

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

MEETING DATE: June 13, 2018

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

North Carolina

Dave Cleland/NAVFAC Mid-Atlantic ATTENDEES:

> Charity Delaney/MCB Camp Lejeune Thomas Richard/MCB Camp Lejeune

Randy McElveen/NCDEQ

Laura Bader/RAB Co-Chair

Betsy Collins/CH2M

DATE: July 5, 2018

Dale Weston/RAB Member Betsy Collins/CH2M Jennifer Tufts/EPA Kristin Brickman/CH2M Matt Louth/CH2M

Michael Curtis/RAB Member

Richard Mullins/RAB Member

#### I. Welcome and Introductions

FROM:

Ms. Delaney began the meeting and reviewed the agenda.

## II. Public Meeting for Site 88

Objective: The purpose of this agenda item was to present the Proposed Plan to the public inviting comments on the preferred alternative for selection in the Site 88 Record of Decision.

Overview: A presentation was reviewed by Mr. Louth. Official meeting minutes were recorded by a Court Reporter and will be documented in the Administrative Record.

### III. Update on Site 96

Objective: The purpose of this agenda item was to provide an update on the Site 96 investigation.

Overview: A presentation was reviewed by Mr. Louth. Site 96 is the location of a former 300-gallon waste oil underground storage tank (UST). The tank and impacted soil was removed in 1996. The site was transferred from UST to the Resource Conservation and Recovery Act (RCRA) program as Solid Waste Management Unit (SWMU) 360 in 2001 due to the presence of volatile organic compounds (VOCs) in groundwater. In 2009, the site was transferred to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program due to the presence of VOCs inconsistent with the reported contents of the waste oil tank.

A Remedial Investigation (RI) was conducted to further assess the nature and extent and fate and transport of contaminants in soil, groundwater, surface water, and pore water, to refine the conceptual site model by obtaining additional site-specific geologic and hydrogeologic information, and to evaluate potential risks to human health and the environment.

The RI recommended conducting a treatability study to evaluate the effectiveness of technologies in reducing VOCs in the source area and as a potential ongoing source to groundwater followed by a Feasibility Study (FS) to identify remedial action objectives and evaluate remedial alternatives to address the remaining VOC contamination.

The enhanced reductive dechlorination (ERD) treatability study is being conducted to reduce concentrations in the source area. A solution of Lactoil, water, and bioaugmentation culture was injected from 22 to 30 feet below ground surface in 17 locations spaced approximately 20 feet apart.

The soil vapor extraction (SVE) treatability study is being conducted to remove source mass from the vadose zone. This study included the installation of two soil vapor extraction wells ranging from 5 to 17 feet below ground surface and is operating using solar power.

The treatability studies began in April 2018 and are planned through March 2019. Quarterly groundwater and soil gas monitoring will be conducted to evaluate performance. A vapor intrusion investigation at Building 1828 and site-wide groundwater sampling event to evaluate seasonal variability are also planned for 2018.

### IV. Update on UXO-23

**Objective:** The purpose of this agenda item was to provide an update on UXO-23 No Action Decision Document.

**Overview:** This presentation was given by Mr. Louth. UXO-23 is the Former Skeet Range (ASR #2.82) that operated from 1952 to 2011. Site investigation activities were conducted from 2008 through 2010 followed by a non-time-critical removal action (NTCRA) for lead and polycyclic aromatic hydrocarbons (PAHs) in soil and an Expanded Site Investigation (ESI) to address remaining data gaps. The ESI activities and results were reviewed as follows:

- A groundwater investigation was conducted in the northern area of the site to confirm the
  presence of PAHs in shallow groundwater. Two surficial aquifer monitoring wells were installed
  and groundwater samples were collected and analyzed for PAHs. No PAHs were detected and
  the monitoring wells were abandoned.
- Sediment samples were collected from Bearhead Creek to confirm potential ecological risks
  previously identified from lead. Fifty sediment samples were collected and analyzed for lead.
  Low concentrations were detected in the samples and a risk evaluation was conducted. There
  were no unacceptable risks to human or ecological receptors identified from exposure to lead in
  Bearhead Creek.
- Sediment and surface water samples were collected from Beaver Dam Creek to assess potential
  impacts from historical site activities. Sixteen sediment samples and six surface water samples
  were collected from Beaver Dam Creek and its drainage features and analyzed for lead and
  PAHs. A risk evaluation was conducted and results indicated that there were no unacceptable
  risks to human or ecological receptors from exposure to lead or PAHs in Beaver Dam Creek.
- Surface soil confirmation sampling was conducted in the southern area of the site to further
  evaluate the potential for elevated lead concentrations previously identified during screening
  activities. Two surface soil samples were collected and analyzed for lead and the results were
  below the regulatory screening criteria.
- The northern wooded area was investigated to identify potential skeet piles and waste disposal activities and evaluate for potential impacts to the environment. Fifteen mounds and 10 discarded drum/container areas were identified and soil samples were collected and analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated

biphenyls (PCBs), and metals. A risk evaluation was conducted and results indicated that there were no unacceptable risks to human or ecological receptors from exposure to soil.

- A groundwater investigation was conducted in the southern area of the site to evaluate the
  potential for lead and PAHs impacts from historical skeet range use. Twelve monitoring wells
  were installed and groundwater samples were collected and analyzed for lead and PAHs. A risk
  evaluation was conducted and results indicated that there were no unacceptable risks to human
  health from exposure to lead or PAHs in groundwater.
- A soil investigation was conducted adjacent to an abandoned cast iron pipe, a former
  watermain, identified during the NTCRA, to investigate the surrounding black material in soil.
  Two soil samples were collected and analyzed for lead and PAHs. Only benzo(a)pyrene exceeded
  regulatory screening criteria; however, the black material in soil is likely attributable to
  bituminous asphalt coating surrounding cast iron pipes and not related to historical skeet range
  activities.

The final ESI report was submitted in March 2018 recommending no further action based on completion of the NTCRA and results of the risk evaluations. The No Further Action Decision Document will be completed this summer.

## V. RAB Business

The next RAB meeting will be scheduled for September 2018.