

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

MEETING DATE: November 20, 2019

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

ATTENDEES:

| | |
|--|------------------------------|
| Ansley Bucher/MCB Camp Lejeune | Brian Wheat/RAB Member |
| Kirsten (Kitty) Hiortdahl/MCB Camp Lejeune | John Faran/RAB Attendee |
| Dave Cleland/Navy | Allison Jensen/RAB Attendee |
| Beth Hartzell/NCDEQ | Walter Perry/RAB Attendee |
| Randy McElveen/NCDEQ | David Plummer/RAB Attendee |
| Jennifer Tufts/EPA | James Rester/RAB Attendee |
| Laura Bader/RAB Co-Chair | Kelsey Stiglitz/RAB Attendee |
| Richard Mullins/RAB Member | Amy Brand/CH2M |
| Cynthia Rester/RAB Member | Kim Henderson/CH2M |
| Steve Thompson/RAB Member | Matt Louth/CH2M |
| | Genevieve Ritter/CH2M |

FROM: Kim Henderson/CH2M

DATE: December 16, 2019

I. Welcome and Introductions

Ms. Hiortdahl began the meeting.

II. Fiscal Year 2020 Community Involvement Plan Update

Objective: The purpose of this agenda item was to introduce the Community Involvement Plan (CIP), provide an overview of the Environmental Restoration Program (ERP), review of the 2015 CIP, discuss the 2020 CIP Update, and tell us what you're thinking!

Overview: A presentation was reviewed by Ms. Brand and Mr. Louth. A CIP is a site-specific strategy to enable meaningful community involvement throughout the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanup process. The CIP is considered an "essential and integral component" of the Department of the Navy's and Marine Corps ERP.

Environmental Protection Agency (EPA) and Navy guidance is followed in developing the CIP. The Navy generally follows EPA's Superfund Community Involvement Handbook dated 2016. The Navy's community involvement requirements are more comprehensive than the minimum CERCLA requirements and CIPs are considered "living documents" that are reviewed and updated periodically.

Contents of the CIP include the scope and objective of the Navy's ERP; site history including the environmental history; key demographic information about the affected community; background and

history of community involvement at the site; community needs, concerns, and expectations; and community involvement activities the Navy plans to implement.

The basis of a CIP is based on information gathered through personal interviews, review of RAB meeting minutes, and public comments. Interviews identify community interests and concerns, information needs, and how people would like to be kept informed.

In 2015, there were 98 sites in the ERP (68 Installation Restoration Program [IRP] sites and 30 Military Munitions Response Program [MMRP] sites) whereas in 2019, there are 101 sites in the ERP (69 IRP sites and 32 MMRP sites) and the status of sites in the CERCLA process were reviewed.

Since the last CIP Update, some highlighted successes were reviewed:

- A pilot study using a bioreactor comprised of mulch, gravel, and vegetable oil at IRP Site 93 was initiated in 2015 to reduce volatile organic compounds (VOCs) in groundwater.
- A permanganate tracer study was conducted in 2016 at IRP Site 88 to determine the best means of distribution to come in contact with the VOCs and to evaluate the performance of a groundwater recirculation system. The solution was applied through a 1,600-foot horizontal injection well at a depth of 95-feet below ground surface.
- A pilot study was conducted at IRP Site 78 from 2017 through 2018 to evaluate the effectiveness of air sparging to treat VOCs found in groundwater at depths up to 125 feet below ground surface.
- A treatability study was conducted at IRP Site 96 in 2018 to assess the effectiveness soil vapor extraction in removing VOCs and to evaluate the effectiveness of enhanced reductive dichlorination in reducing VOC concentrations in groundwater. Solar power was used to run the system.
- Environmental investigations were conducted at MMRP Site UXO-19, Camp Devil Dog in 2016 through 2017. 440 munitions and explosives of concern were identified and although there was no risk to human health or the environment from munitions constituents, potential risk for unexploded ordnance buried below 2 feet remained. Land use controls were implemented in 2016 and warning signs were installed in 2017.
- At MMRP Site UXO-06, in 2019, a total of 425 pounds of material documented as safe were identified and removed from 129 acres of the site. Land use controls were put in place to protect public health and welfare from potential explosive hazards since surface clearance does not remove all the munitions items from the site and below the ground. Warning signs and digging restriction signs were also installed.

The RAB was opened for discussion on technical topics and cleanup:

- A RAB member indicated that Camp Lejeune has been on the cutting edge of cleanup technologies.
- A RAB attendee asked how vegetable oil cleans up chlorinated solvents. Vegetable oil feeds the bugs and they breed and breathe the solvents and take chlorine atoms one by one until the solvents are gone. The resulting waste is carbon dioxide which is not toxic.
- A RAB attendee asked that given the size of plumes and restoration efforts, how long until success can be declared. The timeframe for cleanup is dependent on how easy the contamination is to get to. Although there are good technologies to treat the contamination, contact with the contamination must be achieved for successful treatment. This can be challenging based on subsurface conditions (e.g., if contamination is bound to clay or if contamination is 100s of feet deep).
- A RAB attendee asked how much money has been spent so far at Site 88. Site 88 is one of the most technically challenging sites. For the Record of Decision that was just signed, the remedial action for addressing contamination over 100 feet deep has a present day cost of \$14M and the timeframe to achieve the cleanup goals is just under 100 years.

- A RAB attendee asked how health risks are assessed. As part of the CERCLA process human health and ecological risk assessments are conducted to evaluate every potential exposure scenario from a child to a trespasser to a construction worker to a worker in a building to worms, birds, mammals, and fish. The team's mission is to protect human health and the environment. If there is an immediate concern identified, a time-critical removal action is conducted to address the risk immediately. Potential future risks are addressed through controls (e.g., restricting activities in soil, prohibiting groundwater as drinking water). The Five-Year Review is currently being conducted to review the site remedies and evaluating protection of human health and the environment. There are no known receptors with known contact (e.g., potable well, creek).
- A RAB attendee asked how data is collected. Investigations and interviews with former employees on operations are conducted and environmental media including collection of soil, groundwater, air, surface water, and sediment samples.
- A RAB attendee indicated that they worked in the former dry cleaning building for 20 years and asked about participating in the health evaluations. A RAB member also asked if there is anything being done for people exposed in the 1970s and 1980s for health issues. Ms. Hiortdahl can provide Base and Agency for Toxic Substances and Disease Registry (ATSDR) contacts for more information.

For the 2015 CIP, the results of the interviews and questionnaires indicated 61% were aware of the ERP, 13% were aware of the RAB, 11% were aware of the Navy's ERP website, 7% were aware of the RAB website, and 38% were aware of the Information Repository. It also indicated confidence in the ERP as 76% believe that "Camp Lejeune is a responsible neighbor regarding environmental cleanup". The key environmental concerns identified included potential health concerns, groundwater, and surface water followed by air quality and munitions.

Based on the feedback from community members during the 2015 CIP update, several enhancements were implemented including:

- Increased advertisement of upcoming RAB meetings on the Camp Lejeune Facebook page, through public service announcements (WAVQ FM), community calendars (WRAL FM), and the Base's weekly email "blast".
- Site tours for RAB members.
- Including a link to the RAB website on public notices and fact sheets.
- Maintaining and updating mailing lists.
- Preparation and distribution of fact sheets.
- Publicizing points of contact on the Base's and Navy's websites.
- Updating the CIP format to be more user friendly.
- Providing technical assistance grant information which was presented at the August 2016 RAB meeting.
- Distributing updates through social media and the internet through quarterly "Success Stories" posted to the Camp Lejeune Facebook page.
- Maintaining and updating Base, Navy, and EPA websites more frequently with up-to-date information.
- Placing signs near environmental sites
- Participating in local festivals. An interactive display on the ERP was provided at the Earth and Surf Fest in 2016.

The CIP update process includes developing a preliminary list of community stakeholders for community interviews, developing questions for interviews, conducting interviews to determine community concerns and information needs, promoting the RAB meetings to present the CIP update and gather input, analyze results of interviews and the RAB meeting input along with other sources of information

about community concerns, reviewing and updating community involvement methods as necessary, and updating the CIP document.

The RAB was opened for discussion with questions:

- What do you want to know?
- How do you want to get that information?
- How do you think Camp Lejeune and the Navy should be delivering information?

The suggestions and topics discussed include the following:

- The frequency of RAB meetings is good, every 3 months.
- RAB notifications were recommended on channel G10, through flyer posting on community bulletin boards at community centers and libraries, and announcements through civic organizations, Rotary, the Coastal Federation, etc.
- The Base could do a better job letting people know about all the work that is being done to show action (e.g., how many contractors/people working on the projects during a given time, how many monitoring wells installed and sampled) because the program is doing a lot more than is being shown and communicated.
- There was a recommendation to provide this presentation to the Chamber of Commerce.
- The RAB attendees indicated that there are no concerns that are not being addressed.
- There was a recommendation for less technical content for presentations.
- There was a recommendation to hold meetings on-Base for residents regarding drinking water. The ERP works to prevent contamination to the drinking water wells. There is a separate drinking water treatment department on-Base and Camp Lejeune's drinking water is thoroughly tested and this feedback will be passed along. Notifications for a meeting was recommended through Marine Corps Community Services (MCCS).
- YouTube/channel 10 short films, visuals, and before and after pictures were recommended. The community college may have a media department looking for a project.

V. RAB Business

The next RAB meeting is scheduled for February 19, 2020.