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

MEETING DATE:	November 29, 2017
LOCATION:	Coastal Carolina Community College, Business Technology Building, Room BT 103, Jacksonville, North Carolina
ATTENDEES:	Charity Delaney/MCB Camp Lejeune Thomas Richard/MCB Camp Lejeune Jennifer Tufts/EPA Randy McElveen/NCDEQ Laura Bader/RAB Co-Chair Michael Curtis/RAB Member Thomas Mullins/RAB Member Thomas Mattison/RAB Member Steven Thompson/RAB Member Brian Wheat/RAB Member Betsy Collins/CH2M Dan Hockett/CH2M Matt Louth/CH2M Dan Brown/CH2M
FROM:	Betsy Collins/CH2M
DATE:	December 15, 2017

I. Welcome and Introductions

Ms. Delaney began the meeting and reviewed the agenda.

II. Update on UXO-24

Objective: Provide a progress update on UXO-24 activities.

Overview: A presentation was reviewed by Mr. Louth. The 1983 Initial Assessment Study identified Site 37 as the Camp Geiger Burial Area and no further action (NFA) was recommended based on no records of hazardous waste disposal. Because no sampling was conducted during this initial assessment, a confirmatory site assessment was conducted between 2009 and 2011 to evaluate the potential presence and nature of environmental contamination to confirm the NFA decision at Site 37. Collection of subsurface soil and groundwater samples indicated that pesticides and herbicides were detected at concentrations in excess of screening criteria.

In 2010, ammunition cans containing small arms ammunition were discovered adjacent to hand dug excavations. Base Explosive Ordnance Disposal (EOD) technicians conducted a limited surface sweep and found several additional small hand-dug excavations containing unexpended small arms ammunitions. Based on these discoveries, the Base documented that Marines had been improperly disposing munition items in the wooded area east of Building TC611 instead of checking them in, and the site was designated as Military Munitions Response Program (MMRP) Site UXO-24.

Between 2011 and 2013, a Preliminary Assessment/Site Inspection (PA/SI), was conducted to further evaluate potential risks associated with pesticides and herbicides in soil and to evaluate the potential presence of munitions and explosives of concern (MEC)/material potentially presenting an explosive hazard (MPPEH) items behind Building TC611. Surface soil and subsurface soil samples were collected to fill data gaps for pesticides and herbicides analyses and human health and ecological risk screenings

were conducted. Digital geophysical mapping (DGM) and 100% intrusive investigation was conducted across the area adjacent to Building TC611. Two pesticides and one herbicide were detected at concentrations exceeding screening criteria in soil and no unacceptable human health or ecological risks were identified. Fourteen MEC items were found, and debris including wire, nails, wrenches, pipes, asphalt, automobile parts was discovered scattered across area. The PA/SI recommended to further assess the nature and extent of the waste disposal area.

In 2015, an Expanded Site Investigation (ESI) was conducted to assess the nature and extent of buried debris and assess potential environmental impacts related to historical waste disposal. Surface and subsurface debris, including concrete and steel pipe, trailer parts, automobile parts, rusted drums, marsh mats, and cable, was found to be diffusely distributed across the site. SVOCs, pesticides, and metals were identified at concentrations exceeding screening criteria in soil but no unacceptable human health or ecological risks were identified.

Based on uncertainties for the potential presence of munitions items, the Partnering Team decided to convert the ESI to a Remedial Investigation/Feasibility Study (RI/FS). The remedial action objective is to reduce or prevent the potential for direct physical contact with MEC/MPPEH and the alternatives evaluated include 1) No Action 2) Land Use Controls (which would require UXO safety awareness training for Base non-EOD/unexploded ordnance personnel and contractors) and 3) Surface Clearing and Subsurface Removal (which would include surface clearance and 100% DGM and intrusive anomaly investigation in target areas).

The RI/FS is planned for spring 2018, followed by the Proposed Plan in fall 2018, Record of Decision in winter/spring 2019, and Land Use Control Implementation Plan in summer/fall 2019.

A RAB member asked how Site 37 was originally closed when there wasn't any sampling. Mr. Louth indicated that it was common practice for sites to have been closed based on review of historical use and that's why the Base went back to re-evaluate them.

III. Update on Investigations at Installation Restoration Site 82

Objective: Provide a progress update on Site 82 activities.

Overview: A presentation was reviewed by Mr. Hockett. The remedy in place at Site 82 is groundwater extraction and treatment, long-term monitoring, and land use controls. Currently, a Supplemental Remedial Investigation (SRI) is underway to further evaluate soil and groundwater source areas. The SRI includes conducting a geophysical survey, digging test pits, conducting a membrane interface probe investigation, collecting soil samples, installing monitoring wells, and collecting groundwater samples.

To date, groundwater sampling, geophysical surveying, soil sampling, and digging test pits have been conducted. Test pit locations were chosen based on anomalies identified during the geophysical survey and on passive soil gas and groundwater sample results. During the digging of the test pits, three volatile organic compound (VOC) source areas were identified. Material in the waste disposal areas included drums, paint cans, wire, cable, vehicle parts, commodes, munitions debris, and marsh mat.

Surficial aquifer plumes were reviewed showing the source areas located adjacent to and upgradient of the VOC groundwater plumes. Impacts generally extend to the line of shallow recovery wells located just south of Wallace Creek.

Upper Castle Hayne aquifer plumes were reviewed showing the VOC impacts generally extend to line of shallow recovery wells located just south of Wallace Creek.

Lower Castle Hayne aquifer plumes were reviewed to illustrate the VOC contamination ranges from the water table to 150 feet below ground surface.

The groundwater treatment plant was optimized to treat additional mass and flow with new carbon vessels and a low-profile, tray air stripper. The recovery well network is being evaluated for the potential to increase the capture zone through the installation of additional recovery wells.

In 2018, the following activities are planned: digging test pits, installing recovery wells, conducting a membrane interface probe investigation, monitoring VOCs in groundwater, sampling the effluent from the groundwater treatment plant, collecting soil samples, collecting fish samples in Wallace Creek, re-evaluating potential risks to human health and the environment, and reporting.

V. RAB Business

The next RAB meeting will be conducted on February 28, 2018. A RAB member requested a future base wide Castle Hayne aquifer presentation.