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September 14, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Sterling Marine Terminal and CAD Cells
PROJECT MUNICIPALITY : East Boston
PROJECT WATERSHED : Boston Harbor
EOEA NUMBER : 13126R
PROJECT PROPONENT : **Dredge Management Solutions, LLC**
DATE NOTICED IN MONITOR : August 8, 2006

As Secretary of Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project is **adequate and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). However, for the Final Environmental Impact Report (FEIR) to be found adequate, I am requiring the proponent to provide additional information in the FEIR to address the comments received on the DEIR pertaining to the project's CAD cell design, project impacts to water quality, fishery resources and navigation, CAD cell closure, and mitigation. The FEIR should also include a detailed discussion of how the techniques and methodologies employed in the CAD cells constructed by the US Army Corps of Engineers as part of its Boston Harbor Navigation Improvement Project (BHNIP) March 2003 (#8695), have been applied to the site specific conditions for the proposed Sterling Marine Terminal and CAD Cell project. This information is necessary to ensure that the requirements of 301 CMR 11.07 are met, that the aspects and issues of the project have been clearly described, that a range of project alternatives have been fully analyzed, that the proponent has committed to a set of mitigation that will allow the state agencies to satisfy their Section 61 obligations, and that there will be meaningful opportunities for public review of the additional analysis prior to any Agency action.

Project Description:

Originally proposed by Jay Cashman Inc. in a February 2004 expanded Environmental Notification Form (EENF), the project involved waterside infrastructure improvements and the construction of two confined aquatic disposal (CAD) cells within the Sterling Marine Terminal site located in the Chelsea Creek Designated Port Area (Chelsea Creek DPA) in East Boston.

The proposed waterside infrastructure improvements included the reconstruction of the existing bulkhead, construction of the transfer bridge, and the mechanical maintenance dredging (to -15 MLW) of a portion (approximately 60,000 sf) of the Sterling Marine Terminal area. The dredged sediment (approximately 7,800 cy) from the Phase I activities would be temporarily stored on three barges to be moored within the project site.

The CAD cells construction activities involved the excavation of approximately 36,500 cy of parent material to construct CAD 1. The temporarily stored dredged sediment from the Phase I dredging activities will be disposed of in CAD 1 along with the dredged sediment (approximately 7,200 cy) from the proponent's proposed maintenance dredging of the remaining portion (68,000 sf) of the project site. The proponent proposed to excavate approximately 110,000 cy of additional parent material from the remaining portion (68,000 sf) of the project site to construct CAD 2. As described by the proponent, the project will create approximately 114,000 cy of CAD capacity to accommodate, for a fee, dredged material from other projects.

The Secretary's Certificate and Scope issued on the EENF assumed that the disposal of the parent material excavated from the construction of CAD cells 1 and 2 (approximately 146,500 cy) is suitable for unconfined off-shore disposal at the Massachusetts Bay Disposal Site (MBDS). If the disposal location should change from MBDS, I will require the filing of a timely Notice of Project Change. The project has been modeled and designed to reflect the CAD cells constructed by the US Army Corps of Engineers as part of its Boston Harbor Navigation Improvement Project (BHNIP), a large-scale dredging project involving the construction of CAD cells for the resultant dredge material reviewed by MEPA in March 2003 (#8695). The dredging component of the project will create adequate drafts to continue to accommodate large marine barges and other vessels to enter the site and unload materials and equipment, and thereby support the site's continued use as an active marine terminal within a Designated Port Area.

The project is undergoing MEPA review pursuant to section 11.03 (3)(b)(3), because the project requires state permits and involves the dredging of more than 10,000 cubic yards of material (approximately 155,000 cubic yards total). The project will require a Chapter 91 License and a 401 Water Quality Certificate from the Department of Environmental Protection (DEP); an Order of Conditions from the Boston Conservation Commission (and hence a Superseding Order of Conditions from DEP if the local Order were appealed); and Coastal Zone Management (CZM) Federal Consistency review.

Construction of the CAD cell also requires Section 404 Permit authorizations from the U.S. Army Corps of Engineers (ACOE) under the Clean Water Act, the Rivers and Harbors Act (Section 10 Permit), and the Marine Protection, Research and Sanctuaries Act (Section 103 Permit). I note that the project as originally proposed in the EENF, the project changes proposed in the NPC, and the project described in the DEIR do not require the mandatory preparation of an Environmental Impact Review (EIR) pursuant to the MEPA regulations. As noted in the previously issued Certificates on the EENF and NPC, this project differs from CAD cell construction projects previously reviewed by MEPA (EOEA #8695, 11669), and will result in a private commitment of flowed Commonwealth tidelands that could have a limiting effect on the future maintenance or improvement dredging and future water-dependent industrial uses on this site or elsewhere in the Chelsea Creek DPA. Based on a review of the information provided by the proponent and pursuant to Section 11.06 (7) of the MEPA regulations, the proponent was required to file an EIR to assist the various permitting agencies and interested parties in their evaluation of the potential environmental and regulatory impacts of this first of its kind project and to address a number of outstanding issues related to the project's potential impacts to water quality, fisheries, and Commonwealth flowed tidelands.

Project History:

Notice of Project Change

In May 2004 the proponent, Dredge Management Solutions, LLC (formerly Jay Cashman Inc.) filed a Notice of Project Change (NPC) describing modifications to the original project proposal to include the waterside infrastructure improvements described above, and the construction of a single CAD cell and the dredging of approximately 155,000 cubic yards (cy) of sediment in Phase II. The proponent proposes to dispose approximately 21,000 cy of surficial material from the project site in the proposed CAD cell, and a cap layer of 16,000 cy of suitable material. The resultant CAD cell storage capacity will be approximately 101,000 cy. The Sterling Marine CAD cell project will be constructed, filled, and closed/capped over a three-year period (2006-2009). The proposed three-year project timeline will provide adequate time to create the CAD cell, fill the cell with appropriate dredged material from other off-site dredging projects, allow settling of CAD cell (200 days), and CAD cell closure. All in-water work will be conducted within proposed Time of Year (TOY) restrictions. According to comments received from Mass Coastal Zone Management (CZM) and the City of Boston Conservation Commission, potential sources of dredged material to be accepted by the proponent for disposal in the proposed CAD cell must be determined and coordinated prior to the CAD cell construction.

The Certificate on the NPC required the proponent to prepare a DEIR to respond to the comments received particularly as they pertain to the potential environmental and regulatory impacts of this project to water quality, and Commonwealth flowed tidelands.

Project Design:

As described in the DEIR, the proposed single CAD cell will be constructed by dredging approximately 155,000 cubic yards (cy) from a 3.38-acre basin area to a depth of -72 feet Mean Low Water (MLW) with 2:1 sloped side walls. Both Mass DEP and Mass CZM have raised concerns with the CAD cell's coarse sand parent material and its structural ability to maintain relatively steep sloped side walls. According to Mass DEP, CAD cells that were constructed as part of the BHNIP project were comprised of stable clay parent material and incorporated a moderately sloped (1:2) side wall design. The FEIR should respond to these comments and include a geotechnical analysis to verify the stability of the proposed CAD cell wall design.

Construction:

The proposed four-phase CAD cell construction process includes; 1) the dredging of surface material from the proposed CAD footprint, 2) dredging of parent material, 3) disposal of off-site dredged material into new CAD cell, and 4) the capping/closure of the CAD cell. The CAD cell will be constructed, filled and capped within a three-year period. Phase three of the construction process is to be completed within a one-year period, subject to proposed TOY restrictions. The proponent has proposed a project site management plan to incorporate many of the approved management and monitoring methods successfully implemented for the BHNIP project, and to employ the services of an independent site inspector, as described in DEP's Independent Third Party Inspection Program (3PI), to monitor all dredging and related project activities to assure compliance with the Water Quality Certification application.

The FEIR must include a detailed description of each of the four proposed construction phases including the proposed processes and protocols for CAD construction, dredge material transport, dredge material disposal and proposed water quality monitoring. The FEIR should identify the storage area and final disposition for the dredged surficial material from the proposed CAD footprint in phase one. The FEIR should include a beneficial reuse evaluation for the parent material to be excavated from the CAD cell site during phase two of project construction. Many commenters have requested that the FEIR include additional information to ensure that required quantities of acceptable off-site dredge material will be available for disposal into the CAD cell during the one-year dredge disposal timeline proposed in phase three of the project's construction process. According to the comments received from Mass CZM and the City of Boston Conservation Commission, the proponent must satisfactorily demonstrate, prior to the start of project construction, that sufficient quantities of acceptable off-site dredge material will be available for disposal within the proposed one-year phase three timeline. The FEIR should include a detailed dredge disposal plan that identifies specific permitted off-site dredging projects and their respective dredge material volumes, composition and contaminant levels as may be ascertained through reasonable due diligence, that will use the proposed Sterling Marine CAD cell for dredge disposal. I recognize that the permitting agencies may require additional and/or more detailed information as part of their respective permitting requirements.

Mass DEP has indicated that the proposed disposal of dredge material with contaminant levels higher than ambient conditions may violate the anti-degradation provisions of the Surface Water Quality Standards (314 CMR 4.00). The proponent should respond to Mass DEP's comments and should include in the FEIR additional dredge material disposal criteria in compliance with applicable regulatory requirements. The FEIR should also include an emergency response plan identifying a chain of response notifications, alternative response actions, responsible parties and reporting requirements to respond to a potential release of contaminated material outside of the proposed CAD cell.

The proponent has proposed to incorporate the CAD cell capping guidelines used for the BHNIP project for the proposed Sterling Marine CAD cell capping process. The proposed cap will be comprised of a 3-foot thick layer of approximately 16,000 cy suitable granular capping material (70% sand) and will cover 90% of the CAD cell surface to contain the dredged material stored in the CAD cell. The proponent has committed to a 200-day consolidation period prior to capping the CAD cell. The FEIR must include a detailed description of the CAD cell closure and capping process including its transport to the project site and unloading onto the CAD cell. The FEIR should describe the monitoring process and post-capping surveys the proponent will employ to ensure a uniform 3-foot cover thickness over the CAD cell. MassDEP has indicated that the proponent may be required to construct a cap that covers 100% of the CAD cell to contain the CAD cell in a manner that meets applicable water quality standards. The proponent should respond to MassDEP's comments and should include in the FEIR additional information and analysis to demonstrate how the currently proposed cap complies with applicable water quality standards. The FEIR should provide a detailed description of any necessary long-term chemical and physical monitoring and maintenance of the CAD cell cap.

The proponent has consulted with the U.S. Coast Guard, the Port Operators Group and the Boston Harbor Association (TBHA) in the design and development of a proposed Construction Navigation Plan to coordinate usage of the federal navigation channel in the Chelsea Creek Designated Port Area (DPA) to minimize and avoid impacts to deep draft vessels during project construction and operation. I strongly encourage the proponent to continue to coordinate with the U.S. Coast Guard, the City of Boston Harbormaster, the Boston Harbor Pilots, the Port Operators Group and all interested parties to manage vessel and barge traffic within Chelsea Creek throughout all phases of project construction and operation to ensure the protection of the public health and welfare and to properly manage project construction and operation. The FEIR should provide an update of the proponent's coordination efforts.

Water Quality:

The proponent conducted water quality modeling at the project site to assess the potential impacts from the project activities to existing water current and sediment-transport dynamics and to winter flounder habitat and the spawning migrations of anadromous rainbow smelt.

As described in the DEIR, the results of the proponent's water quality modeling indicate that the proposed project will result in only temporary impacts to water quality and turbidity during dredging and disposal. The proponent has also committed to conduct periodic real-time water quality monitoring before, during and after project completion. The water quality sampling and analysis schedule described in the DEIR which calls for monitoring for the first two dredge material disposal events in phase 3 followed by the sampling of every fourth disposal event. According to Mass DEP, Mass CZM and the Division of Marine Fisheries, the currently proposed water quality monitoring schedule is limited and should be expanded to include a more extensive monitoring program for each disposal event in phase 3. The FEIR must provide a detailed response to these comments. I ask that the proponent consult with these agencies during the preparation of the FEIR.

The proponent has committed to circulate performance reports, audited by the 3PI site inspector, to DEP staff during CAD cell construction and operation. The proponent should expand the list of recipients of any performance reports and notifications to include the City of Boston, the National Marine Fisheries Service (NMFS), local maritime interests including the Boston Harbor Pilots Association, the Port of Boston Operators Group, the U.S. Coast Guard, and the City of Boston's Harbormaster; community and advocacy groups such as Chelsea Creek Action Group and the Urban Ecology Institute; and other parties including City of Chelsea's Planning Department, Boston Redevelopment Authority, and Massport.

Fisheries Resources:

According to the comments received from the Mass Division of Marine Fisheries and the United States National Marine Fisheries Service (NMFS), the project site is located at the confluence of Boston's Inner Harbor, the Mystic River and Chelsea Creek which offer important habitat for the spawning and development of commercially and recreationally important winter flounder (*Pseudopleuronectes americanus*), and an important migratory pathway for the anadromous rainbow smelt (*Omerus mordax*) that serves as a food source for a number of federally managed fish species, and has been identified a "species of concern" by NMFS' Protected Resources Division. As described in the DEIR, the proponent has committed to implement a Time-Of-Year (TOY) in-water construction restriction (February 14 – June 16) to protect winter flounder spawning and juvenile development. According to the information provided in the DEIR, the project is expected to result in temporary impacts to marine and fisheries resources.

Both the Mass Division of Marine Fisheries and NMFS have raised concerns with the potential impacts to marine fisheries resources associated with the proponent's alteration and removal of 3.38 acres of fisheries habitat. Construction-period impacts associated with the CAD cell construction will include increased turbidity resulting from dredged material in the water column, changes to sea floor contours and the disturbance and loss of benthic community habitat.

These commenters have also recommended that the proponent expand the proposed TOY restriction period from February 15 through June 30. The FEIR should provide a detailed response to the comments received from Mass Division of Marine Fisheries and NMFS. I strongly encourage the proponent to consult with the Division of Marine Fisheries, the Massachusetts Lobstermen Association and NMFS during the preparation of the FEIR.

Mitigation:

Although the proposed CAD cell construction project will provide a cost effective means of dredge sediment disposal for both on and off-site dredge material, and will result in the increased likelihood of maintenance dredging in the Chelsea Creek and Boston Harbor, it will result in a private and permanent commitment of flowed Commonwealth tidelands that will have a limiting effect on future water-dependent industrial uses on this site or elsewhere in the Chelsea Creek DPA. The DEIR includes a mitigation section corresponding to the areas of impact outlined in previous sections of the proponent's EENF and NPC submittals. According to the proponent, the proposed Mitigation plan has been designed to address short-term and long-term impacts of the proposed dredging and CAD cell construction and management project, particularly as they may relate to water quality, and occupation of Commonwealth Tidelands.

Commonwealth Tidelands

In their comments, Mass DEP has indicated that the proposed primary use of the CAD cell is for the disposal of dredge materials from Designated Port Areas (DPAs), particularly within the Chelsea Creek DPA and other Boston Harbor DPAs, will serve in the operation of DPAs and therefore can be considered a permissible use pursuant to DEP's waterways regulations (310 CMR 9.36(5)(b)) and the Chapter 91 licensing process.

In response to comments received from CZM and others, the proponent has proposed mitigation to offset the use of Commonwealth Tidelands to ensure compliance with DEP's Chapter 91 licensing process. Specifically, the proponent has committed to providing funding to The Boston Harbor Association for the purposes of acquiring a pump out station for cruise ships in the Port of Boston. In their comments, the Boston Harbor Associates (BHA) has indicated that while a pump out facility for cruise ships is consistent with Boston Mayor Thomas Menino's desire for a no-discharge zone in Boston Harbor, BHA is not the appropriate entity to acquire such a facility. The proponent should work closely with the City of Boston, Mass DEP, and others including the BHA and community organizations, to identify a suitable funding mechanism for locating a pump-out facility for cruise ships in the Port of Boston, and/or any other appropriate mitigation measures sufficient to offset the project's impacts to Commonwealth Tidelands including but not limited to habitat restoration and the removal of existing pile fields along Chelsea Creek, near the City of Boston property off Border Street or along a section of the East Boston waterfront, and support of the Condor Street Urban Wild program.

Fisheries

According to the comments received from NMFS, the proponent should expand the mitigation commitments for the project to include proposed mitigation for the temporary and potential permanent loss of benthic habitats and resources. The FEIR should respond to these comments. Similarly, the project proponent should also consult with the Massachusetts Lobstermen Association to identify possible mitigation commitments for any potential project-related impacts to lobster habitat and traps located in the project area.

The FEIR should include proposals for compensatory mitigation, in consideration of the long term life expectancy of the CAD cell, any proposed restrictions on activity located within the CAD cell project area and potential impacts to marine habitat and fisheries and their anticipated recovery periods. I note that compensation may also be required for this project under Chapter 91.

Comments:

The FEIR should respond to the substantive issues raised in the comments received on the DEIR to the extent that the comments are within the subject matter jurisdiction of MEPA. I recommend that the proponent employ an indexed response to comments format, supplemented as appropriate with direct narrative response.

Circulation:

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to the City of Boston officials. A copy of the EIR should be made available for public review at the Boston Public Library.

September 14, 2006

Date



Robert W. Golledge, Jr., Secretary

Comments received: (continued on next page)

09/8/06	Department of Environmental Protection (DEP) - Boston
09/8/06	NOAA/National Marine Fisheries Service (NMFS) – Northeast Region
09/7/06	City of Boston Environment Department
09/7/06	Mass Coastal Zone Management (CZM)
09/07/06	Massachusetts Marine Trades Association

Comments received: (continued)

09/06/06 New Street Realty Trust
09/01/06 Seaport Advisory Council
09/06/06 Mass Board of Underwater Archaeological Resources
09/11/06 Massachusetts Division of Marine Fisheries
09/11/06 Chelsea Creek Action Group (CCAG)
09/12//06 The Boston Harbor Association

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