MASSACHUSETTS CLEAN ENERGY CENTER

55 Summer Street, 9th Floor
Boston, MA 02110
P (617) 315-9355 · F (617) 315-9356
info@masscec.com · www.masscec.com

April 19, 2013

Mr. David Lederer
Remedial Project Manager
Office of Site Remediation and Restoration
EPA Region 1, Suite 100, OSRR 7-04
5 Post Office Square
Boston, MA 02176

Re: USEPA Final Determination, Appendix C, Section II.5.b. – Use of Silt Curtains for Compensatory Mitigation Areas

Dear Mr. Lederer,

Within its Final Determination, issued November 19, 2012 for the South Terminal Project, USEPA issued a set of Water Quality Performance Standards within Appendix C. Section II.5.b of the Water Quality Performance Standards reads as follows:

> **"Compensatory Mitigation:** At any depth and at all times of the year, all areas where there is filling and capping associated with compensatory mitigation (i.e. winter flounder mitigation creation and intertidal and subtidal mitigation capping) will be completely encircled by silt curtains and absorbent booms for the duration of the filling and capping activity."

It is the Commonwealth's understanding that the silt curtains required by this paragraph are intended to minimize turbidity generated during placement of clean material to construct the Compensatory Mitigation areas. As discussed in our meeting with EPA officials on April 12, 2013, the Commonwealth has studied the impacts of installing silt curtains in great detail, and we feel we must revisit this standard due to the significant safety concerns that have arisen. The Commonwealth's concerns are based on the following information:

- The Commonwealth has recently contracted Cashman-Weeks NB as its contractor for construction of the South Terminal Project. Cashman-Weeks NB has indicated that, particularly due to the deep water present at the "winter flounder mitigation creation area" silt curtains will be very difficult to control when currents and strong winds exert force on the silt curtains.
- The "winter flounder mitigation creation area" is located only slightly further than 100 feet from the Federal Navigational Channel for New Bedford Harbor. Should any portion of the silt curtains be incidentally loosed from their anchoring, or be pushed from their mooring location by currents or winds during a storm, there is a strong likelihood that the silt curtains would migrate into the Federal Channel, where they would present a significant navigational hazard, thereby endangering public safety.
- The New Bedford Harbor Development Commission has informed the Commonwealth that many of the vessels that transit into and out of New Bedford Harbor are shallow-draft vessels (such as fishing vessels), which may not need to remain inside the Federal Channel in order to safely transit in and out of New Bedford Harbor. These vessels are also likely to transit into and out of the harbor at night; as a result, it is possible that

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these vessels may transit periodically over the "winter flounder mitigation creation area", which would increase the possible hazard created by the silt curtains, even when lighted for safety. This hazard will be particularly great at night, regardless of the lighting scheme used to highlight the hazard to vessel operators.

- Since January 15, 2013, the Commonwealth has installed and operated the Fish Deterrent System, as required within Section II.5.c and Section II.8 of the Water Quality Performance Standards. Although the experience has been successful, the Commonwealth has experienced some difficulties in managing and controlling the Fish Deterrent System silt curtains due to current and wind forces inside New Bedford Harbor. The Commonwealth anticipates that those difficulties would be magnified significantly when silt curtains are installed outside of the New Bedford Hurricane Barrier.

Based on the above reasoning, the Commonwealth is concerned that the requirements imposed by Section II.5.b may create an unsafe condition. In order to meet the important goal of minimizing the generation of turbidity without the use of silt curtains at the "winter flounder mitigation creation area", the Commonwealth proposes the following "Alternate Plan",

- Only "Bottom of CAD Cell", "Intermediate Dredge" or "Bottom of Dredge" material will be placed within the "winter flounder mitigation area". These materials are known to contain a much higher concentration of coarse, sandy material, and therefore will be much less likely to generate turbidity than "Top of CAD Cell" or "Top of Dredge" material. In addition, this material is known to be "Parent" material that is free from anthropogenic impacts.
- The "winter flounder mitigation area" is a local depression, with depths ranging from -15 MLLW at its edges to -22 MLLW at its center. As a result, the area is well suited to contain turbidity generated during capping events, as its "walls" provide a direct barrier to turbidity migrations.
- The Commonwealth will require Cashman-Weeks NB to utilize scows that have maximum drafts that would allow the bottom of the scows (once full) to draft between 16 and 21 feet (see **Attachment A** for scow information). These deep-draft scows will allow the bottom of the scows to be below (or very close to below) the upper rim of the "walls" of the "winter flounder mitigation creation area". This will keep turbidity generated from capping events within the "winter flounder mitigation creation area".
- The Commonwealth will require Cashman-Weeks NB to limit the placement of material within the "winter flounder mitigation creation area" to a period of three hours before or after low tide, which will keep tidal influences to a minimum, and will keep the scows as low as possible during capping events.
- The Commonwealth proposes an increased frequency of turbidity monitoring for the "winter flounder mitigation creation area" consisting of daily monitoring at area, to ensure that the Water Quality Performance Standards have not been exceeded.

It is the Commonwealth's believe that the implementation of this Alternate Plan will minimize the impact of turbidity while significantly reducing the public safety risk of silt curtain use at the "winter flounder mitigation creation area".

The Commonwealth's Contractor intends to begin work within the "winter flounder mitigation creation area" within approximately two weeks from the date of this letter. As a result, the Commonwealth requests approval of this approach as soon as possible.

The Commonwealth realizes that a change in the Final Determination will be required to institute these changes, and further realizes that changes to the Final Determination are time consuming; however, due to the impending start of activity in this area, the Commonwealth requests temporary approval to utilize the Alternate Plan immediately (on the grounds of promoting public safety), with the understanding that a formal change in the Final Determination would be completed at a later date.

The Commonwealth sincerely appreciates your assistance with this very important matter. If you have any questions related to this proposed modification to the Final Determination, please do not hesitate to contact me at 617-315-9330.

Sincerely,

Bill White

Bill White
Director, Offshore Wind Sector Development

ATTACHMENT A

SEI 2000

TYPE:	1,500 Yd. Dumpscow
CLASS:	ABS up to 20 miles off-shore
STERLING #:	09-031
LENGTH:	171'
BEAM:	43'
DEPTH:	16'
GROSS TONNAGE:	998
NET TONNAGE:	998
YEAR BUILT:	1963
COMPARTMENTS:	14
BULKHEADS:	(2) Longitudinal (7) Transverse
SPUD WELLS:	None
SPUDS:	None
CAPACITY:	1500 Tons

OTHER: **Vessel is fitted with a bow rake and stern rake and a hydraulic operated six pocket bottom door dump scow.**

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549 South Street | PO Box 692396 | Quincy, MA 02269 | Tel: 617-890-0600 | Fax: 617-890-0606

MIGHTY QUINN

TYPE:	**4,000 Yd. Split-Hull Dumpscow**
CLASS:	**ABS Classed All Oceans**
STERLING #:	**09-095**
LENGTH:	**240'**
BEAM:	**54'**
DEPTH:	**21'**
GROSS TONNAGE:	**2338**
NET TONNAGE:	**818**
COMPARTMENTS:	**12**
BULKHEADS:	**(2) Longitudinal** **(5) Transverse**
CAPACITY:	**4000 Yards**
BUILT:	**2004**

OTHER: **Vessel is fitted with bow and stern rakes. Also equipped with remote control dumping.**

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JOE VERROCHI

TYPE:	4000 Yd. Split-Hull Dumpscow
CLASS:	ABS Classed All Oceans
STERLING #:	09-075
LENGTH:	240'
BEAM:	54'
DEPTH:	21'
GROSS TONNAGE:	2338
NET TONNAGE:	818
COMPARTMENTS:	12
BULKHEADS:	(2) Longitudinal (5) Transverse
CAPACITY:	4000 Yds.
BUILT:	2002

OTHER: **Barge is a split hull dumpscow and can be operated via remote control. Vessel is fitted with bow and stern rake.**

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EDDIE CARROLL

TYPE:	3300 Yd. Split-Hull Dumpscow
CLASS:	ABS Classed All Oceans
STERLING #:	09-074
LENGTH:	260'
BEAM:	55'
DEPTH:	16'
GROSS TONNAGE:	1899
NET TONNAGE:	574
YEAR BUILT:	2001
COMPARTMENTS:	14
BULKHEADS:	(2) Longitudinal (6) Transverse
CAPACITY:	3300 Yds.

OTHER: Vessel is fitted with bow rake and stern rake. Barge is a split dumpscow and can be operated via remote control.

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