NAVAL AIR STATION WHIDBEY ISLAND

RESTORATION ADVISORY BOARD

DRAFT MEETING MINUTES

OCTOBER 19, 2017

Oak Harbor, Washington

RAB Panel:

Captain Geoffrey Moore Naval Air Station Whidbey Island (NASWI) Commanding Officer

Commander Allen Willey NASWI Public Works Officer

Melanie Bengtson NASWI Environmental Program Director

Mike Welding NASWI Public Affairs Officer

Kendra Leibman NAVFAC Northwest
Kristeen Bennett NAVFAC Northwest
Mark Wicklein NAVFAC Northwest
Kathy Lester Community Co-Chair

Gary Windlund Deputy Community Co-Chair Doug Kelly Island County Public Health

The meeting opened at 5:01 p.m. by Ms. Melanie Bengtson welcoming everyone and introducing the Restoration Advisory Board (RAB) panel, regulatory partners, and RAB members.

Captain Geoffrey Moore delivered opening remarks regarding the purpose and importance of the RAB. He discussed the RAB being revitalized with new members and a new charter.

Ms. Bengtson reviewed the ground rules for the evening. Ms. Bengtson introduced herself and Kendra Leibman as being the Navy co-chairs and Kathy Lester being the community co-chair and Gary Windlund being the deputy community co-chair. Ms. Bengtson reviewed the background of the environmental restoration program with CERCLA/Superfund. She briefly discussed the RAB process and purpose, the new charter, and new members.

Ms. Kris Fellrath, a citizen, asked Ms. Bengtson why the RAB charter and RAB were revitalized (was there a problem). Ms. Bengtson stated there were no problems as the program is fairly mature. Based on some new conditions regarding per- and polyfluoroalkyl substances (PFAS) and Area 6, the Navy thought more involvement from the community would be valuable. Captain Geoffrey Moore mentioned Whidbey Island actually conducted the first RAB for any Navy entity, ever, back in the 1990s. Ms. Fellrath asked if the construct of the RAB is the best practice inside the Navy. Ms. Bengtson stated it is a requirement to have a RAB. Ms. Fellrath stated that the pace between the PFAS results and the updated RAB charter was slow and delinquent. Ms. Bengtson briefly discussed the PFAS investigation process and Ms. Fellrath indicated she was pleased with the PFAS response. Ms. Fellrath indicated she did not receive the publication invitation for people to join the RAB and that she would be helpful as part of the RAB but very loud, also. Mr. Mike Welding stated the invitation was put in press releases and in the local newspaper. There was continued discussion regarding publications, information releases, and the website.

Ms. Kendra Leibman presented some of the history regarding sites and where the Navy is in the cleanup process (introduced handout showing maps). Ms. Leibman pointed out that the maps sites for Ault Field and Seaplane Base included active and long-term management (LTM) sites. Ms. Leibman discussed the steps involved in the environmental restoration process and how it can be a long process. Ms. Fellrath asked if the process is constrained by resources and funding. Ms. Leibman replied that it can be but the process is driven by risk to human health and the environment. Ms. Fellrath asked if all the bases that have this kind of responsibility have the same chart and list of their exposures. Captain Moore answered affirmatively while briefly discussing historical practices and regulations. Ms. Fellrath asked where does the budget for these activities come from - general DoD budget or Congress. Ms. Leibman replied the environmental restoration program is an appropriation from Congress under operation and maintenance funds and it's a separate fund from the operations side. Ms. Leibman also noted the environmental restoration Navy funds cover the entire cleanup process from investigation to long-term management (last phase in cleanup process). Ms. Fellrath asked if the RAB committee looks at cost and scheduling against the funding profile. Ms. Leibman replied the restoration program is scheduled based on the need of what issues are being discussed. Ms. Leibman also indicated there is an in-depth process for making sure our money is being spent appropriately from Congress. Ms. Fellrath asked if Captain Moore oversees that as the Chief Financial Officer of the base. Captain Moore indicated he has full-time employees to perform that function. Captain Moore also stated the Navy has about a billion dollar budget to start off with each year for all environmental issues.

Ms. Kendra Leibman presented land use controls (LUC):

- LUCs are part of the remedial action operation and long-term management and the Navy conducts LUC inspections every year.
- LUCs are required when contamination is left in place at a site above residential cleanup levels.
- LUCs are signs, fences, and also deed restrictions in some cases if the property is transferred to a different entity outside the Navy.

Ms. Leibman discussed the environmental restoration process timeline again and showed examples of sites that are in multiple stages:

- Former firefighting school is at multiple stages of the process depending on the chemical.
- PFAS was found in 2015 and the former firefighting school as opened again at the preliminary assessment stage.
- Whenever we find something new at a site, we have to re-assess it from the front to the end of this entire process.
- Area 6 is at multiple stages of the process depending on the chemical including PFAS, 1,4-Dioxane, and chlorinated volatile organic compounds (VOCs).

Ms. Leibman introduced CERCLA Area 6.

- Area 6 is the former current landfill that is southeast of Ault Field.
- Site was identified because of volatile organic compound contamination.
- The ROD was established in 1993 including installing an engineered cap (completed 1995-1996) and installing and operating a pump and treat (P&T) system with air stripping (operating since 1996).
- In 2003, 1,4-dioxane was discovered at Area 6. The current treatment system only treats volatile organic compounds (VOCs). From 2009 to 2015, the Navy conducted four pilot study investigations, different treatment alternatives to determine which would address 1,4-dioxane the best. The low concentrations of 1,4-dioxane make it difficult to treat so the

- evaluation process has taken some time.
- From 2015 to 2017, the Navy has been working on a Focused Feasibility Study (FFS) with the EPA and we recently have come to a new path forward that we agree on.
- There are two groundwater plumes western and southern.
- A FFS was prepared to document all the remedial alternatives as well as the preferred alternative (advanced oxidation) for 1,4-dioxane. The proposed remedy is to refurbish the existing western plant and change the treatment technology from air stripping to advanced oxidation. A new advance oxidation pump-and-treat plant to treat the south plume is also being evaluated to address the 1,4-dioxane and vinyl chloride. Groundwater modeling and additional downgradient sampling will aid in extraction well placement.
- The Navy has been preparing for additional investigation of PFAS, 1,4-dioxane, and vinyl chloride.
- The Navy has been working with EPA to finalize end-point criteria for the FFS.
- The Navy has continued remedial action operations activities including operation of the P&T system and LUC inspections.
- Future activities
 - The Navy will be conducting on-base sampling for PFAS and associated public meetings.
 - Once the FFS is finalized, a Proposed Plan will be prepared and it will be available for public comment.

Ms. Leibman discussed PFAS investigation.

- There are two new handouts showing the Phase 3 drinking water investigation results.
- The Navy has continued and will continue to provide bottled water for those homes that are impacted by PFOA and PFOS above the EPA lifetime health advisory (LHA). The Navy has also been working with the community members that have been receiving bottled water to work towards an interim and long-term solution for the contamination of their drinking water wells. The Navy has been working on and finished an off-base drinking water resampling plan, which included testing for other chemicals that may impact filter performance for those with the wells that are impacted.
- The Navy has begun a preliminary assessment (the first step of environmental restoration process) for PFAS at all three bases (i.e., Ault Field, Seaplane Base, and Outlying Landing Field (OLF) at Whidbey Island.
- Phase 3 water sampling results were reviewed (handouts).
- For the OLF site inspection, the Navy installed 27 new wells and three of those wells have LHA
 exceedances. Eighteen of the 27 new wells had no detections. This information will be used to
 focus delineation efforts. It was determined groundwater flow direction was primarily to the
 south, which is consistent with the drinking water results conducted outside the Navy's property
 line. There is no protective layer above the middle aquifer, which is a primarily drinking water
 source for this area.
- Ms. Lori Taylor, resident from Coupeville, asked for additional explanation regarding the importance of the protective layer. Ms. Leibman explained that a protective layer can basically prevent surface discharges from getting into your drinking water source.
- Mr. Chad Nichols, a resident and geologist, mentioned Whidbey Water Keepers conducting well sampling and that the Navy should compare results. Ms. Leibman stated we have not received their sampling results but we would look at them if we got the chance.
- The next step at OLF is to investigate the extent of the contamination on base and off base.

Ms. Leibman asked for any questions regarding PFAS or Area 6:

- Mr. Steve Swanson, a retired emergency physician, discussed the toxicology and history of the firefighting foam specifically discussing PFHxS. He stated PFHxS has been found in the five people's drinking water results that tested their tap water in Coupeville. Ms. Leibman stated the Navy did not have those specific tap water results. Mr. Swanson discussed his concern regarding Coupeville's blended water and exposure to the community. Ms. Leibman thanked Mr. Swanson for sharing his concerns. Ms. Leibman stated the Navy is addressing compounds that the EPA has set a LHA for and the Navy will be prepared to address additional compounds as new regulations are set. Ms. Leibman said the Navy is very aware of the town of Coupeville's water and options are being evaluated.
- Ms. Taylor, part of Coupeville Community Allies, stated their biggest concern in the unprecedented level of military expansion coming to Central Whidbey or proposed for Central Whidbey. She asked if the Navy was continuing to use the same kind of chemicals. Ms. Leibman indicated the Navy is in the process of inventorying what we currently have on base in our fire trucks, in our hangers, and depression systems. The Navy has some of the old formations of AFFF in inventory, but those formations are not utilized in our fire trucks, and we are no longer performing training practices with these high levels of PFOS and PFOA and other chemicals. It is in the Navy inventory in case of an emergency event as it's a lifesaving chemical. Ms. Taylor mentioned a new foam being developed in Europe that has no perfluorinated compounds, and is biodegradable. Ms. Taylor also discussed difficult filtration of PFHxS and gave the example of Issaquah. Ms. Leibman stated she has provided the new foam specifications to NAVSEA (Navy Sea Systems Command) and they are the ones who do the researching and testing of firefighting foams. Ms. Leibman stated the filter systems are addressing PFOS and PFOA as they have set regulatory levels to compare to.
- Mr. Doug Kelly, ICHD, asked why the Navy was evaluating PFAS at Seaplane Base. Ms. Leibman stated the Navy nationwide is conducting base-wide preliminary assessments for PFAS and we are including it out of the abundance of caution.
- A citizen from Coupeville discussed her family history with base and her concern of the EPA LHA being high compared to other states. Citizen discussed her concern regarding Coupeville's blended water and exposure to the community. Citizen asked what the timeline is for Washington State having its own regulatory standard. Ms. Leibman stated she has been in communication with the Washington State Department of Health (DOH) but it will be at least a year before they determine a level. Ms. Leibman stated there's a difference of opinion between health experts about what PFAS compounds' (e.g., PFOA, PFOA, PFHxS) concentrations should be added together and compared to the EPA's LHA. Captain Moore stated the Navy policy is to address any chemical that is regulated and chemicals with health advisories will have decisions made on a case basis. There is no statutory requirement for the Navy to take actions based on health advisories; however, the Navy has made a decision to do so for PFOS and PFOA. In addition, if a lower advisory or regulation is established for PFOS or PFOA, then the Navy will take the necessary steps to reduce human exposure.
- A citizen asked about Seaplane Base being investigated and the housing water having PFAS.
 Captain Moore stated Seaplane Base is on city water. Ms. Leibman added they are on City of Oak Harbor water.

Ms. Kristeen Bennett presented an update on CERCLA Sites Area 1 (former Beach Landfill) and Area 52 (former Jet Engine Test Cell).

- Area 52 was petroleum site and monitoring has been completed.
- Areas 1 and 52 fall into the long-term management portion of our cleanup process.
- The Navy repaired most of the sea wall fronting Area 1 in 2016 and completed it in March 2017. Final grading was completed in August 2017. The purpose of the repair was to keep the landfill contained as it encounters significant erosion. Based on the setting, seawall repair will likely be conducted more frequently. The Navy updated our budget projections to conduct periodic maintenance and repair of the seawall, just because it's not functioning as we originally intended.

Ms. Bennett presented an update on the following petroleum sites at NASWI: Fuel Farms 1, 2, 3, and 4.

- Fuel Farms 1, 2, 3, and 4 were added to the petroleum restoration program because of the timing of when they were installed and because there was contamination left in place after these tanks were decommissioned.
- Other times sites can be added after discovery during construction work. While installing the A-3 monument at the northwest corner of Ault Field Road and Langley Boulevard, an unknown underground storage tank (UST) was encountered. Based on historical research, there was likely a gas station on that property before the Navy got the property in the late '40s to early '50s.
- Two sites are in active remedy and there are two sites that are considered part of long-term management. Free product recovery would be considered active remedy.
- The Navy also conducts five-year reviews on petroleum sites where we look at remedies and how they're performing every five years. The petroleum five-year review will be finished in the next few months and there is a draft public comment period where the public can also review that five-year review document. It will be published in the newspaper if you would like to review it.
- The A-3 monument UST was discovered in 2013. A preliminary investigation was conducted and primarily diesel with a little bit of gasoline was identified. Work is still being performed and a limited source removal action will probably be conducted in the next fiscal year during drier months.
- A citizen asked if Ms. Bennett is pleased with the timing of it taking five years to remove a tank
 and dig up dirt. Ms. Bennett answered that she thought it happened relatively quickly. The
 citizen stated that is more frightening to them. Ms. Bennett stated the process is driven by the
 risk of the site and petroleum contamination has a lower risk to human health and the
 environment.
- Mr. Doug Kelly asked about groundwater contamination off-site at A-3 UST. Ms. Bennett answered that the data indicates contamination is limited.

Ms. Bennett presented an update on the NASWI Munitions Response Program:

- DoD instituted the Military Munitions Response Program to respond to the potential hazard of things that may explode, whether that be UXO items, unexploded ordnance, or materials potentially presenting an explosive hazardous.
- The funding source is different than chemical sites managed under CERCLA.
- An overview of four sites using a map was provided:
 - o Former Lake Hancock Target Range (LHTR) was a practice site.
 - Aviation Fleet Gunnery School including Mobile Tower Turret Range and Machine Gun Ranges B and C. (Machine Gun Range A is still used)

- o Polnell Point was used as an ordnance disposal area.
- Crest Harbor Practice Range was used primarily is WWII and 1950s for underwater demolition of munitions. It is still currently used as a training area for Explosive Ordnance Disposal (EOD) so we will likely remove it from the program.
- Former Lake Hancock Target Range: Remedial action will be implemented including limited surface removal and land use controls (LUCs), including periodic inspections, fencing, and signage. Limited surface removal will be conducted around the target area and along the beach because of pristine wetlands and historical natural landmark designation. It's not practical or feasible for us to remove all the potential items out there since doing so would destroy pristine saltwater wetlands. The Navy does have issues with trespassing at LHTR. It is Navy owned property, but is still considered a training area for the Navy.
- There are no current plans for additional work at the Aviation Fleet Gunnery School including Mobile Tower Turret Range and Machine Gun Ranges B and C. (Machine Gun Range A is still used) The current remedy is LUCs because the property is still Navy owned.
- Polnell Point has LUCs because the property is still Navy owned. Historically it was used as an
 explosive ordnance disposal (EOD) burn area. It will probably be one of the last sites we look at
 based on risk and funding.
- Ms. Kathy Lester asked what are the contaminants associated with munitions. Ms. Bennett stated lead and polycyclic aromatic hydrocarbons are the main ones at Whidbey.
- A citizen asked if there are any plans on reducing of LUCs at any of these sites specifically Lake Hancock. Ms. Bennett stated she did not think so based on use, ownership, and wetlands.

Ms. Krista Jackson asked about trucks potentially disposing debris (landfill activity) in an open-pit right across the street from the gate on Hoffman Road. Captain Moore stated there is a lot of moving of material in and out for a flight ramp project. Ms. Bengston stated the contractors have to test and properly dispose of Navy soil. Ms. Bengston indicated she would determine the status of this particular issue.

Ms. Jackson asked about the confidence regarding the groundwater flow direction under Area 5. Ms. Leibman stated she is not familiar with Area 5 and we will look into it. The primary direction of groundwater flow is to the south in Area 6. As part of the Navy's on-base investigation for extent of 1,4-Dioxane and PFAS, we will be looking at the northern edge of Area 6 where there might be some minimal northern migration of groundwater flow. Ms. Jackson asked if PFAS could potentially have a northward drift. Ms. Leibman stated the Navy is conducting on-base PFAS investigations, and if we find it, that is possible.

Mr. Kelly asked if the surface water drains into anything to make its way all the way to Dugualla Bay or does it infiltrate into the land. Ms. Leibman answered that evaluation is part of the next steps to look into.

A citizen mentioned the high concentrations (of PFAS) at the former fire-fighting school at 20 feet deep and asked where is it going. Ms. Leibman indicated that is part of the next steps investigation as part of the preliminary assessment and site inspection. Ms. Leibman indicated the Navy's priority has been to address the drinking water exposure, and now that this is complete, we are going back to address and delineate the extent of the contamination.

Ms. Bengtson and Mr. Wicklein reviewed action items for the next meeting including:

- Area 5 groundwater flow direction
- Hoffmann Gate disposal what is being disposed

Mr. Swanson stated based on his calculations he has two lifetime exposures of PFOA and filtration never gets rid of it all. He asked if there was discussion on using non-detect wells as opposed to filtration. Ms. Bengston stated Kendra will address that. Ms. Fellrath stated that "Steve just told us that he's had his blood tested and it is way way over the legal limits. He has two lifetimes of exposure." Mr. Swanson discussed his calculations. Ms. Leibman stated the Navy has several non-detect wells in the southern portion of OLF. Ms. Leibman stated it is a possible solution, and we will look at that as part of the long-term solution evaluation. Ms. Leibman stated the Navy will not install a new drinking water plant on OLF due to flight operations and facility's mission.

A citizen asked the Navy's solution timeframe. Ms. Leibman stated she was confident in an interim solution (filtering) by end of year. The citizen indicated filtering is a non-starter for them and potentially some other neighbors and it isn't a premium solution. There is discussion of separate meetings for affected drinking water well owners. The citizen indicated there are health issues in some of the impacted families and thanked Kendra for her work.

Ms. Bengston stated next RAB will be in late February/early March and there will be a public meeting about Area 6 before then. Regarding the future agenda, we're thinking of not giving all the historic detail that we did tonight, but we would welcome suggestions for agenda topics. We thought we would probably focus more on the active sites, Site 6, and PFAS investigations, more so than revisiting all the historic sites.

Captain Moore asked if the panel had any comments. Captain Moore closed meeting by thanking everyone for their engagement.

Meeting adjourned at 7:15 p.m.

Acronym List:

NASWI - Naval Air Station Whidbey Island

ICPH - Island County Public Health

WEAN - Whidbey Environmental Action Network

RAB - Restoration Advisory Board

NAVFAC - Naval Facilities Engineering Command

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as "Superfund"

RPM - Remedial Project Manager

UST – Underground Storage Tank

AST – Aboveground Storage Tank

LTM - Long Term Monitoring

UUUE - Unlimited use and unrestricted exposure

LHTR - Lake Hancock Target Range

EOD - Explosive Ordnance Disposal

LUCs - Land use controls

ROD – Record of Decision

VOCs – Volatile Organic Compounds

P&T system - pump and treat system

FFS - Focused Feasibility Study

LTMtg – Long Term Management

MNA - Monitored Natural Attenuation

FY - Fiscal Year

OLF - Outlying Landing Field

AFFF – Aqueous film-forming foam

PHA - Provisional Health Advisory

LHA - Lifetime Health Advisory

PFOA - Perfluorooctanoic Acid

PFOS - Perfluorooctyl Sulfonate

PFAS – Per- and polyfluoroalkyl substances

VC – vinyl chloride

PA – Preliminary Assessment

SI – Site Inspection

PA/SI - preliminary assessment and site inspection

bgs - below ground surface

Areas:

- Area 6 is the former current landfill that is southeast of Ault Field
- Area 31 is the former runway fire school
- Area 1 is the former Beach Landfill
- Area 52 is the former Jet Engine Test Cell