

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

MEETING DATE: February 19, 2020

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

ATTENDEES:

Kitty Hiortdahl/MCB Camp Lejeune	Richard Mullins/RAB Member
Ansley Bucher/MCB Camp Lejeune	Brian Wheat/RAB Member
Dave Cleland/Navy	Cece Cavallario/Community
Randy McElveen/NCDEQ	Allison Jenson/Community
Jennifer Tufts/EPA	Jonathon Lucas/Community
Laura Bader/RAB Co-Chair	Walter Perry/Community
Michael Curtis/RAB Member	Dan Hockett/CH2M
Thomas Mattison/RAB Member	Matt Louth/CH2M

FROM: Betsy Collins/CH2M

DATE: February 27, 2020

I. Welcome and Introductions

Ms. Hiortdahl began the meeting and reviewed the agenda.

II. Basewide Per- and Polyfluoroalkyl Substances (PFAS) Data Review and Investigations

Objective: The purpose of this agenda item was to review PFAS data, review recommendations for a future Site Inspection, and provide the schedule.

Overview: This presentation was given by Mr. Hockett and Ms. Hiortdahl.

PFAS Background

PFAS are human made substances widely used for many commercial applications and consumer products, including coatings in carpets, clothing, furniture upholstery, fabric, and food packaging, and in aqueous film-forming foam (AFFF) for firefighting. PFAS is persistent in the environment and resistant to typical degradation processes. It is water-soluble, able to migrate from soil to groundwater, and migrate long distances. The Environmental Protection Agency (EPA) has identified PFAS as an emerging contaminant which has perceived, potential, or real threat to human health or environment. In 2006, North Carolina released an Interim Maximum Allowable Concentrations for perfluorooctanoic acid (PFOA) of 2,000 parts per trillion (ppt) in groundwater. In 2016, the EPA released lifetime health advisories for PFOA and perfluorooctane sulfonate (PFOS) of 70 ppt. This is a non-enforceable guideline.

Camp Lejeune Drinking Water

Drinking water safety is the top priority with the Navy's PFAS policy and investigations. The Navy conducts drinking water investigations first, before completing on-Base PFAS investigations. Ongoing

investigations have shown that Camp Lejeune's drinking water is safe for use. Per the EPA's Unregulated Contaminant Monitoring Rule, six PFAS chemicals were sampled from the Camp Lejeune drinking water supplies from 2013 through 2016 and PFAS were not detected in any finished drinking water samples.

Additionally, drinking water supply wells and treated drinking water are voluntarily sampled for a variety of potential contaminants on a semi-annual basis. PFAS chemicals were recently added to the suite of potential contaminants in 2019. PFOA and PFOS were detected in the sampling event performed in August 2019; however, all values were less than 2 parts per trillion (ppt), below the EPA lifetime health advisory level of 70 ppt. One PFAS chemical, perfluorohexanoic acid, was detected in drinking water (1.76 ppt) from the Hadnot Point Distribution System. This chemical currently does not have a health advisory level or other cleanup standard. The results of required and voluntary sampling are reported to the North Carolina Department of Environmental Quality (NCDEQ).

A RAB member asked if the supply wells that had PFAS were shut down and removed from the water supply network. Ms. Hiortdahl responded that if sampling results were near or above the 70 ppt threshold that well would be shut down but based on the results to date, to her knowledge, the wells have not been shut down.

There are no drinking water supply wells located within one mile downgradient of confirmed PFAS releases. A Basewide Site Inspection that includes groundwater sampling for PFAS in suspected release areas is planned as one way to confirm that drinking water remains safe in the future.

2017-2018 Site Inspection

Between 2017 and 2018, Site Inspection activities were conducted at four sites based on potential AFFF release to the environment: Sites 9 and 54 (firefighting training areas), Site 86 (flight operations and hangars), and Tactical Landing Zone Phoenix (helicopter crash site where AFFF used to extinguish fire). The objective of this investigation was to identify the presence or absence of PFAS in shallow groundwater underlying each site and compare these results to lifetime health advisory limit and the North Carolina Interim Maximum Allowable Concentrations.

Twenty-six groundwater samples were collected for PFAS analysis from the four sites. Groundwater samples collected from Sites 9, 54, and 86 had exceedances of the Lifetime Health Advisory and/or the North Carolina Interim Maximum Allowable Concentrations. No drinking water supply wells exist within one mile of Sites 9, 86, or Tactical Landing Zone Phoenix. One drinking water supply well was identified within one mile of Site 54 but it is sidegradient. This drinking water supply well was sampled in 2018 and PFAS was not detected.

2018-2019 Preliminary Assessment (PA)

Between 2018 and 2019, a PA was conducted to identify and catalog potential or actual PFAS releases, and identify areas requiring further PFAS investigation as part of a site inspection. The PA included an archival search of documents environmental databases, historical maps, storm water management plan, wellhead protection plan, landfill monitoring reports, oil pollution abatement facility inventory, biosolids residual management plans and reports, crash reports, material inventories, forward arming and refueling point training diagrams, command chronologies, statement public supply well databases, and commercially available database search results. The PA also included interviewing over 40 individuals including Base personnel from aircraft rescue and firefighting, fire department, public works, environmental management, geographical information system, range control, historical program office, Marine Corps Air Station New River operations, paint shop, and range development. Additionally, over 100 potential PFAS release sites were visited. The PA identified 63 confirmed or suspected areas of release, of those 4 were permitted facilities and 7 areas were previously investigated leaving 52 recommended areas for Site Inspections.

The suspected PFAS release areas recommend for Site Inspections include a fire training area, fire stations and associated buildings, hangers, emergency response areas, motor transport shops, AFFF spray test/P-19 staging areas, historical waste water treatment plants and sludge drying beds, former waste disposal areas, forward arming and refueling points, and other areas of potential AFFF release.

A RAB member asked if there is prioritization of these sites based on location. Mr. Hockett stated that the 52 areas recommended for investigation in the PA are planned to be investigated concurrently and Ms. Hiordahl reiterated that drinking water is safe and there are no known complete exposure pathways that would warrant site prioritization.

The PA Report was finalized December 2019. Work planning is currently being conducted for the Site Inspection and the field work is expected to begin in summer 2020.

III. Fiscal Year 2020 Community Involvement Plan Update

Objective: The purpose of this agenda item was to provide an update on the Community Involvement Plan (CIP) and review the schedule.

Overview: This presentation was given by Mr. Louth. At the November 2019 RAB meeting, an overview of the CIP Update process was presented. Attendees participated in open discussion and provided feedback including the following:

- Using Channel G10 to broadcast RAB notifications
- Doing a better job of informing the community of all the work that is being conducted
- Providing a presentation to the Chamber of Commerce
- Generating short films, visuals, and/or before and after pictures to be presented on YouTube and/or Channel G10

Interviews were conducted with local officials, the Chamber of Commerce, and Base individuals. Most interviewees agreed or suggested that the Base is fulfilling its role as a responsible neighbor. They were generally aware of environmental investigations being conducted by the Base and believed the EPA and NCDEQ to be credible, trustworthy sources of information. They agreed that email and Facebook are good sources to receive information about local news and events. No interviewees had visited the RAB or Camp Lejeune Environmental Cleanup Program websites.

As a result of the feedback from the last RAB, the next quarterly success story to be posted on the Camp Lejeune Facebook page and printed in The Globe will cover how the Base's long-term monitoring program keeps watch year after year. The story will include a summary of the number of sample locations and a video of active surface water treatment for the Facebook post. The CIP is expected to be finalized in July 2020.

V. RAB Business

The next RAB meeting is scheduled for May 13, 2020. RAB members requested a PFAS investigation update and an Installation Restoration (IR) program funding overview as future RAB Topics.

A RAB member stated that rumors related to the safety of the drinking water continue to proliferate on Base and the perception still exists that there is an issue. Ms. Hiordahl stated that there is an increased effort to connect with resident advisory boards to increase communication with on-Base residents.

A RAB member asked if MCB Camp Lejeune is getting the financial support needed for IR related activities compared to other peer Bases. Mr. Cleland stated that since 2006 his job has been making sure we have the funding we need to get the work done and he will provide more details during the future RAB topic.