



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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June 15, 2004

Curt Frye  
U.S. Department of the Navy  
Engineering Field Activity Northeast  
10 Industrial Highway  
Code 1823-Mail Stop 82  
Lester, PA 19113-2090

*RE: Remedial Investigation Work Plan, Site 17, Building 32 Gould Island, Naval Education and Training Center, Newport, Rhode Island*

Dear Mr. Frye,

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed the Navy's response to comments on the Remedial Investigation Work Plan, Site 17, Building 32 Gould Island. Attached is an evaluation of the Navy's response to comments.

The Navy has stated that the Remedial Investigation (RI) will be limited to Building 32, however additional structures found at the northern end of the site will be investigated as scoped in the Draft Final Work Plan. As stated in the previous correspondences, a number of concerns have been raised concerning the scope of the sampling effort for Building 32, as well as, the other structures on the northern end of the island. The Office of Waste Management is aware that the Navy has limited funds to perform these investigations. It is therefore recommend that these limited funds be directed toward the investigation of Building 32. Other known source areas on the northern end of the island, such as the free product associated with the Power Plant or TPH contaminated soil east of the acid storage building can be address at a later time either under the State program or under the Federal Facilities Agreement.

If the Navy has any questions concerning the above, please contact this Office at (401) 222-2797. ext. 7111.

Sincerely,

Handwritten signature of Paul Kulpa in cursive.

Paul Kulpa, Project Manager  
Office of Waste Management

cc: Mathew DeStefano, DEM OWM  
Richard Gottlieb, DEM OWM  
Kymberlee Keckler, EPA Region I  
Cornelia Mueller, NETC

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**Evaluation of Navy's Response to Comments  
from RIDEM on the Draft Final RI Work Plan,  
Site 17, Gould Island**

**General Comment:**

*As noted in the title, the work plan is limited to the investigation of Building 32. It is not an investigation of the Power House, the Acetylene Generator Building, or other potential source areas on the northern end of the island. Although limited sampling is proposed in the vicinity of some of these structures, the sampling is insufficient to support a no further action position for these sites.*

**Response:**

As noted by the USEPA at the meeting held 4/8/04, the IR Site is limited to Building 32. However, some of the additional structures, referred to in this response summary as "review areas", will be investigated as scoped in the Draft Final Work Plan, but are not part of the RI. Others that are part of or clearly associated with Building 32 will be investigated as part of the RI. Please refer to Table 1 and Table 2 attached at the end of these responses.

Please also refer to the response to Comment No. 16 below.

*Evaluation of Navy's Response*

*The Navy has stated that, "some of the additional structures, referred to in this response summary as "review areas", will be investigated as scoped in the Draft Final Work Plan, but are not part of the RI." As indicated in the comments submitted to date a number of the proposed samples in these areas are either in the wrong locations and/or are inadequate to investigate the area. The Office of Waste Management is aware that the Navy has limited funds to investigate the sites. The Office of Waste Management is willing to evaluate proposals by the Navy to investigate these sites at a later date, when sufficient funding becomes available.*

**Comment 1: Section 1.1 Background,  
Page 1-1.**

*This section notes that the remedial investigation report will be prepared in accordance with EPA Guidance. Please note that the remedial investigation must also be prepared in accordance with RIDEM Remediation Regulations.*

*The Navy has not modified the Work Plan. Be advised that in accordance to the Federal regulatory requirements under CERCLA the most conservative approach should be implemented at the site. Please modify the work plan to state that the most conservative approach will be applied to the site.*

**Response:**

The following text will be incorporated into the first paragraph of the section cited above:

**“The Navy is the lead agency for the site, and the USEPA is lead regulatory agency under the Federal Facilities Agreement. Where differences between EPA and RIDEM exist in technical approach for conduct of the RI, EPA technical guidance and policy shall be used. Navy policy for conduct of remedial investigation and risk assessment will be adhered to at all times.”**

*Evaluation of the Navy's Response*

*The Federal Facilities Agreement is not designed to usurp or waive State laws, regulations, guidance or policy. As an illustration Section 2.7 states that “The Navy shall develop, implement and report upon Feasibility Studies for each AOC or OU of the Site in accordance with the requirements of this agreement, the NCP, applicable EPA regulations, policy and guidance, and to the extent that they are legal enforceable relevant and appropriate requirements in accordance with Section 121 of CERCLA, and this Agreement: Rhode Island Hazardous Waste Management Act and State regulations, policy and guidance.” Therefore, it is incorrect to state that state regulations, guidance or policies do not apply to the site. Please modify the work plan to reflect this fact.*

**Comment 5: Section 1.5, Schedule and Regulatory Oversight  
Page 1-6.**

*This paragraph notes that regulators will be required to provide their own transportation for site inspections. Assuming RIDEM's inspector will make an average of two inspections per week and that the investigation will last for six months (52 trips) and additional \$41,600 will need to be added to the DSMOA to cover these costs. (Cost based on chartered boat @ \$800/day).*

*Evaluation of Navy's Response:*

*The Navy has stated “the Navy will provide transportation to and from the island at regular times to be specified on days where work there is scheduled to occur.”*

*As previously requested, please state if transportation will be provided only when workers, equipment, etc. are transported to the island, or as independent of these activities.*

**Response:**

The Navy or their contractors shall provide regular, once daily transportation as needed for work crews visiting the site. Oversight transportation to and from the island can rely on and use these scheduled trips, and should be coordinated with the Navy site representative.

*Evaluation of Navy's Latest Response*

*The Navy has stated that the regulatory oversight will have to be done in conjunction with the "once daily transportation" associated with work crews. In the past work crews were dropped off at the island and left there until the end of either an eight or ten-hour working day. This would translate into an inspector spending eight to ten hours at a site for an inspection that typically last from one to three hours. In general, due to workloads and requirements at other sites, it is not possible for the Office of Waste Management to provide oversight inspections, which are 8-10 hours long. In order to provide inspections of this duration it will be necessary for the Office of Waste Management to employ an oversight contractor at the site. This will necessitate modifying the DSMOA grant to account for the additional cost. Finally, the Office of Waste Management does not understand the difficulty in meeting this request. At the small boat pier located on the U.S. Navy base there are a number of small boats, (less than twenty to twenty five feet), which are used to transport individuals to the island. In the past an employee from NUSC would transport inspectors to the island and pick them up at a pre arranged time. Since the boat trip to the island takes only fifteen minutes, this did not represent either an inconvenience or arduous task.*

**Comment 6    *Section 2.2, Site History*  
*Page 2-5.***

*This section of the report includes a discussion of groundwater contamination at the site. The report should note that free product was observed south of the former Power Plant.*

*Evaluation of the Navy's response*

*The presence of free product near the Power House has been brought to the attention of the Navy in two previous comment packages. This information was obtained from previous reports submitted by the Navy. The function of the RI work plan is to identify areas, which require*

*additional investigation and or remediation. Unless the Navy intends to propose a remedial action this area must be included in the work plan.*

Response:

The commenter is referred to the response to the General Comment, above.

*Evaluation of Navy's Latest Response*

*See Evaluation General Comment*

**Comment 13 Section 2.5.5, Decision Rule, Item 1  
Page 2-24.**

*Please modify this section to note that in accordance with RIDEM Remediation Regulation 8.01A the cumulative excess lifetime cancer risk cannot exceed  $1 \times 10^{-5}$ . In addition, Regulation 8.02A does not allow for a cumulative HQ greater than one for any target organ*

*Evaluation of the Navy's Response*

*The Navy agreed with the comment, however the section has not been modified to reflect the RIDEM Remediation Regulations. Instead a reference is made to a subsequent section, which deals with the State Regulations. Please be advised that this section must state that the cumulative cancer risk cannot exceed  $1 \times 10^{-5}$ . This would make the acceptable risk rank from  $1 \times 10^{-5}$  TO  $1 \times 10^{-6}$ . Please modify the work plan as agreed.*

Response:

The Navy concurs and the cited section will be revised as noted above.

*Evaluation of Navy's Latest Response*

*Navy has addressed the comment.*

**Comment 14 Section 3.0 Sampling and Analysis Plan  
Page 3-1.**

*A number of studies have been performed at this site. Soil, concrete, sediment and source samples have been taken. As typically done for Work Plans of this nature the report should include a map depicting all historic sample locations. The report should also include a map and a table with the results of these sampling efforts. The Navy may wish to provide this*

*information on separate maps. It is recommended that this information be provided on large fold out maps.*

#### *Evaluation of the Navy's Response*

*The Navy has indicated that the requested information has been included in the report. A review of Appendix A indicates that this is not the case. Please provide the requested information.*

#### **Response:**

The Navy has provided background information in Appendix A; however, data from the PCB investigations conducted by Foster Wheeler Environmental Corporation (FW) have been provided on separate deliverables, as well as in the recent version of the EGIS. Reproducing such a volume of data and maps on paper seems counter-productive. However, in an effort to meet RIDEM's needs, an additional appendix will be added to the work plan to provide a series of maps and data collected by FW.

#### *Evaluation of Navy's Latest Response*

*Navy has addressed the comment.*

#### **Comment 16**

##### ***Section 3.1.1.1, General Approach for Boring and Well Installation, Page 3-3.***

*This section of the report includes tables and figures delineating the proposed sampling locations. In past correspondence and meetings dealing with the previous submittals of the work plan or other documents, the regulatory agencies identified known or potential areas of concern which warranted additional investigations, such as leach fields, discharge points from sludge tanks, areas of free product, etc. The Navy indicated that these areas would be addressed. A review of the current work plan reveals that this is not the case. Therefore, please modify the work plan to include the investigation of areas of concern previously identified by the regulatory agencies.*

#### *Evaluation of the Navy's Response*

*The Navy has stated that the regulatory agencies concerns with respect to past correspondences have been addressed. Further all potential source areas have been included in the work plan. As demonstrated by the comment packages generated at this site, the regulatory agencies concerns with respect to the scope and the implementation of the work plan has not been addressed. In regards to potential source areas below is a list of areas of concern previously brought to the attention of the Navy. The Navy's position*

*concerning the scope of the investigation has been fluid as to whether it is limited to Building 32 or encompasses the entire northern section of the island. Areas of concern listed below include non Building 32 structures. If it is the Navy's intent to limit the investigation to Building 32, these other areas of concern may be addressed at a later date*

{The comment described 21 structures or areas, referred to within this response summary as "Review Areas", which are summarized in Table 1 and table 2, attached at the end of these responses}

Response:

The IR Site includes only Building 32. The Review Areas cited in the comment, and how they will be addressed, are summarized in Table 1 and Table 2, attached to this response summary. Items in Table 1 are considered integral with Building 32 and will therefore be addressed as part of the RI. Items in Table 2 are not considered part of the IR Site; however, the Navy intends to investigate these areas in conjunction with the RI field effort to achieve economy. The RI Work Plan will discuss these investigation activities in a separate section or appendix. Please also refer to the response to Comment No. 1.

*Evaluation of Navy's Latest Response*

*See evaluation to general comment.*

**Comment 16a**

***Section 3.1.1.1, General Approach for Boring and Well Installation, Page 3-3.***

*The Results of the soil gas survey for Building 32 were included in the report. However, a black and white version of the color survey results was submitted. The isopleths could not be distinguished in the black and white version. Please submit a color version of the report for review as it may recommendations concerning sample locations.*

Response:

The reviewer should refer to the original soil gas report provided as Appendix B to the SASE report for the site (Draft Final TtNUS, December 2000), which is available in the administrative record (CD 5 of 5).

*Evaluation of Navy's Response*

*Typically information, which is used in support of a sampling location, is provided in the work plan. This is the rationale behind including the black and white maps in the report. As stated in the comment the isopleths could*

*not be distinguished in the black and white version. In the future, please provide color versions of this information.*

**Comment 18**

***Section 3.1.1.1, General Approach for Boring and Well Installation,  
Page 3-3.***

*During the demolition and other activities a number of areas were uncovered, such as the partially sump filled with blasting sand located beneath the sand blasting booth, the sump located beneath the former acid storage shed, etc. These areas were not addressed during the previously sampling efforts, as their existence was not known. Please modify the report to include sampling of these and similar areas at the site.*

*Evaluation of the Navy's Response*

*The Navy has stated that the aforementioned sump and other delineated structures will be investigated as outlined in Section 3.2.3, UIC evaluation. Section 3.2.3 notes that a sample will be collected from any residue found in the depression associated with the UIC and a sample of soil or sediment will be collected at the discharge location for the UIC. Although not stated, this will entail test pitting at the site. As an illustration, the soil and sand blast debris in the sump in the sandblasting booth will have to be removed and sampled. The base of the sump will have to be inspected in order to ascertain whether a floor drain is present. The floor drain will then have to be tracked to see if it discharges to a UIC. In order to avoid confusion in the field the work plan should specify that test pits would be dug at the site.*

**Response:**

The Navy believes the sump investigations can be accomplished without excavation of test pits. However, the first effort of clearing and investigating the drain system needs to be conducted to make this determination.

*Evaluation of Navy's Latest Response*

*As stated in the illustration for the sand blast sump, the soil and sand blast debris in the sump in the sandblasting booth will have to be removed and sampled. The base of the sump will have to be inspected in order to ascertain whether a floor drain is present. The floor drain will then have to be tracked to see if it discharges to a UIC. Table I in the response package states that a boring will be drilled in this location. A boring will not allow the investigator to determine if a depression or drain is present and it will not allow the investigator to track the drain to a discharge location. As such, the Navy's proposed action will not meet the basic requirements for the*

investigation of this area. Therefore, please address the comment as requested.

**Comment 21 Section 3.1.1.1, General Approach for Boring and Well Installation, Page 3-3.**

*The Work Plan calls for the use of soil borings to collect subsurface samples. At a number of locations it will be necessary to dig test trenches, (i.e. excavation and sampling of bottom of sumps, inspection of bottom of sumps for drains, tracking pipes leaving structures, etc). Please modify the report to include test pitting at the site.*

*Evaluation of the Navy's Response*

*The Navy has noted that there are infiltration concerns associated with digging into the foundations. Potential infiltration concerns are not associated with the digging of test pits outside of the foundations and/or removing fill placed into trenches to inspect for drains or UICs. Therefore, test pits can be dug in these areas. In regards to the foundations, the Navy acknowledges that in order to ascertain whether a release has occurred beneath a trench or along a pipe run, it will be necessary to excavate. However, this action can be done if and when the foundations are removed. If the Navy does not intend to remove the foundations, then a series of subsurface samples from beneath the trenches and along the pipe runs can be collected via borings. If the foundations are to be removed, then test pits can be dug and sampled, and then covered with poly until the entire foundation is excavated.*

**Response:**

It is the Navy's understanding that the regulatory parties prefer to leave the foundations in place until the site can be fully evaluated for VOCs in soil and groundwater. Therefore, the Navy has opted to use a series of borings to evaluate trenches and piping runs as described in the comment above. The Draft Final work plan includes a series of 15 borings to accomplish this task, and more will be added as described in Table 1 of this response summary.

*Evaluation of Navy's Latest Response*

*The original request to leave the slabs in place came from the Office of Waste Management. As indicated in the comment above the Office of Waste Management supports the position to dig test pits in these areas. As stated, this can be done while at the same time addressing infiltration concerns by using poly etc.*

**Comment 26 Section 3.2.1.4, Bedrock Monitoring Well Installation,  
Page 3-21.**

*The report state that the bedrock well screen will be placed based upon the results of the packer test and rock core recovery. Screen intervals for monitoring wells are placed based upon contamination levels and not necessarily the ability of a fracture to produce water. (that is, it is better to a screen a low yield portion of the bedrock that is contaminated then a high yield portion of the bedrock that is clean). In order to avoid confusion the report should clearly state in this section that the wells will be screened in the most contaminated zone. The nature of the screening should also be discussed.*

*Evaluation of the Navy's Response*

*The Navy concurs with comments and stated that the work plan would be revised to include a discussion stating the zone of highest contaminant concentration will be targeted for the screen zones. Please indicate which portion of the revised work plan contains this discussion for bedrock wells.*

**Response:**

The last paragraph of Section 3.2.1.6 provides the description of discreet zone evaluation and sampling. Note that this section will be revised in accordance with EPA Comment No. 1, enclosure (1) of this Response Summary.

*Evaluation of Navy's Latest Response*

*Response to EPA comment number one appears to state that samples will be collected prior to performing a transmissibility test. The sampling results will be the primary method to determine sample interval. Please confirm.*

**Comment 27 Section 3.2.1.7 Groundwater Sampling,  
Page 3-25.**

*The report has proposed collecting water samples via the low flow method. In addition to low flow sampling, all newly installed wells should be sampled using a conventional bailer. The results of the two analyses will be compared and a decision will be made as to whether modifications in the sampling method are necessary in any subsequent sampling event.*

### *Evaluation of Navy's Response*

*Current guidance acknowledges that low flow sampling may be problematic in stratified screen zones. That is, the low flow technique samples a narrow portion of the screen zone. Placement of the low flow sampler higher or lower in the screen interval may produce different results. To overcome this problem it may be necessary to take multiple samples along the screened interval and screen them in the field. The stratification problem has been found even in aquifers that were thought to be homogeneous. The Office of Waste Management request is simple. In all newly installed wells either a series of samples should be collected and tested or a bailed samples will be collected along with a low flow sample. If the bailed results for organics are higher than the low flow sample it may mean that the low flow sampler needs to be placed in a different portion of the aquifer.*

#### **Response:**

The reviewer should refer to the response to EPA comment No. 1, enclosure (1) of this response summary regarding discreet zone sampling. The Navy does not intend to collect samples with bailers at this site as stated in previous correspondence.

### *Evaluation of Navy's Latest Response*

*EPA comment number 1 deals with bedrock wells. Assuming that all of the wells will be screened in the bedrock, sampling the bedrock prior to performing a transitivity test is acceptable. If the wells are to be screened in the overburden procedures similar to those employed at NUSC Disposal area can be applied, (screening development water with a PID/FID to determine where the hottest zone is located in the ten foot well screen, placing low flow sampler in this zone). Note this procedure may also be applicable to bedrock wells if they are developed prior to sampling.*

#### **Comment 30a Section 3.2.3, UIC Evaluation, Page 3-33**

*The plan notes that residue samples, if present, will be collected from a potential UIC near the entrance to the plating room. In addition to the residue, a core is normally taken of the soil at the base of the UIC. The core is extended down to native soils and suspect areas are sampled. This procedure has been applied to other UICs on the island and the base. Please modify the work plan to reflect this requirement*

Response:

The work plan will be revised to reflect this requirement.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment.*

**Comment 31 Section 4.0 Quality Assurance Quality Control,  
Page 4-1.**

*The report states that the site samples will undergo TPH analysis for DRO organics. Please be advised of the following requirements with respect to TPH analysis by GC methods: The TPH test method employed must be able to detect the full range of petroleum products found at the site (if both light and heavy oils are present two different TPH test methods will have to be employed). The GC test method or any modification of a test method must be designed for the petroleum product of interest. All GC must be run to the base line, all petroleum products must be quantified, standards must be run with the analysis on the same GC, and copies of the GC for both the standards and samples must be included in the report. Since, unlike the lighter oils, there is considerable variability in the chromatograms for heavy oils, (i.e. No 5 oil), all petroleum "humps" must be quantified. Please modify the report to reflect these requirements.*

*Evaluation of Navy's Response*

*The Navy concurs with the comments and stated that the work plan will be revised to reflect these requirements. Please indicate which section of the work plan contains these revisions. In addition, since heavy oils, grease and lubes were found at the site all GCs must be run to a minimum of C-36.*

Response:

The analysis is described on Table 3-2 (EPH by GC/FID), although this only implies the range requested through reference to the method. The analysis will be more completely spelled out in Section 4.2 – Project Action Limits.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment*

**Comment 32 Section 4.0 Quality Assurance Quality Control,  
Page 4-1.**

*This section of the report lists the analytes for the various samples. The list of analytes should include constituents, which are known or expected to exist at the site, (i.e., torpedo fuels were alcohol based, an ethyl alcohol underground storage tank was located in the vicinity of Building 32, explosives were used in the torpedoes, asbestos releases prior or during the removal action, TPH has been found at the site, etc.). Please modify the report to include the site related contaminants.*

*Evaluation of the Navy's Response*

*The Navy acknowledges that alcohols were present at the site, however; the Navy contends that alcohols are not persistent in the environment and therefore they will not be tested for. Alcohols have been found at old dumpsites therefore, they must be tested for. The response notes that asbestos is not a CERCLA contaminant and its testing is unnecessary. TPH is not a CERCLA contaminant yet testing for this contaminant is being conducted at the site. Furthermore, DEM regulations require testing for contaminants of concern during the investigation of a site. In regards to explosives or chemicals, the Navy has stated that there is no evidence that explosives were stored in Building 32. The Navy has expanded the investigation beyond the Building 32 footprint and it now covers the entire northern section of the Island. Explosion proof bunkers were found on the southern end of the island and the ACOE has found it necessary to enlist the assistance of the military UXO teams due to possible presence of explosive at scattered locations throughout the southern end of the island, which the ACOE was investigating. Therefore, the COC list should be expanded to include explosive related contaminants*

**Response:**

Alcohol released to the environment is not persistent due to its volatility and solubility properties, unless there is a continuing source present. The alcohol tank at the site was emptied, cleaned and abandoned in place in 1989 with the other USTs at Building 44. The tanks and the surrounding soils were removed during a corrective action excavation conducted for oil-impacted soil in 2000. Considering these removal actions would have addressed any remnant alcohol in the ground, alcohols will not be tested for.

Asbestos is not addressed under the RIDEM remediation regulations (excluded under Section 3.29), nor is it a CERCLA contaminant. Therefore it will not be sought in the soil, sediment, or groundwater at the site as a part of the Remedial Investigation.

As stated previously, there are no records of manufacture or disposal of explosives at the overhaul shop, and these compounds will not be sought at this site. The Navy requests that RIDEM share the results of any UXO or explosives residue investigations conducted on the southern portion of the Gould Island with the Navy.

Regarding the area covered by the investigation, refer to General Comment 1 above.

*Evaluation of Navy's Response*

*The Office of Waste Management disagrees with the position that alcohols will not be found in the environment unless there is a continuing source, (this has been found to be true at a number of sites, including a superfund site in this State). However, since the tank has been removed along with the contaminated soil, the Office of Waste Management will not require the testing for alcohols.*

*The Navy has stated that asbestos does not fall under Site Remediation Regulations. Please be advised that all State regulations apply to the site, and as such asbestos is regulated.*

*The Office of Waste Management comment clearly states " Explosion proof bunkers were found on the southern end of the island and the ACOE has found it necessary to enlist the assistance of the military UXO teams due to possible presence of explosive at scattered locations throughout the southern end of the island, which the ACOE was investigating." The ACOE explosion expert was present to warn the field crew if there were any surface UXO that the field crew might walk over while inspecting the site. The Office of Waste Management reiterates it comment.*

**Comment 34: Section 4.2, Project Action Limits,  
Page 4-3.**

*The site will have to meet both State and Federal Regulations. Therefore, since petroleum has been found at the site the Project Action Limits must include TPH. In addition, the State regulations require that free product in any media must be addressed. Please revise this section of the plan to include these requirements.*

*Evaluation of Navy's Response*

*The Navy has stated that a test will be conducted for measurable free product in the wells. Please be advised that free product in any media must be addressed, therefore the work plan should be modified to address this requirement. Further since petroleum has been found at the site it must be added to the list of Project Action Limits.*

Response:

The Navy concurs, and the Project action limits will be revised in accordance with this comment and as described in the response to Comment 31, above.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment*

**Comment 35: Section 5.2, Human Health Risk Assessment,  
Page 5-4.**

*The report states that deep soils may not be screened against residential standards. Please be advised that the State's residential standard is not limited to the top two feet. Therefore, this restriction should be removed from the report.*

*Evaluation of Navy's Response*

*The Navy has stated that screening against residential values is not appropriate since the site is intended for industrial use. Industrial use of the site will necessitate deed restrictions. The Navy may not be able to place these restrictions on the site. Further deed restrictions are remedial alternatives that are typically addressed during the Feasibility Study. The Remedial Investigation evaluates risk at the site and this risk is not based upon a particular remedial alternative that may or may not be implemented. Therefore, considering the above, the comparison should be made to residential values.*

Response:

Based on the agreements reached at the Technical Meeting of April 8, 2004, the work plan will be revised to reflect the comparison of soil data against residential criteria for the purposes of the screening risk assessment, to develop a COC list for the recreational receptor. Please refer to the response to EPA General Comment No. 3.

*Evaluation of Navy's Latest Response*

*Assuming that both RIDEM and Region IX residential values will be used the Navy has addressed the comment.*

**Comment 36 Section 5.2, Human Health Risk Assessment,  
Page 5-4.**

*The Navy has not stated whether any land use restrictions will be placed upon the property. Therefore, the risk exposure scenarios should include residential reuse.*

*Evaluation of Navy's Response*

*The Navy has stated that land use restrictions are considered in the FS and therefore not appropriate in the RI. Further the intended use of the site is industrial and therefore a residential scenario is not required. The site lies over a GA aquifer and it is abutted by recreational land. Therefore, under the State's notification regulations, exceedances of the residential standards must be reported to the State.*

**Response:**

Please refer to the response to Comment 35, above. The Navy maintains that there is no future residential use planned for the site, and a residential risk scenario is not appropriate for this site.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment*

**Comment 37 Section 5.2, Human Health Risk Assessment,  
Page 5-4.**

*The report proposes eliminating certain contaminants based upon screening against various benchmarks. Screening is only done when the list of contaminants is large. It is typically not done if there are a limited number of constituents found at the site. The work plan should therefore stipulate that screening would only be done if a large number of contaminants were found at the site.*

*Evaluation of Response*

*The responses notes that a large number of compounds are expected to be found at the site, and therefore a screening step will be conducted. Be advised that the cumulative risk at the site cannot exceed 10<sup>-5</sup> and the HQ cannot exceed 1. Therefore COCs cannot be eliminated unless it can be shown individually and cumulatively that the COCs do not exceed 1EE-5.*

Response:

Screening will be conducted in accordance with EPA and Navy risk policy and guidance.

*Evaluation of Navy's Latest Response*

*RIDEM's regulations apply to the site. Region IX is similar to Site Remediation Regulations in that, before a compound is eliminated in the screening process the cumulative risk of all the eliminate compounds cannot result in an exceedance of the upper end of the risk range. If this procedure is followed this will meet the Office of Waste Management requirements.*

**Comment 39 Section 5.2, Human Health Risk Assessment, Page 5-4.**

*The report proposes limiting the recreational scenario to seven days per year. This will not meet State regulatory requirements for unrestricted recreational use. Please modify the report to reflect State regulatory requirements.*

*Evaluation of Navy's Response*

*The Navy has stated that the recreational scenario will be evaluated using an EPA exposure scenario and not the value used under the Office of Waste Management Regulations. Be advised that this is not considered unrestricted recreational use of the site.*

Response:

The recreational scenario EPA proposed (48 days per year) and described in the response to RIDEM's original comment will be used as it is a very conservative but plausible scenario for recreational use of the site, considering the limited quality of the area, lack of a beach-type area, the remoteness of the site, lack of regular transportation to the site, etc.

*Evaluation of Navy's Latest Response*

*Risk assessments consist of two components. The first is the risk assessment, which evaluates the risk at the site. The second is the risk management, which determines how the risk at the site will be addressed. Both the Office of Waste Management definition of recreational scenario and EPA exposure frequency can be applied to the site. If application of*

*both scenarios results in differences in areas of concern, this will be addressed in the risk management evaluation.*

**Comment 40** *Section 5.2, Human Health Risk Assessment,  
Page 5-4.*

*The proposed exposure scenarios are limited to inhalation or dermal contact with dust. It is known that people harvest shellfish in the area and this activity has been observed during site visits. Further, lobsters are also collected in the area. Therefore, the exposure scenarios should include ingestion of shellfish and lobsters.*

*Evaluation of Response*

*It is not clear whether shellfish exposure will include clams and quahogs, as well as mussels. If present, clams and quahogs must be included in the bivalve study. In regards to lobsters, the site is used for harvesting of lobsters. Therefore, lobsters must also be included in the study.*

**Response**

As stated in the response to the previous comment, biota collection species should be limited to bivalves, and should not include lobster or finfish. Considering the magnitude of the bay and the watershed, and the migratory habits of these animals, likelihood of lobster uptake of site-specific contaminants is too remote to provide meaningful information. Bivalves are more appropriate to evaluate site-specific exposure, due to their sessile adult life stage. Mussels will be targeted for representative analysis. However, if present, and in the absence of mussels, clams and quahogs will be collected as well.

*Evaluation of Navy's Latest Response*

*Mussels are not embedded in the sediment and as such they filter water from the water column. Quahogs and clams are embedded in the sediment and they are more likely to be exposed to sediments. Therefore, analysis of quahogs and clams should take priority over mussels. In regards to lobsters, lobster tissue was analyzed at McAllister Point Landfill and Derecktor Shipyard. Similar sampling should be performed at Gould Island, especially since this is an active lobster fishery area.*

**Comment 41** *Section 5.2, Human Health Risk Assessment,  
Page 5-4.*

*The Navy has proposed conducting a limited number of exposure scenarios at the site, industrial exposure, construction worker, etc. The site is classified as GA, therefore groundwater must meet GA standards.*

*Evaluation of Navy's Response*

*The Navy acknowledges that the GA groundwater classification requirements are warranted for the site. However, these requirements will not be considered until the FS. The remedial investigation is designed to assess risk at the site and determine if regulatory requirements are being exceeded. Therefore the groundwater concentrations must be compared with GA standards as part of the RI.*

**Response:**

As a part of the nature and extent of contamination, the groundwater data will be compared with GA criteria and drinking water standards. In the risk screening process, the Region IX PRGs for drinking water will be used. However, the Navy maintains that there is no residential groundwater ingestion scenario currently or anticipated for the future.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment*

**Comment 43: Section 5.2, Human Health Risk Assessment, Page 5-4.**

*The report notes that the Human Health Risk Assessment will be conducted in accordance with USEPA and Navy guidance. Be advised that the risk assessment must also meet State requirements. Please modify the report accordingly.*

*Evaluation of Response*

*The Navy has stated that EPA requirements will prevail over that of the State's. As stated in the guidance documents the more conservative approach should be applied to the site.*

**Response:**

Please refer to the response to RIDEM Comment No. 1, within this response summary.

*Evaluation of Navy's Latest Response*

*Please refer to evaluation of comment # 1.*

**Comment 44: Section 5.3, Ecological Risk Assessment,  
Page 5-6.**

*The work plan states that site samples will be screened against certain benchmarks. Sediment screening values should include Long and Morgan Values, Region IV, Department of Energy Values and Florida State Values. Region IV, Department of Energy and Florida. State values should also be employed for soil samples.*

*Evaluation of Navy's response*

*The Navy has indicated that the above values would be considered in the screening process. It is not clear whether this has been done. Previously, in other reports the Navy included a table with all of the screening values. The value chosen was highlighted. Please include a similar table in this work plan.*

**Response:**

A screening table showing evaluated criteria will be included in the work plan.

*Evaluation of Navy's Latest Response*

*The Navy has addressed the comment*