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From: Cynthia Catri
To: Davis Gary (DCR); Ericson Benjamin (DEP); Chet Myers; Weinberg Philip (DEP); Carl Dierker; James Owens; Carl Deloi; Stephen Perkins; Sneeringer, Paul J NAE; Amy Braz; Ann Williams; ElaineT Stanley; Ellen Weitzler; Jackie Leclair; Ken Moraff; Kimberly Tisa; Larry Brill; Leann Jensen; Michael Stover; Mike Marsh; Phil Colarusso; Ralph Abele; Ronald Fein; Timothy Timmermann; William Walshrogalski
Subject: NBH - South Terminal Questions for May 22 meeting with Apex
Date: Monday, May 21, 2012 3:25:43 PM
Attachments: Jan 18 2012 submittal questions for Apex May 2012.docx

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In preparation for our meeting tomorrow, attached are questions/issues EPA has identified in connection with the January 18, 2012 submittal.

As a reminder, the meeting will be held from 9:00 am to 2:00 pm at EPA in Courtroom No. 6, on the 15th floor.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Memorandum

Date: May 21, 2012

Subject: New Bedford Harbor Superfund Site
State Enhancement Remedy – South Terminal Proposal

To: Gary Davis, General Counsel
Massachusetts Office of Energy and Environmental Affairs

From: Cynthia Catri
Senior Enforcement Counsel

In his absence, Carl Dierker asked that I forward questions/concerns EPA may have concerning the Commonwealth's January 18, 2012 submittal regarding the proposed South Terminal project. As you know, EPA is currently reviewing the Commonwealth's submittals to determine whether or not the project meets the substantive requirements that such a project would meet if it were a permitted facility as part of the State Enhanced Remedy contained within the 1998 Record of Decision for the Upper and Lower Harbor.

We realize that some of the questions below may have already been discussed; however, with the revised design included in the January 18, 2012 submittal and due to the fact that EPA's review team now includes new members, we thought it best to be overinclusive. We expect we can iron out most these issues at tomorrow's meeting with Apex, the Commonwealth's consultant.

I've tried to group the questions in some type of order – I apologize ahead if there is repetition or questions misplaced in the wrong category.

We appreciate the opportunity to meet at such short notice.

1. Timeline

For Cape Wind, all turbines are required to be in place by Jan. 2014 (pp. 22-23); is this at all possible? (AW)

Is the time to construct the terminal 9 mos. (p. 117) or 15 mos. (p. 115)?
(This bears on overall time frame plus on the length of time there would be construction impacts on neighborhoods/EJ community). Also note p. 67: CDF must be in place no later than fall, 2012 and use of the site as early as November 2012. That means dredging would have to occur this summer or early fall. (AW, CC)

Explain the time to construct Cape Wind (2 yrs vs. 1 yr); time frame appears to affect the size of the facility (28 acres needed to accomplish construction in one year). (AW)

2. Project Overview

We would like to have a discussion of the components of the project that are the subject of EPA's review. The inclusion in the January 18, 2012 submittal of CAD cell #3 and portions of the federal channel dredging have created some confusion. Acknowledging that either or both of these activities may or may not happen without the terminal construction, the question raised is, "Have the impacts for these two pieces been analyzed under any prior federal permitting action?" Typically, for a CAD cell, there is not only a permitting action for site selection but also for the actual use of the CAD cell. For instance, in the Ocean Dumping program, (which is different than Superfund) disposal sites are selected via the EIS process. DMMPs are prepared that discuss the monitoring and management of the disposal site. With those documents in place, individual dredging projects still need environmental review and a permit to use the previously designated discharge site. For this project, we seem to have two of the three pieces in place since there was an environmental review on the placement of the CAD cell and there is a DMMP. While there is no need for a permit (since this is proceeding under the State Enhanced Remedy portion of the 1998 ROD for the Upper and Lower Harbor), an environmental review needs to be equivalent for what we would do for a permit. (PC, AW, PS, rest of team)

It appears that there will be a need for a TSCA risk-based determination for the CAD cell and potentially for the upland area of the CDF should this project move forward. Consistent with the above question, we would also like to discuss how these determinations will be issued. (KT, CC).

It should also be understood that if EPA determines this project meets all its substantive requirements and it is approved after public comment, a c. 91 permit to use the facility will be required. (CC)

3. Alternative-Specific

Port of Davisville

There's reference to 14.5 acres at the Magnolia Street area of the Port of Davisville being "under agreement" (p. 30). That was the case 2 years ago; any updates? (AW)

With regard to the discussion of Broadway Street area (pp. 29-30) – On p. 29, it is stated that the area does not have adequate load bearing capacity and so it could only be used for staging in conjunction with Pier 2 (which isn't available). Then on p. 30 there's a discussion about ways to improve this area which would involve extending the existing bulkhead (resulting in more filling and dredging than would occur at South Terminal). It's not clear whether extension of the bulkhead would be the way to solve the issue of the unavailability of Pier 2, or whether even if this work were done, Pier 2 would still be needed. (AW)

In the discussion of potential impacts at Broadway Street area (pp. 30-31), there is an implication that the greater amount of filling (and possibly greater dredging) compared to South Terminal would mean greater impacts. Is there any information available regarding the quality of the resources that could be affected? (AW)

South Terminal

There is a reference to being "in discussions" with private landowner of two lots that would make up part of the South Terminal site (p. 56). This statement was made 2 years ago; are the discussions still not finalized? A similar question exists regarding easements for four properties referenced on p. 57. Are there problems in getting these necessary property rights? (AW)

Dry Dock #4

Please provide more detailed information on why Boston Blue Clays provide inadequate stability for the jack-up barge spuds (pp. 34-35). (PS)

As to the information on softness/instability of blue clay, is there any information in the submission beyond the single statement on p. 36? Also, is the book referred to on p. 34 the only basis for the conclusion that there is fine blue clay underlying the harbor at Dry Dock # 4 and the other Boston Harbor sites evaluated in the Tetra-Tech report (Appendix 2)? (AW)

The examples of the FAA's overhead clearance decisions in Appendix 7 are from 2007. At that time there were a couple of redesigns (refilings) awaiting FAA approval; one was for a structure over 250 feet. Is it possible to learn the outcome of those decisions? (AW)

4. Resource-Specific

The resource area overview map (Figure #5) identifies the mean higher high water ("MHHW") boundary line at the South Marine Terminal project area. NOTE: The

landward limit of Section 404 jurisdiction is the high tide line ("HTL") (aka the highest predicted tide of the year) or adjacent wetlands. Please document a high tide line value and provide revised impact values for the South Marine Terminal Project. (PS)

Is Fig. 5 correct? (CC)

Please identify a typical tidal range for South Marine Terminal project area. (PS)

The document, on pp. 121-122, concluded that the so-called isolated wetland is not federally jurisdictional, but the basis for this conclusion is not clear (and the discussion itself focuses on the Massachusetts Wetlands Protection Act, not the CWA). (AW)

Also, please provide a location for this resource area (isolated wetland) as well as information on why this area has been determined to be "isolated" rather than adjacent and neighboring. (PS)

The document indicates that the "high water mark" is the limit for the New Bedford Superfund site (p. 123). The high water mark is an unknown datum for me; please specify what this datum represents. (PS)

Repeatedly the document states that 1.43 acres of intertidal area will be impacted, but on p. 134, it states that “The intertidal portion of the full Impacted Area of the project is 1.61 acres….” Please explain. (AW)

Also, which water levels (MLLW, MLW, MHW, MHHW, and/or HTL) were used to determine the boundaries of intertidal shoreline areas that will be impacted by the South Terminal? (PS)

Please discuss the specific documentation in the submittal that supports the statement on p. 138 that the additional dredging (compared to the original plan) is not expected to cause a significant change in functions and values? (AW)

As to the description of mudflat areas (pp. 126-129); What size gradation limits were used to define "fines"? Also, how was the presence or absence of benthic invertebrates used to define "mudflats"? (PS)

Endangered Species Analysis - Why were piping plover, Northeastern Beach Tiger Beetles, and Atlantic Sturgeon not discussed as part of your endangered species analysis (pp. 227-232)? (PS)

Fisheries Concerns - Is the South Marine Terminal project area considered spawning, nursery, and/or foraging habitat for estuarine - dependent species such as winter flounder, summer flounder, scup, black sea bass and/or rainbow smelt? Is the project area mainly a migration pathway for anadromous fish, or does it serve as a more important foraging habitat? (PS)

Has an overall invasive species management plan been developed for the project? (PS)

Historic Properties - Have any adjacent historic properties and/or historic districts been identified within the upland area of potential effect? Have either the Wampanoag (Aquinnah) or the Mashpee Wampanoag Tribal Historic Preservation Officer ("THPO") requested an additional survey of "Palesols" in and adjacent to the project area (pp. 107-111)? (PS)

5. Project Description

Please provide a plan drawing depicting existing bathymetry throughout the South Marine Terminal project area. I am concerned about existing depths where the Gifford Street Channel Relocation and New Mooring Area are proposed (See Figure #5). Does the navigation channel shown on Figure #5 include the proposed Tug Channel? (PS)

Please provide documentation on the locations of previously dredged navigational channels (outside of the New Bedford Federal Navigation Project) in and adjacent to the South Marine Terminal Property. (PS)

Please provide a description and/or map of the specific parts of the federal navigational channel Apex anticipates dredging. (CC)

What is the total cubic yards of material to be dredged for this project? (CC)

Is it correct to assume the upland geophysical investigation began at MLLW? (p. 91) (CC).

Are more detailed plans (other than plan-view overview drawings) available for the proposed South Marine Terminal/Confined Disposal Facility? I am looking for typically cross-sections that show proposed fill areas, the proposed steel-sheet bulkhead, any adjacent riprap scour protection, and the proposed dredged areas. Please provide such plans if they are available. (PS)

Please provide a better description of how the South Marine Terminal will need to be organized up to support the construction of offshore wind turbines. Where will wind turbine components be stock-piled? How will the ancillary properties be used? Where will the wind turbine components be put together? Where will cranes be located? How will cargo ships be unloaded and jack-up barges be loaded? (PS)

Please provide a better description of the following: 1) How will cargo ships and the jack-up barges use the turning basin in front of the New Bedford State Pier to access and to egress the proposed South Marine Terminal Channel; and 2) How will these vessels be moored at the South Marine Terminal Basin when the site is used to support the installation of offshore wind energy projects. (PS)

Please clarify the weight bearing capacity of the CDF in pounds per square foot. (p. 80 seems to say 12,160 but p. 77 may say otherwise). Also, please clarify whether the weight of the cranes to be used at the facility are 600 pounds or 1,000-1,300 pounds (p. 84-85). (CC)

Section 4.3 of the document gives a description of why a gravel fill design has been recommended for the South Marine Terminal. This narrative details a range of potential ground loading values which are associated with typical offshore wind turbine construction areas. Based upon this discussion, it is clear that the trend in wind power is to install larger and larger wind turbines. Does the current gravel fill design provide for an appropriate range of live loading values that would allow for the construction of larger wind turbines at the proposed South Marine Terminal? (PS)

Please provide more details on the location and design of the Confined Aquatic Disposal ("CAD") cell where contaminated sediments from the South Marine Terminal Project and adjacent navigation channels will be deposited. Please discuss whether this document considered impacts associated with the construction of this CAD cell as part of this project. If not, were they already reviewed as part of the existing Superfund Project? (PS)

Construction Sequence - Please give a more detailed description of how siltation curtains and booms will be used to minimize turbidity impacts associated with in-water work. Given the range of tidal cycles within New Bedford Harbor, will siltation curtains be very effective in containing turbidity (pp. 251-252)? Please give more details on how tackifiers and polymer emulsions will be used to temporary stabilize construction areas (pp. 253-254). (PS)

6. Revised Design

The increase in proposed dredging in response to information from the tug boat pilots is discussed in Appendix 15. If the typical size of the largest cargo vessel is 90 feet, why is it necessary to increase the channel from 150 feet as originally planned to 175 feet *in addition to* adding a 100 foot tug channel? (AW)

Please explain the basis for DEP's decision not to do hydraulic conductivity analysis because the material to be placed in the CDF will be clean sand (p. 107)? (AW)

Please confirm that no further sediment sampling was conducted subsequent to the revised design of the project as presented in the January 18, 2012 submittal. (CC, KT, ES)

With the enlarged shipping channel dredging, has further archaeological study been conducted to ensure that no additional impacts to paleosols or other TCPs and archaeological features will be impacted by the expanded area? (MS, LJ) If not, please

explain the breadth of prior archaeological surveys conducted prior to the revised design and the basis for why no further surveys are necessary. (CC)

Please verify: have the tribes been notified by the State of this expanded dredging scope, and schedule for archaeological exploration, following the communication protocol agreed to at the March 2011 meting... i.e. the State provides adequate time frame for and information related to projected activities to allow the tribes to schedule monitoring if desired. (MS, LJ)

7. Mitigation Issues

Winter Flounder Spawning Habitat Mitigation - Section 7.2.1 of the document describes the basic design for the winter flounder spawning habitat mitigation area. This sub-tidal area is proposed to be filled to a depth of approximately -16.0 feet mean low lower water ("MLLW"). Please explain how this mitigation area is suppose to provide a positive impact for Roseate and Common Terns, who typically plunge dive only 1-2 feet to feed? (PS)

Intertidal Habitat Creation and Near-Shore, Shallow, Sub-tidal Enhancement Mitigation - Please provide an overview map of Superfund site OU-3, a 17,000 acre area outside of the New Bedford Hurricane Barrier (p. 321). (PS)

Successional Marsh Area Restoration/Enhancement - Please provide a better description of this proposed mitigation. Based upon a review of Figures #14 - #16, I am uncertain if this work is a fill and/or excavation activity. Please explain how the proposed work will enhance the hydraulic capacity of this tidal tributary. Has an invasive species management plan been developed for this mitigation yet? (PS)

Tern Survey: What is the status of the tern survey planned for the Spring/Summer of 2012 (pp. 325-326)? (PS)

Shellfish Mitigation: A mean shellfish distribution is used to estimate/extrapolate a value for the number of shellfish to be impacted by the project. Based upon the results of the shellfish survey (Appendix 52), it doesn't appear that shellfish distribution was not consistent throughout the survey area. Please explain why a mean shellfish value is an appropriate way to estimate the scope of potential impacts for the purposes of determining the scope of shellfish mitigation. (PS)

Floodplain Mitigation: What mitigation is the State proposing to compensate for the 27.33 acre-feet of lost flood storage associated with the project (pp.112-114)? Please explain how the floodwater rise calculations were done. I thought that the flood water rise should be closer to 0.5 inch under 100-year flood conditions. (PS)

8. Miscellaneous Questions

Contaminated Sediments - The document sometimes refers to contamination in regards to parts per million ("ppm") and other times as mg (milligram?) per kilogram. Please provide a conversion factor between these two data. (PS)

New Bedford Hurricane Barrier - What is status of coordination with the U.S. Army Corps of Engineers Levee Safety Office regarding potential impacts from this project on the adjacent New Bedford Hurricane Barrier? (PS)

Similar Habitats - Where is Fort Taber site (p. 300)? (PS)

9. Environmental Justice

Neighborhood Analysis - Please identify any substantial existing traffic problems within the community of concern. Please provide additional description of the Cove Street Residential Area (pp.116-120). Please provide more details on what the State is doing to improve intersections along Route 18 adjacent to the New Bedford State Pier to improve access to the waterfront (p. 295). (PS)

With regard to the Construction Management Plan, are there additional details about a more proactive approach to mitigating construction-related impacts (e.g. commitment to diesel retrofits). Also, since the project is located in close proximity to an EJ community, please provide more information on steps to be taken to engage this community during the construction phase (e.g. who will be the point of contact to respond to questions from the community about construction). (AB, TT)