

Marine Corps Base Camp Lejeune (MCB Camp Lejeune) Restoration Advisory Board (RAB) Meeting Minutes

MEETING DATE: February 23, 2022

LOCATION: Coastal Carolina Community College, Business Technology Building, Jacksonville, North Carolina

ATTENDEES: Thomas Richard/MCB Camp Lejeune Brian Wheat/RAB Member
Laura Spung/MCB Camp Lejeune Dan Hockett/CH2M
David Towler/MCB Camp Lejeune Matt Louth/CH2M
Dave Cleland/Navy
Lindsey Mills/Navy
Randy McElveen/NCDEQ
Jennifer Tufts/EPA
Laura Bader/RAB Co-Chair

FROM: Matt Louth/CH2M

DATE: March 3, 2022

I. Welcome and Introductions

Mr. Richard began the meeting.

II. Basewide Per- and Polyfluoroalkyl Substances (PFAS) Site Inspection (SI) Summary

Objective: The purpose of this agenda item is to provide Preliminary Assessment (PA) background, review the Basewide PFAS SI approach, review results from the Basewide PFAS SI, and review SI recommendations.

Overview: A presentation was reviewed by Mr. Hockett. PFAS is a family of thousands of compounds of human made substances. PFAS are found in aqueous film-forming foam (AFFF) for firefighting, coatings in carpets, clothing, furniture fabric, and food packaging. The key properties of PFAS are that they are very difficult to break down and last a long time in the environment, are water-soluble and move from soil to groundwater, and can move long distances with groundwater.

Environmental Protection Agency (EPA) identified PFAS as a class of emerging chemicals. Emerging chemicals are identified based on perceived, potential, or real threat to human health or environment; lack of published health standards; and discovery of new pathways to humans. In 2006, North Carolina established Interim Maximum Allowable Concentrations for perfluorooctanoic acid (PFOA) at 2,000 parts per trillion (ppt) in groundwater. In 2016, EPA established a lifetime health advisory for PFOA and perfluorooctane sulfonate (PFOS) for drinking water with a limit for individual or combined PFOA and PFOS at 70 ppt. These values are non-enforceable.

Drinking water safety is the top priority with the Navy's PFAS policy and investigations. The Navy monitors concentrations of PFAS in drinking water on its installations to ensure concentrations are below the EPA lifetime health advisory for PFOA and PFOS. The Navy conducts drinking water

investigations first, before completing on-Base PFAS investigations, if there are drinking water wells within 1 mile in the direction of groundwater flow from a known or suspected PFAS release areas. If releases are identified during on-Base investigations and there are off-Base drinking water wells within 1 mile in the direction of groundwater flow the Navy conducts drinking water investigations.

The drinking water supply wells aboard Camp Lejeune are tested for PFAS every six-months starting in 2019. Drinking water testing for PFAS was also conducted between 2013 and 2015. Thus far, PFOA and PFOS have not been detected above the EPA Lifetime Health Advisory. During the PFAS SI activities, one release area, Camp Davis South forward arming and refueling point (FARP) activities area, was identified as needing an off-Base drinking water investigation. Twelve off-Base drinking water wells were identified within 1 mile of the on-Base area. Samples were collected from the 12 off-Base drinking water wells. All results were below the EPA lifetime health advisory. PFOS and PFOA were detected in only 1 of 12 off-Base samples at a combined concentration of 1.264 ppt.

The 2020-2021 PA findings were reviewed and identified 52 confirmed or suspected release areas and 7 areas that were previously investigated in 2017-2018. The objectives of the SI were to evaluate whether a release of PFAS has occurred and if a release is confirmed, evaluate whether a Remedial Investigation (RI) is warranted and/or if there is a potentially complete exposure pathway to the public through drinking water.

Data evaluation for the SI is based only on PFAS with project action limits (PALs) which include PFOA, PFOS, and PFBS. Recommendations for No Further Action (NFA) were based on PFOA, PFOS, and PFBS in soil and groundwater that do not exceed PALs. Recommendations for a Phase 2 SI were based on PFOA, PFOS, and/or PFBS in soil and/or groundwater at concentrations above their respective PAL, but potential unacceptable risks to people are not expected based on available data, or uncertainty related to the location of the source. Recommendations for an RI were based on PFOA, PFOS, and/or PFBS in soil and/or groundwater above their respective PAL and potential unacceptable risks have been identified for people.

The SI field activities were conducted at 52 areas between June 2020 and July 2021. Surface/subsurface soil samples were collected at 104 locations, 195 new monitoring wells were installed and groundwater was sampled from the new wells and 61 existing monitoring wells, and sampling results were compared to the PALs. The recommendations were reviewed by area of the Base as follows:

- In the Camp Davis area of the Base, NFA was recommended for 2 areas and an RI was recommended for Camp Davis FARP Activities South (Site 111). RI work planning is underway and field work is planned to start this summer.
- In the Rifle Range area of the Base, NFA was recommended for 2 areas, a Phase 2 SI was recommended for 1 area, and an RI was recommended for 2 areas.
- In the Marine Corps Air Station (MCAS) New River area of the Base, an RI was recommended for 20 areas within and adjacent to the flight line.
- In the Camp Geiger area of the Base, a Phase 2 SI was recommended for 3 areas and an RI was recommended for 8 areas.
- In the Mainside area of the Base, NFA was recommended for 1 area, a Phase 2 SI was recommended for 4 areas, and an RI was recommended for 6 areas.
- In the Midway Park, Tarawa Terrace, and Montford Point areas of the Base, NFA was recommended for 1 area and an RI was recommended for 2 areas.
- In the Courthouse Bay area of the Base, NFA was recommended for 1 area and an RI was recommended for 5 areas.

In summary, 59 areas were evaluated overall, 7 of the 59 areas were recommended for NFA at this time, 8 of 59 areas were recommended for a Phase 2 SI, and 44 of 59 areas were recommended for an RI. Some of the areas recommended for RIs will be combined, resulting in 23 proposed RIs.

The Basewide PFAS SI was finalized in January 2022. The RI for Site 111 is planned for 2022 and additional RIs will be prioritized based on proximity to surface water, drinking water wells, and relative degree of PAL exceedances and will begin in 2022-2023.

Mr. McElveen from NC DEQ indicated that the State Groundwater Standards have a requirement that any chemical that does not have a standard is required to use the detection limit (Practical Quantitation Limits (PQL)) as the Standard. The NC DEQ is working with NC DHHS to establish standards for PFAS. Ms. Tufts from USEPA said the EPA is in the process of developing established PFAS and PFOS standards with preliminary values scheduled to be released by the end of 2022 and then finalized in 2023.

V. RAB Business

The next RAB meeting will be scheduled for May 2022 and an email with the projected date will be sent to the RAB members. No topics were suggested for the next meeting. Mr. Richard indicated the Base is in the process, based on RAB charter, of evaluating to ask members who no longer meet the RAB criteria to resign. The Base is also evaluating additional ways to obtain new members. Ms. Bader indicated many avenues have been explored and tried to obtain new members without many results. Mr. Wheat acknowledged how well the team is working on site clean-up and Ms. Tufts concurred.