if groundwater exceeds evaluation criteria. The degree of concern depends on the difference between a pollutant's GB Pollutant Mobility Criterion (the target interim removal criterion) and its Aquatic Water Quality Benchmark value, and also on the potential for attenuation between the soil location and the receptor tidal flat. For example, DEP recommends a value of 280 ug/l for vanadium acute toxicity in water, as compared to a GB Pollutant Mobility Criterion of 500 ug/l. A removal criterion of 280 ug/l, as opposed to 500, would ensure that, even without any attenuation on the transport path from soil to surface water, there would be no possibility of acute toxicity. Suggested Aquatic Benchmark values for identified pollutants not listed in Connecticut's Water Quality Criteria and Standards can be obtained from Traci Iott (860-424-3082)

DEP also reiterates earlier comment that polluted soils within the zone of diurnal tidally influenced groundwater fluctuation may require additional mitigation in the final remedy if they are found to be unacceptably affecting the environment.

If you have any questions please contact me.

Sincerely,



Kenneth Feathers
Supervising Sanitary Engineer
860-424-3770

Enclosure
Attachment

CC: Meghan Cassidy, EPA
Nelson Walter, HLA
Michelle Brock, USACE
RAB