

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

MEETING DATE: July 31, 2019

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

ATTENDEES:

Charity Delaney/MCB Camp Lejeune	Enrique Flores Jr./Guest
Ansley Bucher/MCB Camp Lejeune	Kim Henderson/CH2M
Dave Cleland/Navy	Monica Fulkerson/CH2M
Beth Hartzell/NCDEQ	Matt Louth/CH2M
Randy McElveen/NCDEQ	Fahran Steier/CH2M
Jennifer Tufts/EPA	Dylan Elks/Meadows
Laura Bader/RAB Co-Chair	Shaun Whitworth/Meadows
Thomas Mattison/RAB Member	

FROM: Kim Henderson/CH2M

DATE: August 13, 2019

I. Welcome and Introductions

Ms. Delaney began the meeting, introduced Ansley Bucher to the RAB, and reviewed the agenda.

II. Hurricane Preparedness and the Installation Restoration Program (IRP)

Objective: The purpose of this agenda item was to review how the IRP prepares for hurricanes.

Overview: Presentations were reviewed by Mr. Louth and Mr. Elks. The Atlantic hurricane season is officially from June to November. Between 2007 and 2018, 15 named storms passed within 100 miles of Camp Lejeune. The IRP has a Hurricane Preparedness Plan that outlines preparation activities and post-hurricane site inspections. In preparing for a hurricane, there are five Conditions of Readiness based on destructive winds and timeframe within distance of Camp Lejeune. The preparation activities for each condition were reviewed followed by activities to resume site operations after a hurricane.

In preparation for Hurricane Florence, on September 10, 2018, work sites were secured in accordance with the Conditions of Readiness. The investigation-derived waste (IDW) and portable latrines were secured using tie-down straps. Drilling and field operations were suspended, equipment was prepared for demobilization, and weather and Base recommendations were monitored. On September 11, 2018, the remediation systems were shut down and all equipment and subcontractors were demobilized. On September 12, 2018, all field staff and project personnel were evacuated prior to Hurricane Florence making landfall on September 14, 2018.

Meadows is responsible for the operations and maintenance of several active remediation and mitigation systems aboard MCB Camp Lejeune including Site 78 North and South groundwater treatment plants (GWTPs) and vapor intrusion mitigations system (VIMS), Site 82 GWTP, Site 88 VIMS

and sewer ventilation system, and Site 89 air sparge and surface water aeration systems. In addition to active remediation systems, Meadows is responsible for the upkeep and inspections of Land Use Control (LUCS) fencing and signage around IRP Sites, and a landfill cap at Site 69.

Prior to the evacuation of personnel, Meadows prepared worksites and facilities in accordance to the Hurricane Preparedness Plan. Active systems were preemptively shutdown the week of September 10th 2018 to prevent avoidable problems such as:

- Damage to equipment and electrical systems caused by power surging and unintended startups
- Uptake of groundwater into VIMS or soil vapor extraction blowers caused by high water tables
- Releases of contaminated groundwater by damaged systems re-starting prior to inspection by operations and maintenance personnel

Active remediation systems were brought back on line from September 25th to October 3rd. The damage to GWTPs were limited to damaged wells houses and a blown main-breaker at Site 82, fallen trees damaged LUC fences and impacted monitoring well access across several IRP sites, and Meadows conducted tree removal and LUC repairs at seven IRP sites, beginning with high priority sites. Work was conducted at Sites 6/82, 44, 89, 74, 69, 49, and 102. Meadows will continue to prepare for hazardous weather events per the Hurricane Preparedness Plan. The Site 82 tower air stripper was a concern during the lead up to Hurricane Florence, due to its age and fiberglass construction. The tower air stripper is slated for removal in Fall 2019 and will be replaced by two lower profile tray air strippers.

III. UXO-06 Update

Objective: The purpose of this agenda item was to provide an update on recent activities at UXO-06.

Overview: This presentation was given by Mr. Louth. UXO-06 was a training area and historical range for fortified beach assault. Over, 17,000 anomalies were investigated and 18 Munitions and Explosives of Concern (MEC) items, 2,729 Materials Potentially Presenting an Explosive Hazard (MPPEH) items, and 249 locations with small arms ammunition were found. Potential risks remain from explosive hazards from MEC/MPPEH over approximately 366 acres. The Record of Decision was signed in May 2018 with a Remedial Action Objective to reduce or prevent the potential for direct physical contact with MEC/MPPEH, which can present unacceptable risk to human health and safety due to the explosive nature of the items/materials. The Selected Remedy was Surface MEC Clearance and LUCs and the Remedial Design was finalized in September 2018, followed by implementation that was initiated in March 2019. The surface clearance was completed over 129 acres, sign installation was completed, and demolition was completed this month. No MEC was found and 54 MPPEH items were found. The LUC survey plat map has been drafted and the Remedial Action Completion Report is planned for completion for Remedy Complete status in September 2019.

IV. Vapor Intrusion Five-Year Review

Objective: The purpose of this agenda item was to provide an overview of the past and upcoming vapor intrusion five-year re-evaluation.

Overview: This presentation was given by Ms. Steier. MCB Camp Lejeune initiated a phased approach to identify buildings where vapor intrusion had a potential to occur and to evaluate potential risks and conducted a Basewide Vapor Intrusion Evaluation (2007-2011). The phased approach evaluated 168 buildings across the Base (Mainside, Hadnot Point, MCAS New River, Courthouse Bay, Camp Geiger, and Tarawa Terrace). Phase 1 identified 161 buildings and evaluated 50 buildings, Phase 2 further evaluated 28 of those 50 buildings, and Phase 3 evaluated 43 additional buildings. MCB Camp Lejeune conducted follow-on event to re-evaluate potential risks based on most recent data through a Vapor Intrusion Monitoring Event (2013) when 464 buildings were evaluated and 11 buildings within 7 IRP sites were retained for further evaluation.

VIMS were installed at IRP Sites 78 and 88 (2012), in Building 3B (Site 88) based on results of Basewide Vapor Intrusion Evaluation and as precautionary measures in Building 902 (Site 78) and Buildings 3, 37, and 43 (Site 88). Additional vapor intrusion evaluations were conducted at Building HP57 (Site 88) and identified potential risks associated with a wastewater sewer line preferential pathway; therefore, a VIMS was installed (2014-2016). As precautionary measures, VIMS were also installed near IRP Site 10 (2013-2016) during new construction of three buildings outside of the IRP Site 10 boundary and near IRP Site 89 (2015-2016) during new construction of a building outside of the IRP Site 89 vapor intrusion LUC boundary.

The Vapor Intrusion Five-Year Review is planned this year to re-evaluate potential vapor intrusion pathways based on the most recent data. A Basewide evaluation of 247 buildings across 15 IRP sites is being conducted and includes conducting a desktop evaluations to review data collected since the last Basewide Vapor Intrusion Evaluation and evaluate the vapor intrusion potential at buildings within 100 feet of screening level exceedances or within potential preferential pathways. The desktop evaluation was completed in early 2019 and the work plan will be completed this year. The field investigation activities will include inspecting and performing leak checks of existing subslab probes, replacing and/or installing new subslab probes, and collecting subslab soil gas and/or indoor air samples in late 2019/early 2020.

V. RAB Business

The next RAB meeting is scheduled for November 20, 2019. The Community Involvement Plan Update will be a topic at the next meeting and community feedback will be solicited at the meeting. Charity indicated that up to 10 interviews are planned and to contact her if there are recommendations for community members to gain feedback from.