



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

February 9, 2001

Mr. James Shafer, Remedial Project Manager  
US Department of the Navy, Northern Division  
Code 1823, Mail Stop #82  
10 Industrial Highway  
Lester, PA 19113-2090

RE: Remedial Design Work Plan, 100% Design Submission, Response to RIDEM  
Comments 85 % Design Submission  
McAllister Point Dredging, Naval Station Newport

Dear Mr. Shafer;

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed to above referenced document and the Navy's response to comments on the Eighty Five/Sixty Percent Design Document, both dated 8 January 2001. Please find attached comments generated as a result of this review.

RIDEM looks forward to working with the Navy on the dredging of McAllister Point Landfill. If you have any questions or require additional information please call me at (401) 222-2797 ext.7138.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Gottlieb".

Richard Gottlieb, P.E.  
Principal Engineer

cc P. Kulpa, DEM OWM  
K. Keckler, USEPA  
M. Griffen, NSN  
C. Tippmann, FWEC

McAllister Dredge 3-083100

2367

**Evaluation of Response to Comments  
60 % Design Submission  
Remedial Design Work Plan  
McAllister Point Landfill**

**3. Section 2.5, Weekly QC/Progress Meetings,  
Page 2-3.**

The Office requires a weekly schedule of field activities in order to schedule inspections. This schedule should be submitted on a weekly base. The Office also requests twenty four-hour notification for any cancellation of field activities.

Evaluation of Response.

The Navy has indicated that the 100 % design submission can be used by RIDEM to schedule field visits. In addition, a two-week "look ahead" will be included in the minutes. As schedules delineated in final Work Plans are seldom adhered to RIDEM agrees with the Navy's proposal to include a two-week "look ahead" in the minute meetings. Although not stated, it is assumed that this look ahead will be designed so that field visits can be schedule (that is, it will not be generic in nature). As an illustration, a generic schedule stating that dredging a backfilling will continue in the next two weeks will not provide needed information for inspections. A schedule indicating which days dredging, sampling, and back filling will occur will allow for inspections. Please indicate which format will be presented in the meeting notes.

In the response the Navy has not indicated whether notification for cancellation of field activities will be provided. Please confirm that this will be incorporated into the Plan.

Evaluation of Second Response.

The Navy has stated that RIDEM should contact FWENC every two days to determine what task will be performed at the site. The State simply requested that a copy of the weekly schedule that FWENC employs to perform work at the site be sent to the DEM (This was done on other projects on the base. The DEM is aware that logistic problems may result in deviations from the schedule). Therefore, the DEM reiterates its request that the Navy submit a weekly schedule, similar to that submitted for other sites, so that field inspections can be scheduled.

**5. Section 2.9, Regulatory Agency Personnel Site Visits,  
Page 2-4.**

The Navy has requested that the regulatory agencies submit all questions or comments in writing to the Navy. In concert with this requirement, the Navy must respond, in writing, to all questions or comments submitted by the regulatory agency in a timely manor.

Evaluation of Response

The Navy has indicated that they will respond in writing within five working days. The Office agrees with these provisions, however, during any remedial activity concerns will be raised which will require immediate action. Waiting five business days for a response to this concern or attempting to locate an individual in the State of Pennsylvania would be inappropriate. Therefore, as was done at other sites, the Navy should provide an on scene representative who can address concerns, which warrant immediate action.

#### Evaluation of Second Response

The Navy has stated that an on scene Naval coordinator will be provided to address States concerns, which warrant immediate attention. However, the report states that any request for additional work to be performed must be submitted in writing. Please define additional work.

**12. Section 4.2.4, Turbidity Curtain,  
Page 4-3.**

Please include a map depicting the location of all turbidity curtains, including temporary curtains, to be installed in-between dredge areas.

#### Evaluation of Second Response

The response package has excluded this comment. Please respond to the State evaluation of the Navy's response

**17. Section 4.4, Waste Dredging and Transport – Nearshore,  
Page 4-5, Paragraph 1.**

Once an area has been dredged to the bottom of the contaminated sediment layer the material below this layer will be inspected to determine if landfill debris is present.

Please indicate what measures will be used to determine if landfill debris is present. The Office recommends that at a minimum two test pits be dug for each 50-ft<sup>2</sup> cell to determine if landfill debris is present.

#### Evaluation of Response

The Navy has indicated that once it has been determined that the bottom of the excavation has been reached an additional bucket of sediment will be removed and set aside. Afterwards a confirmatory sample will be taken. Although not stated, it is assumed that the material, which was set aside, will be sent off site for disposal. Please confirm.

The Navy has indicated that visual inspection of the material in the bucket will be used to determine whether all of the landfill debris has been removed. Since the depths of many of the excavations are shallow, the Navy should also visually inspect the area, (once the turbidity has settled) prior to backfilling. Please modify the Plan accordingly.

## Evaluation of Second Response

The response package has excluded this comment. Please respond to the State evaluation of the Navy's response

### 22 **Section 4.6, Staging of Dredged Material, Page 4-8, Paragraph 3.**

This paragraph states that dredged material which contains excessive moisture will be blended with a solidifying agent to create a product suitable for off site disposal. Section 6.6.1 states that cement kiln dust, Portland cement, or quicklime will be used as a solidifying agent. Please be advised that lime products or products which generate heat may not be used on PCB contaminated soil as this will release the PCBs to the atmosphere.

## Evaluation of Response

The Navy has stated that lime will not be added to material that is expected to contain PCBs. Landfills, by nature are heterogeneous, and materials that erode from landfills are expected to be similar in nature. In addition, at other well studied site, including site on the Navy Base, the contaminants found during the removal action were not reflective of that based upon the investigation. Therefore, it would be inappropriate to apply the lime limitation to those piles "expected" to contain PCBs. As such the piles should be tested before adding lime. This may be done using field tests, which generate quick and inexpensive results, or it may be done as part of the characterization of the piles for disposal. Finally, the Navy has noted that lime products will not be added to the piles. The Plan should state that lime, Portland cement or other drying agents, which generate heat, will not be added to the piles.

## Evaluation of Second Response

The Navy has noted that quicklime has been added at other sites with higher levels of PCBs. Please confirm that air samples were tested for PCBs at these sites and whether the levels were within regulatory guidelines

### 31. **General Comment**

It is stated that stockpiles will be no larger than 500 cubic yards. Please state how high piles will be and how long it is anticipated to dewater the pile. The concern is that sufficient area is provided for the dewatering activity. Also, please state if stockpiles will be covered while not being added to prevent dust from migrating from the materials handling facility

## Evaluation of Response

The Navy has indicated that the piles will be covered if dust is noted. As the objective of storing the piles is to aid in dewatering, (removal of water from soil to reduce shipping and disposal cost) the piles should be left continuously covered. This will avoid problems during rain events,

which will result in resaturation of the once dried out pile.

#### Evaluation of Second Response

The Navy has stated that the dewatering activity is being performed to meet the requirements of the disposal facility not to reduce disposal cost. The Navy is being charged by the ton for the disposal of this material. Precipitation events will increase the weight of the soil and increase the disposal cost. If at a minimum, the piles are covered prior to rain events, this will avoid unnecessary, additional, expenditures for the disposal of this soil. The Office therefore reiterates its comment.

#### 32 General Comment

Because sediments are being excavated under water there is a high potential that contaminants could migrate into areas which have previously been cleaned (i.e. turbidity). To reduce this potential the following procedure is recommended: Excavate the first row of grids. When it is thought that all the contamination has been removed place a silt fence along the first row of grids and perform confirmation sampling. If sampling is acceptable begin excavating the next row of grids. When this second row of grids is thought to be contaminate free erect a silt fence along the length of grids and perform confirmation sampling on second row. If confirmation sampling is acceptable then backfill the first row of grids. Repeat the process until all excavations have been completed.

#### Evaluation of Response

The Navy has indicated that a turbidity curtain will remain in place until sample results have confirmed that PRGS are meet. The Office's concern was that during the dredging process removal of the silt curtain for a dredge area which is clean while active dredging is performed in an adjacent cell will result in contamination of the once clean cell by the adjacent contaminated cell. In order to avoid this problem the Office recommends that the Navy keep the turbidity curtains up around the clean cell until the adjacent cell is proven to be clean. This will avoid cross contamination. During the 60 % Design meeting the Navy agreed with the Office recommendation. In order to avoid confusion please modify the Plan so that these provisions are explicitly stated.

#### Evaluation of Second Response

The Navy has stated that the turbidity curtains will remain in place in between clean cells and active dredging cells. This is acceptable to the State. In an effort to reduce turbidity the Navy may elect to employ a closed, smooth teeth, clamshell at the site (as opposed to an open clamshell). The closed clamshell will reduce the turbidity generated during the dredging process.

**Evaluation of Response to Comments**  
**85 % Design Submission**  
**Remedial Design Work Plan**  
**McAllister Point Landfill**

**6. Section 4.2.6, Material Handling Facility Construction –Tank Farm 5 Facility**  
**Page 4-5.**

A layer of sand should be placed in between the geomembrane and processed gravel to prevent holes from being punctured into the membrane as a result of the stockpiles and trucks going over the gravel. The facility proposed for Derecktor Shipyard is to handle the dredge material from the elevated risk (contaminated) areas. It is proposed to have an asphalt base. This base can be porous which in turn can let possibly contaminated water from the dredge material to seep into the ground. A geomembrane should also be placed under the asphalt to prevent potential groundwater contamination. Runoff, in particular, from the Derecktor Shipyard facility will most likely require treatment prior to discharge to the environment. Please make appropriate accommodations for runoff treatment. In addition, please explain why it is necessary to have two handling facility locations.

Evaluation of Response

“The processed gravel will be sufficiently graded to prevent puncturing of liner, therefore a sand layer is not needed.”

It is assumed that either the Navy contacted the manufacture or the manufacture's specifications for the geomembrane states that it can be placed over process gravel without being compromised. Please submit this information to the State.

**8. Section 4.3, Ocean Haul Road Construction**  
**Page 4-6.**

Paragraph 2 of this section indicates that the maximum extent of the boom on the excavator can only reach 50 feet. At this distance, the maximum depth of excavation will be zero feet due to the arc that is formed by the motion of the boom. Therefore, the ocean haul road needs to be moved in a westerly direction so that appropriate excavations can be made within the contaminated areas. Some areas of the nearshore excavations are 160 feet wide. In addition, this paragraph notes that spur roads will be constructed. These spurs can be determined at this time and therefore, should be shown on the plan.

Evaluation of Response

Based upon the figure presented the excavation in the central portion of the site will be at or just beyond the maximum extent of the boom. The Plan should either move the haul

road, widen the haul road, or propose a spur in this area.

**Evaluation fo Resposne to Comments**  
**Draft Habitat Mitigation Work Plan**

**1. Section 1.1.1, Nearshore Remediation;  
Page 1-2.**

The Plan calls for the use of R-3 as the primary fill agent with more representative material being used for the top two to three feet stone of sediment. Placing a uniform layer of appropriate top sediment across the site will be difficult and it is likely that some areas will not be at the desired thickness. Further erosion events, storm and other actions will result in a movement or loss of this material, which result in the habitat being composed of primary R-3 stone as opposed to the native sediment configuration. In order to minimize these problems the Office recommends increasing the natural fill material depth to five feet.

Evaluation of Response

The Navy has stated that the presence of the existing sediment attests to its ability to withstand erosive forces in this area. After the construction of the McAllister Point Landfill, the existing sediment was not able to withstand the erosive forces in the area and erosion was observed at the toe of the landfill (the erosion exceeded one foot in a number of locations). Therefore the Office reiterates its concerns and the Navy should increase the depth of the substrate in the area.

**11. Section 2.2.4, Placement;  
Page 2-4.**

The plan calls for the construction of rock reefs at the site. Please be advised that approval from the U.S. Coast Guard and CRMC may be required for these reefs.

Evaluation of Response

The Navy has noted that the Dutch Island Study only required approval from the ACOE. Although not stated it is assumed that the Navy contacted the CRMC and Coast Guard to ensure that approval from these agencies was not required. Please confirm

**12. Section 2.2.4, Placement;  
Page 2-4.**

The rock reefs appear to be located in the vicinity of the existing eel grass beds. Please include a discussion of the effects of these reefs on said beds. This discussion should at a minimum include the following: note whether the reefs will occupy areas that the eel grass might colonize, (if this is true the reefs should be moved), evaluate whether the reefs will support crabs, or herbivore fish which will adversely affect the reefs, evaluate

the hydrologic effects of the reefs, if any on the beds, etc.

#### Evaluation of Response

The Navy has stated that rock are located adjacent to eel grass beds at other locations in the bay and therefore, the beds are not expected to be affected by hydrological conditions caused by the construction of the reefs. Eelgrass beds are sensitive to a number of factors including currents. The comparison to rocky environments at other locations in the bay is inappropriate as the hydrologic differences may exist. The Office recommends that in order to avoid any potential problems that the reefs be located at least one hundred feet away from the eel grass beds (this will affect the two northern reefs).

**18. Section 3.5.1 Harvesting and transplanting seagrass from the dredge site;  
Page 3-2.**

The Plan states that a clamshell will be used to remove the eel grass beds. Use of a dredging machine to remove fragile eel grass may result in the destruction or loss of the eelgrass (action of bucket will result in eelgrass being destroyed or buried). Please provide documentation that a clamshell bucket has been successfully used to remove eel grass beds with minimum loss of said beds (the Navy may also wish to consult experts in this field).

#### Evaluation of Response

The Navy acknowledges that the proposed method will result in the loss of eelgrass, however the amount of eelgrass at the site is greater than that needed for transplant. Based upon the Navy response it appears that the Navy will harvest more eelgrass than what is needed. Rather than letting this eel grass go to waste, the Office suggests that the Navy contact Save the Bay, URI or other groups which might take the "extra" eel grass and plant it at other needed locations in the bay.

**26. Section 3.8, Specify Criteria for Success;  
Page 3-5.**

The Plan calls for monitoring of both the restored bed as well as the rest of the bed. The Office approves this proposal as the restored area as well as the rest of the bed may have been affected by the dredging operation. However, the Navy has proposed comparing the restored area to the rest of the bed. This comparison would be inappropriate, as the rest of the bed may have been affected by the dredging activity. The Office recommends performing the comparison to predredging conditions in the bed or to other healthy beds east or west of Jamestown. DEM may be contacted for a list of potential beds for comparison.

#### Evaluation of Response

The Navy has indicated that the only adverse affect, sediment deposition, will be monitored. Please confirm that no dredging boat traffic will occur in this area.

**27. Section 3.8, Specific Criteria for Success;  
Page 3-5.**

The Plan characterizes success as 25 % in the first year, 50 % in the second and 75% in the third, fourth and fifth years. The latter part of the criteria will characterize stagnant growth 75 % for three years as success. Please provide documentation that these criteria reflect natural conditions, that is, as opposed to continual growth for five years, natural conditions normally result in dramatic growth in the first three years and stagnant conditions in the next two.

**Evaluation of Response**

The Navy has indicated that 75 % bottom coverage will be the success criteria. Please indicate whether this value applies to both sites, (the original sites and the transplanted sites) together, separately, etc. In addition, please indicate when this criteria will be applied, (year 1, 2,3,4, etc). It should be noted that eel grass beds that had significant growth in the first year, decline or failed in the second, third or fourth year. Therefore, these criteria should be applied with sufficient time to confirm that the transplant had succeeded, (i.e. at least seventy five percent sustained growth in the fourth year). Finally, the Success criteria should include density specifications. That is, the density of the plants will be equivalent to predredge densities.

**27. Section 3.9, Duration Responsibility and Consequences Compliance;  
Page 3-5.**

“The Navy’s responsibility for successful eel grass habitat mitigation will end when the success criteria is met or four years, which ever is longer.”

Please modify the above as follows: “It is anticipated that the Navy responsibility for successful eelgrass habitat mitigation will end the when the success criteria are met or five years, which ever is longer. At that time the Navy will request approval from the regulators for termination of monitoring requirement. Should eelgrass restoration via the proposed method prove unsuccessful the Navy will present alternative methods to restore the area.”

**Evaluation of Response**

The Navy has stated that the Navy in conjunction with the regulators will decide if additional eelgrass mitigation is warranted should the proposed mitigation fail. The decision as to whether additional worked is required is determined by the regulators, not by the entity being regulated, specifically the Navy. Therefore, this section should be modified to state that the regulators will decide if the criteria have been met and if additional work is required if the criteria was not met.