Email received on 6/18/2021

1. For the past several years and even to this day, community members have had trouble when trying to communicate with the Navy and ask questions about the Environmental Restoration Program at NRL-CBD. Some of the common themes include unanswered phone calls, no response to voicemails, no reply to emails or email responses that take weeks or months.
    a. Could you please provide instructions on how community members can submit questions and receive a response?
    b. Do community members need to follow up daily or weekly to verify that our questions were received?
    c. How long should it take for a community member to receive a response when they submit questions?

Response: We understand that the community members have experienced frustration in communicating directly with the Navy in the past. Prior to 2019, the Restoration Advisory Board (RAB) for NRL-CBD didn't exist. However, with the creation of the RAB we expect information sharing should become easier in the future. The best way to communicate with the Navy is at the RAB meetings. These meetings are the best opportunity for community members to ask their questions and for everyone on the team and in the public to have the benefit of the answers. Personal questions related to your own circumstance can be submitted to the Navy PAO (Ms. Regina Adams) regina.f.adams.civ@us.navy.mil whose contact information is also listed on the NRL-CBD website. Ms. Adams will provide a receipt of message within (2) business days, to verify receipt. Response times can vary depending upon the number of questions, complexity of the questions, and staff workload to respond to questions, however, responses could be within 4-6 weeks. We also plan to go over this issue during our next RAB Meeting in Nov. 2021.

2. Thousands of PFAS compounds exist and the Navy is using USEPA analytical Method 537.1 which can detect 18 compounds.
    a. Does NRL CBD have records of which PFAS compounds have been used or tested at the facility?
    b. How many PFAS compounds could be present at NRL CBD and how many of those PFAS compounds would not be detected by USEPA analytical Method 537.1?

Response: Correct, PFAS is a class of chemicals which contains thousands of compounds. Currently, the Navy uses approved USEPA Analytical Method 537.1 which analyzes for only 18 of those compounds. Additionally, given the current state of the science regarding PFAS, at this time it is not possible to know how many PFAS could be present at NRL CBD. However, a request of this nature for individual records would require a FOIA request. Your question is related to current mission and/or operational information. To gain the information you seek, please file a request under the Freedom of Information Act (FOIA). A FOIA request can be submitted by emailing DONFOIA-PA@navy.mil, submitted to FOIAonline.gov, or submitted via mail. The FOIA request must be in writing, provide an email or physical mailing address, indicate a willingness to pay fees, and reasonably describe records requested. Your request should be as specific as possible with regard to names, dates, time frames, places, events, subjects, etc.... Describe the record as accurately and definitively as possible.

3. The Navy conducted groundwater and surface water sampling at NRL CBD in 2020. Can you please provide those sampling results for all 18 PFAS compounds included in the analysis?

Response: Our typical process is to include all data collected and analyzed in a final report. Often a subset of this data will be shared at RAB meetings before a final report is issued. Specific to PFAS data, the Navy has developed a website where validated analytical data will be posted for the public's awareness. The surface water sampling results from 2020 are in the process of being posted to this website, which is called the PFAS Reading Room online at: https://www.navfac.navy.mil/Business-Lines/Environmental/Products-and-Services/Environmental-Restoration/PFAS-Reading-Room/

4. PFAS sampling of the shallow groundwater at NRL-CBD and the surrounding residential areas has identified PFAS upgradient and side gradient of Site 10.
    a. How do you explain PFAS detections upgradient and side gradient of Site 10?
    b. Is there a problem with the shallow groundwater flow models?
    c. Are there multiple PFAS source areas?
    d. Is PFAS migrating in a different direction than the shallow groundwater flow?
    e. Why hasn't this warranted an expanded off-base drinking water investigation?

Response: These are important questions which have complex answers, many of which are addressed in the Site Inspection report I mentioned earlier. PFAS have been detected in the shallow (or surficial) groundwater aquifer in several wells located on base. The PFAS concentration data for the shallow aquifer supports the conceptual site model that a release of PFAS near the fire testing pad. The Site 10 Fire Testing Area is the only suspected PFAS source area which is migrating to the north-northeast and southeast following the shallow (or surficial) groundwater flow directions. We have not identified any other source areas. The Navy does note that there have been PFAS detected in shallow wells along the western perimeter at low levels and estimated levels which are noted by the J-flag after the sample result. In July 2018, the Navy initiated off-base drinking water sampling near NRL-CBD. Out of the 42 samples collected by the Navy through September 2018, only three had detects, none of which approached the lifetime health advisory of 70 ppt (parts per trillion) set by the USEPA. The Navy has not made a decision to perform additional off-site drinking water wells at this time. The most recent sample results will be evaluated to guide recommendations for future actions, including off-site drinking water sampling and the Remedial Investigation phase of work.

5. I submitted the following question to the Navy for discussion in the May 2021 RAB meeting, "The highest PFAS concentrations at NRL CBD have been detected in AOA-MW02. In 2017, shallow groundwater samples collected from AOA-MW02 contained PFAS compounds at concentrations as high as 234,000 NG/L. In 2020, shallow groundwater collected from AOA-MW02 contained PFAS compounds at concentrations as high as 171,000 NG/L. How would you explain the change in concentration at this location?" The Navy responded that this change was likely due to normal groundwater fluctuations. If a 63,000 NG/L change in the concentration of PFAS concentrations can be attributable to normal groundwater fluctuations, then why isn't the Navy regularly sampling private drinking water wells where the action level is 70 ppt?

Response: Fluctuations are normal for groundwater sample results, it is a dynamic system, we would expect to see some changes. Concentrations can fluctuate in environmental media based on a variety of factors (e.g., dispersion, dilution, absorption). Some groundwater wells had increases, followed by other wells where we observed decreases. While these two results differ from each other they are both in the same relative order of magnitude. From that perspective these two results are relatively

consistent. In July 2018, the Navy initiated off-base drinking water sampling near NRL-CBD. Out of the 42 off-base well samples collected by the Navy through September 2018, no samples exceeded the lifetime health advisory of 70 ppt (parts per trillion) set by the USEPA, additionally, no wells sampled on base (in the Piney Point aquifer) exceeded the USEPA lifetime health advisory as well. The Navy has not made the decision to perform any additional off-site drinking water wells at this time. The most recent sample results will be evaluated to guide recommendations for future actions, including off-site drinking water sampling. The Navy is currently in the Site Inspection (SI) phase and has confirmed the presence of PFOS, PFOA and PFBS in soil, groundwater, surface water and sediment at the NRL-CBD and is initiating a Remedial Investigation (RI) to determine the nature and extent of these compounds in soil, groundwater, surface water and sediment and evaluate risk to human health and the environment.

6. It can be reasonably assumed that PFAS in the groundwater will continue to travel away from the Site 10 source area and the PFAS concentrations will increase in the surrounding areas. Why hasn't this warranted recurring sampling of off-base drinking water wells?

Response: The PFAS sampling results, to date, indicate that a release has occurred to the shallow aquifer. Additional sampling under the next RI phase is being planned to better understand the migration pathways. See also response to Question #5.

7. Has the effluent from the NRL CBD Sewage treatment plant been sampled for PFAS?

Response: Yes, surface water sampling of the effluent at the Sewage Treatment Plant has been conducted within the scope of the Environmental Restoration program in Oct. 2021, and sampling results are pending.

8. Does any stormwater get processed by the NRL CBD Sewage treatment plant?

Response: Yes, on-base storm water influent is processed by the Sewage Treatment plant, although from limited on-base areas..

9. What waste sources are processed through the NRL CBD Sewage treatment plant?

Response: The Sewage Treatment plant treats sanitary wastewater and storm water influent.

10. How and where is waste from site 10 currently disposed?

Response: Environmental investigative derived waste associated with the Environmental Restoration program (i.e. groundwater and/or soil sampling waste) is disposed offsite according to applicable regulatory requirements. Waste associated with current Site 10 mission operations are separate from the Environmental Restoration Program. We are open to answering questions about NRL-CBD, however, your question is related to current mission and/or operational information. To gain the information you seek, please file a request under the Freedom of Information Act (FOIA). A FOIA request can be submitted by emailing DONFOIA-PA@navy.mil, submitted to FOIAonline.gov, or submitted via mail. The FOIA request must be in writing, provide an email or physical mailing address, indicate a willingness to pay fees, and reasonably describe records requested. Your request should be as specific as possible with regard to names, dates, time frames, places, events, subjects, etc. Describe the record as accurately and definitively as possible.

11. The Navy patented AFFF in the 1960s and has studied the impacts to the environment and human health. Could you please provide the studies that the Navy or the Naval Research Lab has completed related to the environmental and/or human health impact of AFFF and/or PFAS Compounds?

Response: This question is not within the scope of the Environmental Restoration program, please see the response to Question #10 for filing a request under FOIA.

12. The Navy established and maintains an Administrative Record File for NRL CBD.
    a. On what date was the NRL CBD Administrative Record File established?
    b. On what date was the NRL CBD Administrative Record File made accessible to public?
    c. On what date was the NRL CBD Administrative Record File made accessible to public online?
    d. The Navy commonly refers the community to the NRL CBD Administrative Record File when we ask questions. However, documents do not show up in the Administrative Record File for many months after they are finalized. How long does it take to add new documents to the Administrative Record File?
    e. Are all documents referenced in the Community Involvement Plan available for review in the Administrative Record?

Response:

a: The Navy established the Administrative Records at the beginning of its investigations, so the reports were developed as far back as the late 1980's. CERCLA and the NCP requires the Administrative Record be established at the start of a Remedial Investigation (RI). A Sampling and Analysis Plan for the first RI was completed and fieldwork for the RI began in 2012.

b: An exact date is not certain, however, all documents in the Administrative Record are publicly available, however, prior to the RI the public may not be aware of the documents, until public notice is advertised (i.e. Proposed Plan, 5 Year Review, Time Critical Removal Action).

c: The Administrative Record has been publically available online for several years, an exact year is not certain, however, each installation is different when the Administrative Record was posted online. The Navy now has a centralized Administrative Record system for public review.

d: Final documents are submitted to the Administrative Record upon approval; however, document processing and uploading to the Administrative Record, can take 1-2 months. Should a document be final and is in the process of being uploaded to the Administrative Record, we would make the document available upon request, a FOIA request would not be necessary, unless other restrictions are noted.

e: Not all documents referenced in the Community Involvement Plan are part of the Administrative Record, as the Administrative Record only contains documents used in the decision-making process for sites in the Environmental Restoration Program.

13. I would have appreciated the opportunity to review and provide feedback on the Community Involvement Plan. Restoration Advisory Board (RAB) members continue to be updated after documents are finalized, without opportunity for input.
    a. Is there anything that the Navy can do to increase the opportunity for RAB members to provide Feedback?

b. Is there anything that the Navy can do to inform RAB members of how or when our feedback is being utilized?
c. Is there anything that the Navy can do to inform the RAB members if the Navy disagrees with our feedback or if the Navy will not address our feedback for a different reason?

Response: Community Involvement Plans (CIPs) are a planning document for the Navy and are not typically released for public comment, however, they are available and posted to the Administrative Record. CIPs are considered a "living" document and are updated periodically (typically every 5 years but can be more frequent.) Community input was sought during the CIP preparation, and will again be sought prior to the next NRL-CBD CIP update planned for around Mar. 2026.

The Navy and the Environmental Restoration Program follows the CERCLA process for public involvement. The CERCLA process provides public review of studies and investigations after regulatory review and final report results. Once the environmental investigations and the Feasibility Study are completed, a Proposed Plan is submitted for public comment and a responsive summary is prepared. RAB meetings are also held to provide the report results and the next steps in the investigation process, but also to provide the public with input into the environmental restoration program.

14. Please provide a response to the following items related to the Community Involvement Plan.
    a. Section 2.1 Location and History
        i. What is the base address?
        ii. Why is the address not included in this document?
        iii. The first sentence states, "NRL-CBD is located south of Chesapeake Beach, Maryland." Isn't NRL-CBD located in Chesapeake Beach, Maryland?

Response: As is standard for a CIP, the location of the NRL-CBD is described and shown on a location map. NRL-CBD is located south of the Town of Chesapeake Beach, MD and outside the Town of Chesapeake Beach limits. NRL-CBD is a research lab and does not post an address, however, operates under the U.S. Naval Research Laboratory (NRL). The address of NRL is:

U.S Naval Research Laboratory

4555 Overlook Ave., SW
Washington, DC 20375

b. Section 2.4.4 Site 10 (Formerly AOC A) – Fire Testing Area
    i. I believe NRL-CBD has taken the position that the concrete lined pit is preventing PFAS from entering the environment.
        1. Does this mean that all the PFAS in the groundwater at NRL CBD entered the environment prior to the installation of the concrete lined pit 1980s?
        2. Why aren't the methods of waste disposal prior to the installation of the concrete lined pit described?
    ii. The Navy has developed a protective policy to address past releases of PFAS. Does the Navy have a protective policy to address active releases of PFAS, such as the NRL-CBD sewage treatment plant discharging to surface water?

Response: The purpose of the History of Environmental Investigations section of a CIP is to provide an overview and context for the planned community involvement activities. Text in the section came from existing final technical documents. The Environmental Restoration Program is investigating potential historical releases of PFAS chemicals during operations from 1968 through 1985. Current handling and disposal of hazardous materials at NRL-CBD is not part of the Environmental Restoration Program, which focuses on past disposal practices. Overall Department of the Navy PFAS policy and guidance is provided at the following link: https://www.secnav.navy.mil/eie/Pages/PFAS_Home.aspx. The Environmental Restoration Program is being proactive and has sampled surface water bodies downstream of the Sewage Treatment Plant, and has reported those surface water sampling results during the May 2021 RAB meeting. Additionally, Navy recently conducted more PFAS sampling in surface water bodies around the base and the Sewage Treatment Plant. We do not have these analytical results from the laboratory yet.

c. Section 3.1 Community Setting
    i. NRL-CBD is not located in the Town of Chesapeake Beach. The residential areas surrounding NRL-CBD are not located in the Town of Chesapeake Beach. The community setting in the Town of Chesapeake

Beach is very different than the community setting outside the Town where NRL-CBD and the surrounding communities are located. Citizens who live in the Town of Chesapeake Beach receive treated water from an aquifer that has not been contaminated by NRL-CBD. Citizens in the areas surrounding NRL-CBD rely on private drinking wells which draw water from aquifers contaminated by NRL-CBD. It does not make sense to include the Town of Chesapeake Beach History and not the Randle Cliff History. Here is one example that was not included in your write up, the Randle Cliff School, a segregated school for African American students still stands 500 feet from NRL-CBD. White students attended an all-white school within the Town of Chesapeake Beach.

1. Why is the Town of Chesapeake Beach the focus of Section 3.1 Community Setting?
2. Did the Navy consider or investigate why the Town borders do not include all of Chesapeake beach?
3. Did you the Navy consider or investigate the Randle Cliffs history?

Response: In general, the "community setting" section of a CIP provides context for the specific community involvement activities to be implemented. CIPs typically describe the nearest town or city to a base, in this case, the incorporated Town of Chesapeake Beach. The CIP does not address the history of the Randle Cliffs area beyond the general base history.

d. Section 3.2 Population
   i. Why is demographic and economic data for the Town of Chesapeake Beach highlighted?
   ii. Why isn't demographic and economic data highlighted for other Towns that are not adjacent to NRL-CBD?
   iii. Why isn't demographic and economic data highlighted for communities that are adjacent to NRL-CBD?

Response: The "community setting" section of a CIP provides context for the specific community involvement activities to be implemented. CIPs typically describe the nearest town or city, in this case, the incorporated Town of Chesapeake Beach. Detailed demographic and economic information was provided for Chesapeake

Beach as well as for Calvert County. Comparable information is not available for smaller or less populated geographic areas.

e. Section 3.3 Environmental Justice
    i. Why is the EJSCREEN data not included?
    ii. Please provide the EJSCREEN data for the 5-mile radius.
    iii. Please provide EJSCREEN data for the area that was included in the Navy's private drinking well sampling.
    iv. Please provide EJSCREEN data for the 1-mile radius that was not included in the Navy's private drinking well sampling area.

Response: The EJSCREEN results are described in the CIP but not presented in detail because no areas surrounding the base exceeded the 95th percentile for low-income or minority populations, thereby indicating populations that are considered more susceptible to environmental concerns based on income or minority indicators. Should areas have reflected as low as 80th percentile, a map would have been provided in the CIP. More information about EJSCREEN and to mapping tool itself can be found at https://www.epa.gov/ejscreen.

f. Section 3.5 Local Water Use
    i. This section states, "Shallow groundwater across the facility has been encountered from depths ranging from 10 to 27 feet below ground surface. Localized groundwater flow is influenced by surface topography, which causes the groundwater flow to radiate to the northeast and southeast from Navy Court Road." Hasn't the groundwater model been proven wrong? Or is PFAS moving upgradient against the groundwater flow?
    ii. This section states, "This shallow water table is underlain by a thick clay layer (i.e., Calvert confining unit) that is believed to be laterally continuous and fully confining."
        1. There are PFAS detections in the Piney Point Aquifer, doesn't this indicate that the clay layer is not fully confining?
        2. Given the recent PFAS detections in the Piney Point Aquifer, does the Navy still believe the Calvert confining unit is laterally continuous and fully confining?

3. How did PFAS enter the Piney Point Aquifer?
4. Does the Navy believe that wells are acting as a pathway for PFAS to move from the shallow aquifer to the Piney Point aquifer?

iii. Why doesn't this section state that the shallow groundwater is a drinking and agriculture source?

Response: The purpose of the Local Water Use section of a CIP is to provide an overview and context for the planned community involvement activities. Text in the section came from existing final technical documents. The conceptual site model (CSM), including groundwater flow, will be further evaluated during the Remedial Investigation phase.

g. Section 3.7.1 Process to Assess Community Interests and Concerns

i. To assess community interests and concerns and prepare this Community Involvement Plan, a letter introducing the Community Involvement Plan process and the RAB interest meeting was mailed in August 2019 to 124 local stakeholders, including elected officials, town and County employees, and local residents, including those who had previously attended public meetings.

1. How were local residents selected for notification?
2. Were the residents who lived in a specific area notified? If so, which areas were included?
3. Were any residents west of NRL-CBD included?

ii. The document states, "Public meetings tended to draw little attention until off-based shallow well sampling was conducted in 2018."

1. Were there public meetings before off-based shallow well sampling was conducted in 2018?
2. Please describe the topics covered in public meetings prior to off-base sampling in 2018?
3. Please describe method of communication used to advertise public meetings before off-base sampling in 2018?

Response: As stated in the CIP, a letter introducing the CIP process and the RAB interest meeting was mailed in August 2019 to 124 local stakeholders, including elected officials, Town and County employees, and local residents. Local stakeholders

included representatives from local town government, County government, a business organization, churches, local schools, environmental organizations, and other civic organizations. Local residents included a local homeowners association and residents who had previously attended public meetings about environmental restoration activities at NRL-CBD. In addition, a public notice was published in the *Calvert Recorder* twice during the weeks preceding the August 2019 CIP/RAB public meeting.

Prior to 2018, public meetings and public comment periods were advertised by public notice in a local newspaper of general circulation (the *Calvert Recorder*), as required by CERCLA. Public comment periods and an opportunity for a public meeting were held for:

- Munitions Response Site 2: Randle Cliffs, Zuni Launch Site, and Randle Cliffs Gun Mounts
- Soil at Munitions Response Site 3, Small Arms Range
- Groundwater at Munitions Response Site 1, 2, and 3: Hypervelocity Low Pressure Gun, Randle Cliffs Zuni Launch Site, Small Arms Range

Subject: Letter dated 22 Sept. 2021 regarding detections of per- and polyfluoroalkyl substances (PFAS), and expanding PFAS sampling off base

Question: Once again I am requesting that the Navy greatly expand the testing of PFAS to properly determine the extent of the PFAS spread. I once again offer testing to be allowed on my property as well. I further remind you that myself and others have asked and suggested to the Navy that you should be testing to the West as well. To our knowledge the Navy has not performed any testing and does not plan to perform any testing to the west even though the test wells on the western edge of the NRL-CBD facility have PFAS traces in them. There are several streams heading to Lake Karylbrook that may have PFAS in them. I really think it is important to expand the testing out as far as possible to get negative tests. Then you will have a baseline to check for the spread. Something similar to the deep wells that were drilled by the Navy into the Piney Point aquifer. Your first round of testing as reported showed no PFAS however your most recent, 2020 test showed PFAS traces showing up. This gave you a rough timeline for the PFAS movement as well as showed you all that the PFAS can and will spread through the confining layer even though the Navy and MDE tried to assure the public this would not occur.

As always please kindly reply to let me know you have received this email and the attachment. I look forward to hearing if the Navy plans to do any expanded testing as the need for it is clear. I know it has only been a week since I last asked but has a date been set yet for the next RAB meeting? I have copied MDE on this email so they have a copy of what I sent you.

Response: The Navy has received your email of 22 Sept. 2021 in regard to detections of per- and polyfluoroalkyl substances (PFAS), and expanding PFAS sampling off base. The Navy is committed to protecting the health of our Service members, our workforce and our surrounding communities from PFAS releases on our installations. We have a comprehensive strategy to manage and address known or potential releases of PFAS which includes the following two components.

First, we investigate known or suspected PFAS releases on our installations following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process to identify risks to human health and the environment and, when necessary, select and implement remedies to mitigate those risks. CERCLA is a prescriptive, comprehensive process which can take years to complete while working with our regulatory partners.

Second, while following the deliberate and often lengthy CERCLA process, we proactively evaluate if any drinking water could be impacted due to PFAS migrating from past Navy uses on our installations. We use the U.S. Environmental Protection Agency (U.S. EPA) drinking water health advisory levels for two PFAS (i.e., perfluorooctane sulfonic acid [PFOS] and perfluorooctanoic acid [PFOA]) to determine if alternate drinking water is necessary.

PFAS concentrations have been detected in the shallow groundwater aquifer in several wells located at the Naval Research Laboratory – Chesapeake Bay Detachment. The Navy does note that there are some low level PFAS detections, and also at estimated levels which are noted by the J-flag after the sample result, in shallow wells along the western perimeter. However, the PFAS concentration data for the shallow aquifer supports the conceptual site model that a release of PFAS near the fire testing pad, which is within the suspected source area, has occurred and is migrating to the north-northeast and southeast following the groundwater flow direction.

In July 2018, the Navy initiated off-base drinking water sampling near NRL-CBD. Out of the 42 samples collected by the Navy through September 2018, no samples exceeded the lifetime health advisory of 70 ppt (parts per trillion) set by the U.S. EPA. The Navy has not made the decision to perform any additional off-site drinking water wells at this time. The most recent sample results will be evaluated to guide recommendations for future actions, including off-site drinking water sampling.

The next RAB meeting is scheduled for 10 Nov. 2021 at 5 pm, and plans to be virtual similar to the 18 May 2021 RAB meeting.

I appreciate the Naval Facilities Engineering Systems Command's (NAVFAC) time spent with the community on May 18, 2021 participating in the Naval Research Laboratory Chesapeake Bay Detachment Restoration Advisory Board Meeting. Thank you for transmitting the May 2021 RAB Presentation.

I have reviewed the May 2021 presentation and have the following questions/ comments for considerations. I look forward to a response.

Questions/Comments for the Navy

1. Page 11 of 47 of the May 2021 presentation covers TAPP. I am interested in learning more about the TAPP process and to have support evaluate the plethora of technical documents on the Administrative record.

A presentation was provided to the RAB during the May 2021 RAB Meeting. A summary of the RAB discussion can be obtained from the RAB meeting minutes. Additionally, please reach out to Mr. Kevin Britt, the Community Co-chair, as he was requesting RAB member support for TAPP. His email contact is kev3125@yahoo.com.

2. Please advise how to secure TAPP resourcing. I came across a great video put out by Science for Citizens by Dr. Christopher Salice on this topic. Has the Navy considered reaching out to an Ecotoxicologist from Townson, Johns Hopkins, University of Maryland, etc. as a resource to help evaluate the environmental toxicologic effects? Can one use TAPP resources to secure University support?

A presentation was provided to the RAB during the May 2021 RAB Meeting. A summary of the discussion can be obtained from the RAB Meeting minutes. Additionally, please reach out to Mr. Kevin Britt, the Community Co-chair, as he was requesting RAB member support for TAPP. His email contact is kev3125@yahoo.com.

Site 10 Questions

3. What is the acreage of site 10? What is your data density? Are there data gaps? Did you delineate to non-detect?

The Fire Testing Area is approximately 4 acres. The site is currently in the Site Inspection phase with the primary objective to determine whether PFAS are present in site media above project action levels. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. However, based on the data collected the Navy intends to proceed forward with the Remedial Investigation phase.

4. How many soil (surface and subsurface) samples were collected and analyzed?

Twenty-nine surface soil and 34 subsurface soil samples were collected. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178.

5. How many groundwater samples were collected and analyzed per aquifer? Are there impacts to aquifers where people obtain drinking water?

In the most recent onsite sampling, 23 samples were collected from the shallow aquifer and 4 samples from the deep (Piney-Point) aquifer. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. However, based on the data collected the Navy intends to proceed forward with the Remedial Investigation phase. Offsite drinking water sampling was conducted in 42 offsite drinking water wells. Three (3) of the 42 offsite drinking water wells contained PFAS compounds below USEPA Lifetime Health Advisories. Results of this study is found in the Administrative Record # 000172.

6. How much Surface water was collected and analyzed? How many lakes or streams exist on the property? Do any of the streams leave the property? Were downstream receptors both human and ecological evaluated? During the meeting individuals mentioned scouts camping on the property and people eating the fish and drinking the water. How is this being factored into the assessment?

Eleven surface water samples were collected. Two large ponds (one on the north end, and the other on the southwest end) and their associated downflow streams were sampled and both discharge off-base. There are other smaller drainage flows. Additional surface water sampling will be evaluated during the Remedial Investigation phase. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. However, based on the data collected the Navy intends to proceed forward with the Remedial Investigation phase which will evaluate human health and ecological receptors. Camping is not permitted on the facility.

7. How many Sediment samples were collected and analyzed?

Four sediment samples were collected. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. However, based on the data collected the Navy intends to proceed forward with the Remedial Investigation phase.

8. The Figures used to explain Site 10 lack some key information. Earlier in the presentation it indicates that 18 compounds were analyzed under Method 537.1. Why is the data of all 18 compounds not included in the presentation? Please explain. Page 33 of 47 lists PFOS, PFOA, and PFBS. Those three have human health screening levels. There are no units or reference to the human health screening levels. Request slide is updated to include that relevant information and redistribute information to the RAB.

The Navy's ERN program currently analyzes for the 18 PFAS compounds listed in EPA Method 537.1. All compounds associated with the sampling method are included in the reports, however, for presentation purposes only 3 PFAS (PFOS, PFOA, and PFBS) with EPA screening levels are presented and discussed in details. The remaining compounds are presented in the appendix of the report. Compound

concentration units and locations were provided in the slide figure diagrams. Compound concentrations and comparison to screening levels will be included in the SI Report.

9. The conceptual site model on page 31 0f 47 is very generic and does not include many of the streams or other related features. Are there any subsurface utilities that could serve as preferential pathways? How many geologically logged soil borings/monitoring wells were completed over the years at this facility? How many distinct geologic zones are there? Suggest a fence diagram is provided with various cut aways across the site.

Worksheet #10 of the Sampling and Analysis Plan contains the Conceptual Site Model. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. A further detailed CSM will be presented in the Final Site Inspection Report and be refined in the future Remedial Investigation phase.

10. How many validated data points were collected total? How many exceeded the applicable screening levels?

A total of 112 samples were collected from environmental media during the Site Inspection. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized.

11. There was not much information presented specific to where drainage leaves the site. Please elaborate on this topic. Please provide more information on lithology, groundwater flow and direction. There were not definitive statements such as “Based on the analytical results, a release of AFFF is confirmed that has impacted the groundwater, surface water, soil and sediments at the site.” Request clarification.

Worksheet #10 of the Sampling and Analysis Plan contains the Conceptual Site Model. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. However, based on the data collected the Navy intends to proceed forward with the Remedial Investigation phase.

12. Page 34 uses generic terminology such as “low level” and “higher”…. Request actual numbers are used when communicating results with comparison against available reference values.

Comment noted.

13. The subsurface soil boring figure on Page 35 lacks some key information. Earlier in the presentation it indicates that 18 compounds were analyzed under Method 537.1. Why is the data of all 18 compounds not included in the presentation? Please explain. Page 33 of 47 lists PFOS, PFOA, and PFBS. Those three have human health screening levels. There are no units or reference to the human health screening levels. Request slide is updated to include that relevant information and redistribute information to the RAB.

Please refer to response to Question #8.

14. Page 36 uses generic terminology such as “low level” and “higher”…. Request actual numbers are used when communicating results with comparison against available reference values. Why is 6-16ft BGS defined as the subsurface boundary? Define highest concentrations? Is a source area delineated? What mass is believed to exist? Usually in a PA/SI data is collected to estimate the releases. Do you have that information? Can you provide those results? Was that missed in the presentation?

The site is currently in the Site Inspection phase with the primary objective to determine whether PFAS are present in site media above project action levels. Actual concentrations and locations were provided in the figure diagrams presented. Discussion of the subsurface soil intervals is contained in Worksheet #17 of the Sampling and Analysis Plan and contains the Sampling Design and Rationale. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized.

15. The shallow monitoring well locations figure on Page 37 lacks some key information. Earlier in the presentation it indicates that 18 compounds were analyzed under Method 537.1. Why is the data of all 18 compounds not included in the presentation? Please explain. Page 33 of 47 lists PFOS, PFOA, and PFBS. Those three have human health screening levels. There are no units or reference to the human health screening levels. Request slide is updated to include that relevant information and redistribute information to the RAB. Please provide information on well installation dates, screening intervals, when wells were last developed.

Please refer to response to Question #8. Groundwater well information will be included in the Site Inspection Report.

16. The deep monitoring well locations figure on Page 39 lacks some key information. Earlier in the presentation it indicates that 18 compounds were analyzed under Method 537.1. Why is the data of all 18 compounds not included in the presentation? Please explain. Page 33 of 47 lists PFOS, PFOA, and PFBS. Those three have human health screening levels. There are no units or reference to the human health screening levels. Request slide is updated to include that relevant information and redistribute information to the RAB. Please provide information on well installation dates, screening intervals, when wells were last developed. What aquifer are these wells screened in? Is this impacted aquifer the same aquifer that the residents of Chesapeake Beach receive their drinking water from? Please provide additional detail on groundwater flow, contaminate transport, and modeling completed to date?

Please refer to response to Question #8.

17. Page 40 uses generic terminology such as “low level” and “higher”…. Request actual numbers are used when communicating results with comparison against available reference values. Why is 200-300ft BGS defined as the well screening? Do wells have 100 ft of well screen? Define low and highest concentrations? Is this impacted aquifer the same aquifer that the residents of Chesapeake Beach receive their drinking water from? Please provide additional detail on groundwater flow, contaminate transport, and modeling completed to date?

References to “wells screened” in the RAB presentation was referring to general well depths and not the actual well screen depth interval. Well screens are in the range of 10 ft. The Deep groundwater well referred to in the RAB presentation is the Piney-Point aquifer and used by offsite residents. Worksheet #17 of the Sampling and Analysis Plan contains the Sampling Design and Rationale. Details for the data collection of the Site Inspection can be found in the Sampling and Analysis Plan which can be accessed through the Administrative Record by searching for record #000178. The site is currently in the Site Inspection phase with the primary objective to determine whether PFAS are present in site media above project action levels. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized.

18. The surface water and sediment locations figure on Page 41 lacks some key information. Earlier in the presentation it indicates that 18 compounds were analyzed under Method 537.1. Why is the data of all 18 compounds not included in the presentation? Please explain. Page 33 of 47 lists PFOS, PFOA, and PFBS. Those three have human health screening levels. There are no units or reference to the human health screening levels. Request slide is updated to include that relevant information and redistribute information to the RAB. Please provide information on data collected in the Chesapeake Bay. What ecological assessments have been completed or are planned?

Please refer to response to Question #8. Additional project action limits and associated screening information is contained in SAP Worksheet #11 of record #000178. The remaining compounds are contained in the reports. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized. No sampling to date has been collected in the Chesapeake Bay. The Site Inspection phase, currently underway, does not include ecological assessments, as provided, by EPA policy. Ecological Assessments are included in the Remedial Investigation phase.

19. Request opportunity to review Site Investigation Report prior to MDE final acceptance.

The Navy follows the CERCLA process, and provides public review of studies and investigations upon regulatory review and final report results. The results and recommendations will be presented in the Site Inspection Report which will be issued to the Administrative Record once it has been finalized.

20. I reviewed the Navy Administrative Record Website and noticed that it contains 111 records. Is this site catalogued that will allow users to rapidly identify all AFFF documents in chronological order? Request that the Navy provide a list of AFFF documents in chronological order with hyperlinks to the files to make this more usable to the public.

The Administrative Record contains documents of all environmental sites at NRL-CBD not just Site 10 documents. The reports can be viewed by clicking on the View Record button. The online Administrative Record contains an “Admin. Record Search” function at the top of the screen, which provides some search capability. In particular, records with recent PFAS or AFFF are in records dated 2018 or later. Some of the earlier records Initial Assessment Study Mar. 1984, and Preliminary Assessment Report, Sept. 2006 and Site Assessment Report Nov. 2009 also have very limited AFFF references.