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MINUTES FROM 20 AND 21 AUGUST 2013 PARTNERING TEAM MEETING MCB CAMP  
LEJEUNE NC  
11/13/2013  
CH2M HILL

## Marine Corps Installations East – Marine Corps Base Camp Lejeune IR Partnering Team Meeting Minutes

**MEETING DATES:** August 20-21, 2013

**LOCATION:** MCIEAST-MCB CAMLEJ, NC

**ATTENDEES:**

Bryan Beck/NAVFAC	Matt Louth/CH2M HILL
Dave Cleland/NAVFAC	Betsy Reid/CH2M HILL
Charity Rychak/MCIEAST-MCB CAMLEJ	Tom Roth/CH2M HILL (Day 2)
Patti Vanture/MCIEAST-MCB CAMLEJ	Cathy Weber/Osage
Gena Townsend/EPA Region 4	Shaun Whitworth/Osage
Beth Hartzell/NCDENR	James Macdonell/Sepi (Day 1 afternoon)
Randy McElveen/NCDENR	Rob Sok/Tetra Tech (Day 1 afternoon)
Marti Morgan/NCDENR	Mark Pisarcik/Tetra Tech (Day 2)
Chris Bozzini/CH2M HILL	Bob Lowder/MCIEAST-MCB CAMLEJ (Day 2)
Kim Henderson/CH2M HILL	

**FROM:** Kim Henderson/CH2M HILL

**DATE:** November 13, 2013

### August 20, 2013

- I. **Introductions, Logistics, Check-In**
- II. **Review Agenda**
- III. **Review Ground Rules/Action Items/Meeting Minutes**

The status of Action Items identified during the previous meeting and on-going Action Items are tracked in the attached spreadsheet.

**Consensus:** May 2013 meeting minutes are approved.

### IV. **Base/Navy Time**

Current Base topics were reviewed as follows:

- **OU boundaries** – Charity requested clarification of the old OU boundaries and changes over time. The Team reviewed the OUs 1 and 2 boundaries identified in the ROD and in the 2002 LUCIPs where the boundaries were updated to encompass the extent of LUCs. Gena indicated that the OUs are areas identified for initial investigation and should not have changed. LUCs become the site boundaries when instituted. Charity requested this be clarified in SMP.
 

**Action CH2M HILL** – Clarify changes to the OUs 1 and 2 boundaries over time and show initial OU boundaries on figures in the FY14 SMP.
- **New MILCON Site Evaluations** – The Base developed a sensitive facilities (e.g., housing, schools, administrative) and vapor intrusion decision trees to evaluate MILCON projects. The flow chart is in draft form and has been reviewed by the Navy. If the sites have never previously been assessed, soil, groundwater, and soil gas data will be collected and generally analyzed for full suite within the building footprints. Typically for vapor intrusion, mitigation systems are included as part of the building construction. Charity indicated that these evaluations have been initiated at Midway Park. Gena indicated that Midway Park is not necessarily

within the NPL boundaries since it is across Highway 24 not located within the Base fence line. Charity checked the Base GIS and the area is shown within the boundaries and Gena questioned whether it was historically included. Randy clarified that if the area was not scored during the NPL listing, it can be cleaned up within another program. EPA and NCDENR cautioned the Base on sampling full suite and recommended focusing any investigations on previous releases and documentation. The Base will continue with due diligence sampling but hope to limit chemical analysis.

- **Vapor Intrusion** – The Base provided ATSDR with the requested vapor intrusion-related documents. There is discussion that ATSDR plans to model vapor intrusion exposure through the 1990s using their groundwater model.

#### V. Sites 49 and 86 Updates

Dave indicated that the Site 49 ROD RTCs and Site 86 FS RTCs are with Navy legal for review. Dave is hoping for resolution next week.

#### VI. LUC Update – Sites 1 and 28, Sites 16 and 63, and Site 93

**Objective:** Review background, LUC boundaries, and discuss path forward.

**Overview:** A presentation was reviewed by Kim.

##### Site 1:

The 2010 5-Year Review findings indicated that groundwater cleanup levels were achieved and LTM was complete. Recommendations were to remove groundwater LUCs and abandon the monitoring wells. The site background was reviewed. Liquid wastes (POL, battery acid) from vehicle maintenance were reportedly poured on the ground surface in 2 disposal areas. The 1995 RI indicated that VOCs were detected in groundwater at concentrations exceeding the NC2Ls; however, only unacceptable risk was identified from potable use of groundwater from arsenic and manganese. The RI concluded that metals in groundwater were naturally occurring and not related to site activities. The selected remedy in the 1996 ROD was groundwater LTM for VOCs and LUCs. LTM was conducted from 1996 through 2000 until 2001 when 4 quarters of VOCs were below the cleanup levels and a RACR was prepared. The LUCs were implemented in 2000 and updated in 2002 and the boundaries changed over time. It is not clear what the LUC changes were based on. Gena recalled that the Base and Navy initially used the site boundaries and expanded LUCs to nearest identifiable boundary and/or roadways for conservativeness, then the LUCs were re-evaluated between 2000-2002 to update them to be more site-specific. The current land use is for vehicle and equipment maintenance/staging area. Monitoring wells were abandoned in 2012.

Gena indicated that the industrial use LUCs would have likely been based on soil and recommended that we review the soil levels and compare to industrial and residential values in that northern area. Also, consider the risk exposure pathways that were evaluated (e.g., industrial and residential). If the RI does not identify exceedances and/or unacceptable risks, the Team will discuss the need for maintaining LUCs at the site.

**Action CH2M HILL** – Re-evaluate previous soil and RI data at Site 1 to determine whether there was contamination or waste remaining in place.

##### Site 28:

The 2010 5-Year Review findings indicated that groundwater cleanup levels were achieved and LTM was complete. Recommendations were to remove groundwater LUCs, abandon the monitoring wells, and add LUCs to restrict intrusive activities (soil) to prevent exposure to waste in-place. The site background was reviewed. From 1946 to 1971, 2 separate areas were used for burning solid waste. The 1995 RI indicated VOCs and metals detected in soil and groundwater and potential unacceptable risk from metals in soil, sediment, and groundwater. The selected remedy in the 1996 ROD was groundwater LTM for metals and LUCs. LTM was conducted from 1996 through 2001 when 4 quarters of metals were below the cleanup levels and a RACR was prepared. The LUCs were implemented in 2000 and updated in 2002 and the boundaries changed over time. It is not clear what the LUC

changes were based on. The current land use is for recreation and physical training exercises. Monitoring wells were abandoned in 2012.

The Team discussed the path forward to remove groundwater LUCs, maintain non-industrial use LUC, and add intrusive activities (soil) LUC to prevent exposure to waste but extend the LUCs to encompass former burn dump boundaries. Charity indicated that there was waste encountered during utilities installation last year along Orde Pond where current LUCs are not in-place.

Charity requested clarification on what safety controls would be needed for the intrusive LUCs if digging (e.g., for utilities) is needed and was it acceptable just to inform them of the waste in-place since there were no unacceptable risks. Gena raised concerns with asking utility contractors that are not necessarily trained to properly handle waste and indicated that a 40-hr HAZWOPER certified contractor should properly dispose of wastes encountered in accordance with RCRA regulations. For utilities, the Base could conduct a pre-clearance along the construction area as part of the planning. Gena recommended confirming how the waste boundaries and LUCs were created. Charity questioned whether the aquifer use control should remain in-place based on waste remaining in-place to prevent any well installations and requested conservativeness.

**Action CH2M HILL** – Confirm what the Site 28 waste boundaries were based on for development of the non-industrial and intrusive activities (soil) LUCs and keep aquifer use control boundary.

#### Sites 16 and 63:

The 2010 5-Year Review findings indicated that the RODs were issued for NFA but LUCs were in-place to prohibit aquifer use, non-industrial use, intrusive activities (groundwater). Recommendations were to complete an ESD to document LUCs as remedy and add LUCs to restrict intrusive activities (soil) to prevent exposure to waste in-place. The ESD was signed in 2012 and LUCIPs will be submitted this month.

#### Site 93:

MILCON is currently planned for utilities and soil borings in the western area of the intrusive activities (groundwater) LUC boundary that may not be needed in that area. The site background was reviewed. In 1993, a 550-gallon waste oil UST was closed. The 1998 RI identified CVOCs in groundwater and only unacceptable risk from potable use of groundwater. The selected remedy in the 2006 ROD was ISCO, LTM, and LUCs. ISCO was conducted from 2006-2008, groundwater LTM for VOCs was initiated in 2008 and is ongoing, and LUCs to prohibit aquifer use and intrusive activities (groundwater) were implemented in 2009.

Based on the LTM changes in CVOC concentrations over time (concentrations of PCE and TCE have gone down and concentrations of breakdown products have gone up), construction worker risks were re-evaluated using the max 2013 LTM concentrations. No unacceptable risks above target risk levels were identified. The vapor intrusion pathway has been evaluated at 2 buildings (Buildings G930 and TC942). During the Basewide evaluation, Building G930 was recommended for NFA based on no exceedances of screening levels and Building TC942 was unoccupied at the time. During the recent FYR monitoring at IRP sites, Building TC942 was found to be occupied and sampling was conducted as discussed during the VI agenda item.

The Team discussed that path forward to remove intrusive activities (groundwater) LUC based on unacceptable risk from potable use of groundwater only but maintaining LUCs to prevent aquifer use; and adding a Industrial/Non-Industrial (vapor intrusion) LUC within 100 ft of surficial aquifer CVOCs exceeding cleanup levels to evaluate future buildings and land use for potential VI pathways prior to construction. The Team discussed dewatering and the need for the intrusive LUCs to remain in-place to prevent recontamination of soil and shallow groundwater.

Charity noted that the planned MILCON is for decentralizing the steam plant and installing a generator. The contractor needs to conduct 1 geotech boring to 25' bgs in the far west side of the site outside of the current groundwater plume.

**Action Charity** – Confirm UST NORP boundary at Site 93 and whether MILCON is planned within the NORP area.

**Consensus** – The Team agrees to update the Site 93 intrusive activities (groundwater) LUCs to within 50 feet of the groundwater plume (to prevent spreading of contamination) and add vapor intrusion LUCs to evaluate any

future buildings. The rationale for LUC changes based on the HHRS updates will be documented in the LTM report and a LUCIP will be prepared to update the LUC boundaries. Proposed MILCON in the western area of the site can proceed with no environmental controls related to the CERCLA site required unless evidence of previously unknown contamination is discovered.

**Action CH2M HILL** – Update the LTM report to include the HHRS and rationale and recommendations for updating the LUCs at Site 93 to change the intrusive activities (groundwater) LUCs to within 100 feet of the groundwater plume (to prevent spreading of contamination) and add vapor intrusion LUCs to evaluate any future buildings. Complete a LUCIP to document the new LUCs.

## VII. Site 65 Update

**Objective:** Review background, chronology of construction work and impacts identification, path forward, and documentation.

**Overview:** A presentation was reviewed by Cathy. The site background was reviewed. IR Site 65 (OU9) is the Engineer Area Dump that was primarily C&D, crushed metal, and wire. The SI/RI found rusting metal debris but concluded no release of hazardous materials and levels of contaminants were within acceptable risk range. Therefore, NFA was issued under CERCLA in 2001.

Construction started earlier this year and uncovered buried waste, including concertina wire, crushed drums, and roof shingles that appeared to be consistent with the SI/RI findings. However, the roof shingles, tiles, etc. are likely asbestos containing materials. A timeline of recent events was presented as follows:

- March 2013 - contractor identified areas within an approximate 800' x 800' area that cannot be compacted
- May 2013 - contractor finds buried debris/stained soil in the utility line excavation
- June 2013 - contractor observes a reddish fluid bubbling to the surface of a large pond of standing rainwater in the southern excavation area, identified as a possible hydraulic fuel based on color and hydraulic oil-like odor
- June 2013 – soil sampling of debris stained stockpile found lead “hot spot” in soil
- June 2013 – CH2M HILL prepares a draft HHRS for lead in site soil
- July 2013 – Osage advances soil borings along utility trench to identify buried debris extents and assess lead in soil; installed and sampled two temporary groundwater wells to evaluate lead in groundwater and lead was not detected
- August 2013 – 10-Day Courtesy Notification for Asbestos Demolition/Renovation submitted to NCDHHS

The current path forward is to remove lead-impacted soils within the utility trench for off-site disposal this month, screen soils from within utility trench to remove asbestos and oversized debris in September 2013, replace screened soils following asbestos and debris removal, sample soils following screening to document asbestos levels, and prepare a report.

Charity noted that when dealing with lead in soil; although no unacceptable human health risk was identified based on the HHRS, OSHA regulations require PPE. Additionally, although asbestos is not a CERCLA driver, soil will be managed on-site as asbestos containing material per NCDHHS requirements. Asbestos supervisors' will be onsite while laying the soils and clean fill. Osage will identify locations where asbestos containing material and waste remains in-place in the construction completion report. Then based on MILCON findings and the waste in-place, intrusive activities (soil) controls will be documented in a LUCIP.

## VIII. Site 89 PRB Update

**Objective:** Provide an update on the remedial action for the PRBs and review the schedule.

**Overview:** A presentation was reviewed by James and Rob. The Draft RAWP was prepared and submitted to partnering team for comment on March 8, 2013. The Final RAWP incorporating responses to comments was submitted on May 1, 2013.

Site preparation included removal of ground cover but leaving existing root mat, grading to control stormwater runoff and provide a work platform, and clearing and grubbing that completed on June 6, 2013. The work platform construction was conducted to support the one-pass trencher and consisted of a raised platform over the low-lying areas with intermittent standing water. It incorporates features for erosion control and spoils containment. It was anticipated that approximately 5,000 cubic yards of fill material would be needed; however, the final quantity was approximately 8,000 cubic yards. The platform construction began June 18, 2013 and was completed along with site grading on July 9, 2013.

The first loads of media components for the PRB installation were delivered July 8, 2013. The trench media (40% mulch and 60% aggregate) was mixed onsite. Waste characterization sampling was conducted via DPT along PRB alignment during site preparation to facilitate subsequent T&D. PRB B was trenched from west to east and finished on July 12, 2013 and PRB A was trenched south to north and was finished on July 15, 2013. Approximately 2,400 tons of waste was generated for offsite disposal and on site water containment (2 x 21,000 gallon frac tanks) was conducted.

Eighteen new monitoring wells are planned for installation to assess PRB performance. All monitoring well installations will be conducted in accordance with NCAC Title 15A 2C.0100 standards and is scheduled to begin September 3, 2013.

Site restoration will include re-grading as close to original contours as possible and re-seeding and re-vegetating with native species. Some of the clean fill material used in platform construction will remain on-site and some of the fill material impacted the wetlands area to provide access to PRB B, future access for DPT reactivation if needed, and the monitoring wells (PRB performance monitoring).

An IRACR is planned to record as-built conditions, document RA implementation in accordance the RD and ROD, and will become part of the overall RACR for Site 89.

The project schedule is to complete site activities in September 2013, complete baseline sampling and aerator installation (pending funding) in November/December 2013 and complete the IRACR in February/March 2014.

Dave noted that the baseline sampling and aerators to address surface water contamination will be funded either by the end of September 2013 as a swing project or as a must-fund in the 1<sup>st</sup> quarter of FY14. Gena noted that she has the RACR date scheduled in her system by June 2014.

Charity noted that the Base is starting to collect additional info on monitoring wells for a Basewide monitoring well database and more information will follow.

James will post videos of the RA activities on the IR portal.

## **IX. Site 89 Air Sparge Update**

**Objective:** Review of the presentation planned for the RAB meeting and provide an update on the baseline groundwater monitoring results and schedule.

**Overview:** A presentation was reviewed by Shaun. No changes were made to the presentation for the RAB.

In May 2013, 19 performance monitoring wells were sampled for VOCs to establish baseline conditions before startup of the AS system and the concentrations were reviewed by aquifer.

The compressed air system was delivered to the site in July 2013 and the system will be started in phases in August and September. Patti asked about metering of the system. Dave indicated that the system will be metered and Dave gets billed.

Reporting in October 2013 will include a Project Closeout Report to document the baseline groundwater sampling event and air sparge system installation and startup and an O&M Manual will describe the system process flow, operational procedures, maintenance requirements, and system components.

## **X. SWMU 574/OU 1 Path Forward**

**Objective:** Provide background, present RFI results, review current status, and discuss path forward.

**Overview:** A presentation was reviewed by Kim. SWMU 574 is a 1.5 acre gravel lot located in HPIA that was formerly used for vehicle storage and maintenance and possibly used to store transformers. The site was identified during storm sewer utility construction based on petroleum odors and stained soil observed in trench excavation. A Confirmatory Site Investigation (CSI) was completed in 2011 and SVOCs, pesticides, and PCBs were detected in soil and VOCs, SVOCs, and metals were detected in groundwater.

An RCRA Facility Investigation (RFI) was recommended and completed in 2012. PAHs, dieldrin, Aroclor-1260, arsenic, and chromium exceeded screening criteria and background. PAHs and dieldrin were most frequently detected and widespread with no pattern and the detections of Aroclor-1260, arsenic, and chromium were isolated. These detections were likely associated with long-term use as industrial area. In groundwater, VOCs were detected above screening criteria isolated to one location that is within the Site 78 aquifer use control boundary.

The HHRA identified no unacceptable risks based on current industrial land use and potential unacceptable risks based on future residential use based on reasonable maximum exposure (RME) only assuming direct contact with maximum concentrations. However, there was no unacceptable risk from individual exposure to COCs or site media and the risk was cumulative from combined exposure to PAHs in soil and inhalation of VOCs from groundwater at the showerhead; and there were no unacceptable central tendency exposure (CTE) risks. The ERA indicated that SWMU 574 does not support an ecological habitat based on the gravel parking lot in an industrial area.

The RFI report is currently draft. NCDENR comments were to remediate soils to below the SSLs or apply land use restrictions. However, the Base requested to transfer the SWMU to OU 1 based on the location within OU 1 (Site 78) boundary and the COCs are consistent with OU 1.

**Action Beth** – Write an acceptance letter to Charity for the SWMU 574 transfer to CERCLA.

**Action CH2M HILL** – Finalize the SWMU 574 RFI concluding no unacceptable risk to soil or groundwater and the site will be transferred and managed under the existing aquifer use control for Site 78 based on location within the OU 1 (Site 78N) boundary and the VOCs detected in groundwater are consistent with the Site 78 COCs. Add the SWMU 574 data to NIRIS and associate it with Site 78 and include the data in the Five-Year Review.

## **XI. Site 78 Treatability Study Update**

**Objective:** Provide treatability study update and review schedule.

**Overview:** A presentation was reviewed by Chris. The EHC-L with bioaugmentation bench-scale study is planned to focus on Site 78 South where the average PCE concentration is 5,100 ppb.

Two injection wells and three monitoring wells were previously installed to 50-60 ft bgs and will be used for the study. The substrate plan is for 6 g/L EHC-L and  $10^{10}$  DHC bioaugmentation culture and to inject one pore volume (15' ROI) or 8,000 gallons per well.

Six months of post-injection monitoring 1-, 3-, and 6-month monitoring events will be conducted and includes three groundwater samples and field screening two soil gas locations for methane in soil vapor in the office of the adjacent Building 1603 to evaluate potential impacts from biodegradation of CVOCs.

The Draft Treatability Study Work Plan is planned for submittal in September 2013 and will include Notification of Intent to Operate Injection Wells (UIC) followed. The field implementation is planned for November 2013.

## **XII. Vapor Intrusion Update**

**Objective:** Provide results from IRP 5-Year Update sampling, provide VIMS O&M update, and review current Base-wide VI activities and schedule.

**Overview:** A presentation was reviewed by Kim. The IR 5-Year Update sampling was conducted April 8-17, 2013 and the analytical results are pending. Samples were collected at previously identified buildings at Sites 35, 73, 78, 88, 89, 93, and 96. A HAPSITE screening was conducted at the buildings where indoor air samples were collected and there were no obvious indoor air sources identified. Radon data collected from subslab and IA at Buildings 1828, 1601, and 1606 suggest the Base-specific Attenuation Factor (AF) =  $10^{-3}$  remains appropriate.

The results for each building were reviewed and although there were exceedances of Base-specific subslab screening levels and indoor air screening levels, no significant indoor air impacts are expected from the preliminary data review.

**Action Charity** – For subslab data, consider only presenting the Base-specific screening levels for comparison rather than both the Base-specific and generic screening levels for industrial buildings in future reports.

**Action CH2M HILL** – Send IRP 5-Year Monitoring data to Charity. If indoor air concentrations exceed screening level, Charity will forward to Base IH for review and evaluation if needed.

The 5th round of VIMS monitoring was completed in May 2013. Vacuum and flow measurements indicate VIMS are operating as designed and exhaust sample results indicate VIMS are effectively removing COCs from subsurface. Concentrations in indoor air generally < indoor air screening levels with the exception of HPFF Building 1115 where indoor sources have been identified.

The VIMS Year 1 Summary Report is with the Base and Navy for review and planned for Team submittal in September 2013. Charity questioned whether the Team needs to review the HPFF Buildings 1005 and 1115 since they are UST-related. Gena indicated that she can take a look but does not have the information (e.g., remediation system operation, recent data) to provide an actual review. The Team decided to add a recommendation to this VIMS report to start reporting them separately.

Round 6 of VIMS monitoring is planned for September 2013. Building 1005 testing with AS and biosparge operation is ongoing from July-October 2013 to evaluate VIMS performance and determine influence on subslab conditions. The UST/RCRA field activities and the IR 5-Year Update Summary Report are planned for completion by the end of 2013.

### XIII. Site 35 Data

**Objective:** Review groundwater trends in vicinity of air sparge system, review FY14 LTM recommendations and schedule, and discuss data between the Armory and Site 35.

**Overview:** A presentation was reviewed by Chris. The horizontal air sparge well was in operation from August 2010 through February 2013. The current LTM consists of quarterly monitoring for the AS wells and annual monitoring for the MNA wells (NAIPs every 5 years). Average overall and individual well trends were reviewed for the AS wells. In general, benzene and TCE concentrations have decreased and cis1,2-DCE and VC concentrations have increased.

Recommendations for FY14 LTM are to transition the AS area to MNA with annual monitoring for the following AS wells: MW87, MW87IW, MW91, MW91IW, MW30, MW30IW, and MW30DW. Additionally, to remove redundant wells (Surficial - MW66, UCH - MW49IW, MW55IW, MW85IW, MW86IW, MW90IW, and MCH - MW80DW, MW89DW) and add MW93DW in the southern plume to LTM.

The last quarter of FY13 LTM was conducted in July/August 2013 and included all the AS wells. The Draft FY12 LTM Report was submitted to the Team for review this month and the Draft FY14 LTM UFP-SAP is planned for submittal in October 2013 followed by the first quarter of FY14 LTM in November/December 2013. This will include annual MNA sampling for VOCs and NAIPs from 33 wells.

The background of the Armory and Site 35 relationship was reviewed. Originally under CERCLA, we looked at LNAPL related to Building G480 – the Armory that the UST group is now calling site TC341, which is west of Building G480. Under CERCLA, the 1995 RI did not identify LNAPL measured north of the Armory; however during the 2003 NA Evaluation, a BTEX “hot spot” and LNAPL were identified to the north. In 2002, a “Hot Spot”

Characterization confirmed the results and identified a deeper CVOC plume beneath Highway 17 Bypass. In 2004, an EE/CA was prepared for removal of the LNAPL “hot spot” to prevent further contamination in groundwater and potential future release to surface water. At this point (2004), the plumes were not co-mingled and the BTEX and LNAPL-related contamination were handled under the UST program.

Under the UST program, in 1995 and 2003, soil removal actions were conducted that partially addressed the petroleum “hot spot” north of Armory. In 2004, AFVR was initiated and was again conducted in 2008 and is ongoing. From 2009-2010, an additional assessments and Corrective Action Plans were completed. In 2012, Catlin prepared a TC481 Report of Findings where free phase product and dissolved groundwater contamination were found to be co-located.

UST is currently installing a remediation system (pump and treat with product recovery trenches and wells and surfactant injection); therefore, the Team decided to keep Site 35 and the UST sites separate for the time being awaiting remediation system installation and data.

Charity questioned whether the buildings in the vicinity of Building G480 were evaluated for vapor intrusion. The Basewide evaluation did evaluate Building G480 and the other buildings in the vicinity. Osage also collected data pre-construction for the new buildings to the west and they were also evaluated.

#### **XIV. FY14 SMP Update and RTCs**

**Objective:** Review key FY13 accomplishments, present current site status and FY14 goals, discuss comments on the Draft SMP, and review schedule.

**Overview:** A presentation was reviewed by Matt. The key FY13 accomplishments for the IRP were completion of the FS for Site 86, public meeting for Site 49 PRAP, Final RODs/RDs for Sites 69 & 89, RA implementation for Site 89, the award for the Site 69 RA, transitioning Site 35 from active remediation to MNA, Base-implemented LUCs at Sites 10 and 10 to prevent exposure to waste, and the ESD for Sites 16, 63, and 80.

The key FY13 accomplishments for the MMRP were completion of the RI/FS at UXO-06 and UXO-19, NTCRAs at UXO-01 (ASR# 2.64), UXO-14, and UXO-23, and closing UXO-01 (ASR# 2.64) and UXO-25 with NFA.

The current status of the remaining IRP and MMRP sites were reviewed and the FY14 goals were identified as completing the PA/SI for Site 37/UXO-24, the FS for Site 88, the PRAP/ROD for Site 86, and the RD/RAs for Sites 49, 69, 86, and 89.

NCDENR comments and responses were reviewed and Randy was ok with the RTCs. Gena has not reviewed the SMP yet but recommended that we revisit the schedules to make sure we can meet them per the FFA. Once Gena’s comments are received and incorporated, the SMP will be finalized, planned by the end of September 2013.

#### **XV. UXO-06, 19, and 23 RI Updates**

**Objective:** Review schedules.

**Overview:** A presentation was reviewed by Matt. Additional RI Activities at UXO-06 are planned for late August/early September pending approval of the ESS Amendment. The Draft RI Report is planned for late 2013/early 2014.

The Draft RI/FS is with the Navy/Base for review and will be sent to the Team once comments are received and incorporated. The plan is to choose the preferred alternative at the November 2013 meeting. Charity asked about the timing for the RI/FS to present the areas where utilities that have been dug and presents the rationale for no additional investigation or action. The current schedule is for an RI and FS to be drafted in 2014.

The UXO-23 UFP-SAP Addendum for NTCRA soil sampling is with the Navy/Base for review and planned for submittal to the Team this month. The soil sampling and Beaver Dam Creek is planned for October 2013. Following the NTCRA, groundwater will be re-evaluated and an MMRP investigation for UXO-28 is planned.

Gena discussed whether an additional public meeting for the NTCRA activities is needed. The Team decided that because the NTCRA is still as presented in the EE/CA and AM, a RAB presentation to provide an update would that the NTCRA is complete would be sufficient.

#### **XVI. UXO-14 NTCRA**

Shaun provided a schedule update and the presentation for the RAB meeting was reviewed by the Team and changes were made real-time. The Project Closeout Report submitted was submitted for Team review on July 29, 2013 and is awaiting comments and approval. A NFA Decision Document will be prepared pending approval of NFA by EPA and NCDENR. The Team decided to remove the detailed table on the soil stabilization for the RAB presentation.

#### **XVII. UXO-23 NTCRA**

Cathy reviewed the presentation planned for the RAB meeting. Beth questioned the difference between the cleanup levels for lead between UXO-23 and UXO-14. Kim explained that for UXO-23, a site-specific risk assessment was not completed since the lead concentrations were so high and the EPA residential screening level was used as the cleanup level (400 mg/kg) whereas for UXO-14, a risk assessment was completed and a site-specific cleanup level (433 mg/kg) was developed.

The Team discussed UXO items found and that they will be further assessed as part of UXO-28.

Bryan questioned whether the remaining NTCRA grids will be ER,N funded and Dave funded the additional delineation and plans to fund the remaining NTCRA activities in 2014.

#### **August 21, 2013**

#### **XVIII. Check-In**

#### **XIX. Partnering Exercise**

Beth led a Team-building exercise and reviewed results from the Team Assessment questionnaire. The Team ranked between Performing and High Performing.

#### **XX. Site 69 RA Update**

**Objective:** Review background, discuss the planned RA, discuss traffic routing and logistics, and present the schedules.

**Overview:** A presentation was reviewed by Mark. The background for Site 69 was reviewed. The requirements for the RA were reviewed as follows:

- Installation of a 4.6 acre multi-layer cap system including soil and geosynthetic layers and a stormwater management system
- MNA
- LTM and maintenance
- LUCs

Pre-construction activities were reviewed including a work plan preparation, procurement and resource planning, site access coordination and security clearance, material testing and QC submittals, a pre-construction meeting, and notice to proceed.

Installation of temporary facilities, access roads, erosion controls, relocating the chain-link fence, MEC surface and vegetation clearance over an 8.2-acre area, and abandoning 22 monitoring wells are planned during site preparation. The current fence will remain as-is except to the south where the sedimentation basin is planned and the gate will be expanded.

Dave indicated that MEC is not expected based on the UXO-02 findings and MARCORSYSCOM concurred with this determination during a meeting with them earlier this year. An AAR is being prepared that requests removal of the ESS arcs and to close out UXO-02. If anything is found then EOD would need to respond since the ESS would

be closed out. No surface clearance was identified as needed for the capping action; however, TetraTech's safety plan may require surface clearance. Dave noted that surface clearance is completed on active ranges at a rate of approximately 10 acres/day.

Additionally, a CSS is not needed since there is no chemical hazard associated with capping or upcoming groundwater activities. A CSS Determination Request was prepared for documentation.

The cap installation is planned over approximately 4.6 acres and includes the following components:

- Minimum one foot thick sub-grade fill layer (34,200 cyds)
- One foot thick gas venting sand layer (8,900 cyds)
- Gas collection system (11 vents)
- Cap anchor trench
- Geosynthetic clay liner
- 40 mil LLDPE barrier geomembrane
- Double-sided drainage geocomposite
- 18-inch thick protective soil layer (13,360 cyds)
- 6-inch thick topsoil layer (4,640 cyds)
- Stormwater management system (4,000 tons of rip-rap)

Site restoration and demobilization activities include restoring via seeding and sod placement and an as-built survey. Charity noted that the Team should be prepared for erosion and repairs. Dave responded that there will be the Base's quarterly inspections and he will fund O&M. Kim noted that there is an inspection plan/checklist included in the RD.

Options for traffic routing and alternative gate access were discussed and will be a key topic at the Base meeting tomorrow morning to minimize and avoid disruption of Base operations. Patti noted that the area around the fence is grown up with vegetation based on a recent inspection. She also noted that Marines have runs down the road and coordination may be needed during construction.

The schedule is for the draft work plan to be submitted to the Team in October 2013. Pre-construction and mobilizations is planned for December and site activities are planned through July 2014. The RACR is currently scheduled for completion in November 2014; however, Dave requested RIP by the end of September 2014 so requested the Team try to complete the RACR and approval by the end of September 2014.

Gena indicated that the RA must start within 18 months of ROD signature and she currently has the planned start date as December 31, 2013 so she will record the start date between December 2013 and January 2014 based on the current schedule.

## **XXI. UXO-21, 22, and 24 Updates**

**Objective:** Review background, discuss approaches, provide field updates, discuss path forward for UXO-21 and UXO-24, sign UXO-22 UFP-SAP, reach consensus for UXO-22 Battery Disposal Area UFP-SAP, and review schedules.

**Overview:** A presentation was reviewed by Tom. The background for each site was reviewed and the field findings were presented as follows:

### UXO-21 Phase 2 ESI

10% DGM and intrusive investigation of geophysical anomalies was conducted in June 2013 adjacent to site boundary (10.6-acre area). 528 anomalies were investigated and 19 MPPEH/MDAS items were found. What appeared to be a small battery disposal area, scattered on surface and some buried batteries) was identified yesterday during site QC of the intrusive excavation locations. It is unknown how many batteries are present; however the UXO tech estimated several five gallon buckets to up to a few drums worth. The photo provided by the UXO tech appears to show a D-size style battery. Gena questioned whether it appeared to be an organized dump or an isolated incident and about sampling. The batteries were left in-place and appeared to be an isolated incident.

The Team discussed the path forward for the batteries and the MRP site and decided to remove the batteries as investigation-derived waste and collect soil samples for metals as part of the MRP site. If the batteries become a larger issue than anticipated, it may be possible to separate them from the MRP site. For the MRP site, the original site was identified as a gas chamber and the items found to-date are not related to gas chamber activities and the items are practice, present a low risk, and are most likely related to training/maneuver areas that were not documented. No HE items have been found to-date and an explosive hazard analysis is planned based on the data collected to-date to evaluate risks from an MR perspective.

Gena asked about environmental sampling around the Phase 2 ESI area and the need to investigate. Sampling was conducted in the inner circle and outer circle and no unacceptable risks were identified; therefore, sampling was not conducted as part of the investigation of this adjacent area. Gena questioned the need for samples where MPPEH was found for perchlorate.

**Consensus** – The Team agrees to have Osage investigate the batteries found in the adjacent area to UXO-21 using UXO support per the ESS. Soil sampling will be conducted for metals analysis from the sidewalls and bottom of the battery excavation area.

The Team discussed whether the ESI or RI should be completed based on the results since if LUCs are anticipated, an RI will be needed. The Team discussed evaluating the data and moving forward with the UXO-21 Phase 2 ESI report at this time, scheduled for completion in December 2013.

#### UXO-22 RI

A surface clearance within the DRMO area to remove large metal debris and soil sifting in NW corner followed by 10% DGM and intrusive investigation of statistically representative portion of geophysical anomalies and disposal pits (if identified) are planned. The ESS was approved by MARCORSSCOM in May 2011. The UFP-SAP for the RI was signed during this meeting and will be finalized.

The approach for the surface clearance and removal of large metallic debris is to reduce risks posed by surface MEC and MPPEH and reduce DGM interference from surface metal. Soil sifting is planned in 3 acres in the NW corner of the former DRMO and will include removal/sifting of top 6" soil. An ESS (Amendment 4) is being prepared and planned for submittal in September 2013.

The vegetation clearance, DGM (outside DRMO), and surface clearance/large metal debris removal is planned August/September 2013 followed by soil sifting, DGM (inside DRMO), and intrusive investigation. The Draft RI is planned for submittal in Summer 2014.

Patti asked about the soil sifting causing detonation. Tom answered that it is possible and covered in the ESS to use armored equipment that is designed to withstand detonations. Charity asked about impacting the Base scales and any impacts will be coordinated.

Gena noted that batteries are buried all over the place and questioned how DGM will identify batteries vs. UXO. Disposal pits will be investigated for MEC/MPPEH to determine the extent and waste will be put back in place and noted where identified. The data from the ECP Rhea conducted will also be used to define extent. Gena questioned conducting an RI where an RI has previously been conducted on a dump site for OU 2 and LUCs are in-place. The RI will be conducted to determine the nature and extent of MEC/MPPEH and LUCs for MEC will likely put in to place based on the findings.

The investigation approach for the battery disposal area EE/CA will be presented in a UFP-SAP planned for submittal in November 2013. A geophysical investigation is planned to evaluate lateral extent of an approximately 1 acre area. Test pits are proposed to evaluate vertical extent followed by soil sampling to support the EE/CA alternatives.

**Consensus** - The Team agrees with the following investigation approach to evaluate the horizontal and vertical extent of battery disposal at UXO-22:

- Conduct geophysical evaluation of approximately 1 acre
- Excavate test pits to evaluate depth of battery disposal

- Collect up to 4 soil samples from test pits for metals analysis and up to 3 samples for TCLP analysis to assist in evaluation of potential soil remedial actions

The field delineation activities are planned in Winter 2014 followed by a tech memo in Spring 2014. A Remedial Alternatives Analysis (RAA) will be submitted to the Navy in Spring 2014 followed by a Draft EE/CA in Summer 2014 and an Action Memo in Fall 2014. Dave asked about the timeframe for an NTCRA once the EE/CA and Action Memo are complete. Gena indicated that there is not a specific timeframe for an NTCRA.

#### UXO-24 PA/SI

100% DGM of 2.5-acre area was conducted May 2012, identified 1,479 targets representing potential MEC, and there was no indication of large burial pits. The intrusive investigation of 988 anomalies investigated was completed from July 24 - August 8, 2013. Fifteen MEC items, three MPPEH items, and small arms were discovered. An EOD emergency response was conducted based on the findings of two unexpended HE 40 mm projectiles. Buried debris, wood, construction debris, and a diesel/petroleum odor were identified during the investigation activities. MPPEH was also visible in a fenced area west of the site. Charity noted that the fenced area is identified designated MPPEH holding area. A figure showing all the findings will be provided in the PA/SI report, planned for submittal in January 2014.

The Team discussed the path forward and need for additional MR investigation since the MEC/MPPEH was found in the woods adjacent to the building and nothing was found eastward. The option for reducing the MRS was also discussed. Randy indicated that since HE was found, the site would need to be moved to the RI phase since LUCs would be needed for activities >2 ft bgs. Tom responded that there were no indication of pits and hand burial would not be expected at depth. Randy recommended that the grassy area between the wooded area and fence line west of the investigation should be investigated.

The PA/SI will also include the results of the additional soil sampling that was recommended as part of the Site 37 CSA to further evaluate ecological risks from pesticides. The unvalidated results indicated that DDD, DDE, and DDT were detected but were consistent with background and/or below ecological screening values.

Patti informed the Team that stormwater repairs are needed early next year in the drainage to the wetlands that crosses the site if possible. Tom indicated that the ESS does not allow for mechanized operations as written and because the HE items exceeded the contingency, no excavation will be permitted without an ESS Amendment. It may be possible to practice avoidance unless the waste in-place is present along the drainage. The planned activities and options can be discussed with MARCORSYSCOM.

#### **XXII. SDZ Path Forward**

**Objective:** Review findings from Expanded SI field activities, discuss path forward, and review schedule.

**Overview:** A presentation was reviewed by Tom. The investigation area and findings were reviewed. In summary, 4,885 total anomalies were identified (1,720 AGS + 3,165 terrestrial DGM); however, 2,801 were excluded based on erosion control netting and other anomalies were excluded because they were underwater or the exclusion zone included homes. Therefore, 983 anomalies were physically investigated (47% of applicable anomalies). The source was identified at 379 locations and six MEC items and 36 MPPEH items were found.

MEC was found only in the southwest area and snake eye fins were found (and other MPPEH) in the northeast. Only cultural debris or MPPEH was found in remaining areas.

The locations appear consistent with historical ranges. An expended 155mm illumination round was found west of the G-6 Artillery Range; 2.25" and 5" rockets found likely associated with Rocket Range Number 1; and practice bombs, rockets, and 25mm/20mm cartridges were found and likely associated with Impact Area BT-3/N-1-1.

An evaluation of explosive hazards was conducted to consider the site factors, human factors, and MEC factors. In summary, all MEC was found in difficult to access areas. Although the underwater anomalies were not investigated, the type and distribution of sources are expected to be similar to those of the identified MEC.

Therefore, the probability of contact with MEC is low. Severe injuries could result with aggressive intentional contact based on the presence of HE.

The Team discussed whether the site has been characterized. Randy indicated that he feels confidence about investigating the large area and that only 6 MEC items were found and they are located within clusters. Bob indicated that he thinks we characterized the site and can reduce the MRS and put some kind of restrictions and notices in place.

Marti asked whether there were active ranges along the shoreline and whether the property is owned by the Base. Bob indicated that there is an active range on Browns Island and that the property is not all owned by the Base and MEC was found on State property and the State would need to be involved with any discussion on notices and signs.

The Team decided to complete the ESI report to provide conclusions and to not include recommendations since the conclusions will be used to support a Base management decision. The draft ESI report is planned for submittal in November 2013.

### **XXIII. Gun Position Owl (UXO-27)**

**Objective:** Provide background, present PA/SI approach, and review schedule.

**Overview:** A presentation was reviewed by Matt. The site is part of ASR #2.212 that includes various artillery firing points and covers 18 acres of mostly woods. The area is part of the MARSOC complex located just south of Tactical Landing Zone (TLZ) Owl and a MILCON is pending for Everett Creek Road and new buildings south of Everett Creek Road.

No MEC/MPPEH findings have been documented to-date. Based on historical records review, TLZ Owl may have trained soldiers with covering fire (usually small arms) and used as a firing position associated with TLZ Owl that may have been used for artillery into K-2 Impact Area. MEC/MPPEH may be similar to adjacent Site UXO-02.

The PA/SI approach includes preparation of an ESS with a primary MGF/D based on the Mk II Grenade (Live version of the practice item) with a contingency MGF/D based on 105-mm M1 (Composition B Filled). Site preparation activities include a site survey, utility locating, and vegetation clearance followed by DGM. DGM will include 10% of MRS in north/south transects (approximately 3-5 ft wide) and 100% DGM in 1-acre MILCON area that is TBD. Intrusive investigation of potential subsurface MEC will be conducted and controlled detonation as needed.

The southernmost site boundary extends beyond the Base boundary across Everett's Creek but investigation will only be conducted within the Base boundary. The gun positions were documented as a latitude and longitude with a radius drawn around them and the boundaries are arbitrary.

Charity noted that the Base is not closing the whole site area. The fence line may be moved back south a bit and only north of the fence line will be closed and the remaining site will be used for training and maneuvers. The Base is waiting for TECOM to sign off on the closure.

The Team discussed focusing the investigation within the area planned for closure.

**Action Charity** – Provide CH2M HILL with the area of UXO-27 planned for closure to focus the investigation within that area.

Environmental sampling will include 3 initial groundwater samples, 12 surface soil samples, and 6 subsurface soil samples for explosives residues and metals. Contingency sampling will be included for delineation (3 groundwater and 6 soil samples).

Patti asked about stepping out from locations that are along the site boundary. A human health and ecological risk screening will be conducted to confirm delineation samples where needed.

The ESS is planned for submittal in August 2013 followed by a Draft PA/SI Work Plan in September 2013 and field activities late 2013/early 2014. The Draft PA/SI Report is planned for submittal in September 2014. An AAR will be completed if no additional work is needed to close out the ESS.

**XXIV. MCAS Demonstration Range (UXO-29)**

**Objective:** Provide background, present PA/SI approach, and review schedule.

**Overview:** A presentation was reviewed by Matt. A MILCON at MCAS New River is ongoing for hangar, roadways, recreation facilities, and RV/boat storage site. In May 2013, MILCON activities were suspended in a 9.2 acre area based on discovery of 3 - 2.36-inch practice bazooka rockets that EOD responded to.

There are adjacent/overlapping former ranges to the MILCON area and 182 acres were identified for closure under the MMRP as UXO-29. UXO-29 includes ASR #2.29 - Infantry Weapons Demonstration Course, B-17 that was active from 1946 to 1947, ASR #2.1 - Artillery Training Area used from 1941 to 1943, and ASR #2.167 - Hand Grenade (practice) Demonstrator, M-113 that was active from 1970 to 1977. A wide variety of ordnance was used including small arms, cartridges, rockets, projectiles, and hand grenades.

The ESS Determination Request was submitted to MARCORSYSCOM in July 2013 for non-intrusive maintenance (e.g., mowing grass and running path improvements) and an ESS was submitted to MARCORSYSCOM in August 2013 for MILCON support. The primary munition was based on a 4.5-inch Barrage Rocket Mk 3 and the contingency munition was based on 155-mm M107 (TNT Filled).

The Work Plan for the MILCON area includes 100% DGM and intrusive anomaly investigation over 6.8 acres where the new roadway, buried utilities, and chain link fence; and mag and dig in 2-ft lifts over 2.4 acres where 200 cubic yards of stockpiled soil are placed to the depth of MILCON (~5 ft bgs maximum depth). Environmental sampling will be conducted post-BIP if needed.

Several years ago during MILCON planning, an environmental assessment (EA) was conducted and the ranges were not shown and the MILCON was not planned this far south.

Charity noted that this investigation is MILCON-based but the remaining areas of UXO-29 will need to be investigated under the MMRP in the future. Bryan will add UXO-28 to the MMRP and UXO-27 and UXO-29 when they are officially closed.

Charity noted that EOD recently responded to items found in an off-Base RV park in fill that was reportedly received from the Air Station and are re-evaluating the process for soil going off-Base. Patti also noted that as part of MILCON at the Air Station, IR Site 54 was going to be covered and in a nearby area, fire extinguishers and solid waste was found in a pile and buried. Osage conducted GPR, found another pile of debris, and will be conducting sampling.

**XXV. FY 2014 Goal Update**

The Team reviewed the FY 2014 goals and discussed the current status of each goal. The goals were color-coded to identify high priority document reviews (red), upcoming document submittals (yellow), and documents close to finalizing (green). The goals are presented in a table at the end of these minutes.

Gena indicated that she has over 150 hours of use or loose vacation and reviews were prioritized through the end of the year.

**XXVI. Parking Lot**

There were no items remaining in the parking lot after the meeting.

Chris notified the Team that the University of Florida is conducting a study on a new flux meter that is a passive sensor that measures groundwater flux to surface water. Site 82 was identified as a potential site to install the meter for testing. The Team agreed.

**XXVII. Next Partnering Meetings**

<b>Start:</b> TBD (November 13, 2013 with RAB if needed)	<b>Start:</b> February 5, 2014
<b>End:</b> TBD	<b>End:</b> February 6, 2014
<b>Facilitator:</b> TBD	<b>Facilitator:</b> TBD

**Host:** TBD  
**Chair:** TBD  
**Timekeeper:** TBD  
**Location:** TBD

**Host:** TBD  
**Chair:** TBD  
**Timekeeper:** TBD  
**Location:** TBD

The next RAB date is November 13, 2013.

### XXVIII. Agenda Topics for Next Partnering Meetings

Agenda Items for the next (November 2013) Partnering Meeting

Agenda Topic	Required Time
<b>Standing Agenda Items:</b>	
Check-in	30 minutes
Review agenda	15 minutes
Review action items, approve minutes from prior partnering meeting; read ground rules	30 minutes
Partnering exercise	30 minutes
Base/Navy time (new Base Master Plan maps)	1 hour
Review FY2014 goals	30 minutes
Parking lot	15 minutes
Agenda items for next partnering meeting, team assessment, +/- review, checkout	30 minutes
Lunch	3 hours
Breaks	1 hour
<b>Time for Standing Agenda Items:</b>	<b>8 hours</b>
<b>Technical Agenda Items:</b>	
Site 69 RA Update	30 minutes
Site 78 Update (RTCs)	15 minutes
Site 86 Schedule	15 minutes
Site 88 Schedule	15 minutes
Site 89 AS RTCs (Osage)	15 minutes
Site 89 PRB Update (Sepi)	30 minutes
UXO-06 RI Field Update	30 minutes
UXO-19 RI/FS RTCs and choose preferred alternative	30 minutes
UXO-21 Phase 2 ESI	30 minutes
UXO-22 Field Update	30 minutes
UXO-23 UFP-SAP RTCs	30 minutes
UXO-24 PA/SI	30 minutes
UXO-27 Update	30 minutes
UXO-29 Update	30 minutes
SDZ ESI	30 minutes
VI RTCs	15 minutes
LUCIP Updates	30 minutes
Site 65	30 minutes
<b>Time for Technical Agenda Items:</b>	<b>7 hours 45 min</b>
<b>TOTAL TIME</b>	<b>15 hours 45 min</b>

The agenda will be drafted prior to the meeting and the required times and topics may be adjusted based on current site status.

## Fiscal Year 2014 Goals

Goal #	Site	Goal	Complete by	Status as of 08/21/13	Future Agenda Items
1.	6/82	Draft Supplemental Investigation Tech Memo	1 October 2013	On track	
2.	6/82	Final Supplemental Investigation Tech Memo	1 December 2013	On track	
3.	49	Draft ROD	30 March 2013	Complete	
4.	49	Final ROD	November 2013	On track	
5.	69	RA Work Plan	3 October 2013	On track	Update
6.	78	Draft Supplemental Investigation Tech Memo	1 October 2013	On track	
7.	78	Final Supplemental Investigation Tech Memo	1 December 2013	On track	
8.	78	Draft Treatability Study Work Plan	15 September 2013	On track	Update
9.	78	Final Treatability Study Work Plan	1 November 2013	On track	
10.	86	Draft FS	17 April 2013	Complete	
11.	86	Final FS	30 September 2013	On track	
12.	86	Draft PRAP	30 September 2013	On track	Schedule update
13.	86	Final PRAP	15 December 2013	On track	
14.	86	Public Meeting	February 2014	On track	
15.	86	Draft ROD	December 2013	On track	
16.	86	Final ROD	May 2014	On track	
17.	88	Draft FS	16 March 2012	On hold	
18.	88	Final FS	TBD	On hold	
19.	88	Draft PRAP	TBD	On hold	
20.	88	Final PRAP	TBD	On hold	
21.	88	Draft ROD	TBD	On hold	
22.	88	Final ROD	TBD	On hold	
23.	89	Draft AS Closeout Report & O&M Plan	October 2013	On track	RTCs
24.	89	Draft PRB Closeout Report	31 December 2013	On track	Update

## Fiscal Year 2014 Goals

Goal #	Site	Goal	Complete by	Status as of 08/21/13	Future Agenda Items
25.	89	RACR	2014	TBD	
26.	96 (Former SWMU 360)	Complete Delineation for SRI/FS	TBD	TBD	
27.	LTM	Draft FY2012 Report	6 August 2013	Complete	
28.	LTM	Final FY2012 Report	30 October 2013	On track	
29.	LTM	Draft FY2014 UFP-SAP	October 2013	On track	
30.	LTM	Final FY2014 UFP-SAP	November 2013	On track	
31.	UXO-06	Draft RI	30 January 2014	On track	
32.	UXO-06	Final RI	30 March 2014	On track	
33.	UXO-14	NTCRA Report (Osage)	29 July 2013	Complete	
34.	UXO-19	Draft RI/FS	15 September 2013	On track	RTCs
35.	UXO-19	Final RI/FS	30 November 2013	On track	
36.	UXO-21	Draft Phase II ESI Report	30 December 2013	On track	Update/RTCs
37.	UXO-21	Final Phase II ESI Report	March 2014	On track	
38.	UXO-22	Draft RI Report	June 2014	On track	Field update
39.	UXO-22	Final RI Report	September 2014	On track	
40.	UXO-23	Draft Phase II NTRCA Sampling UFP-SAP Addendum	15 September 2013	On track	RTCs
41.	UXO-23	Final Phase II NTRCA Sampling UFP-SAP Addendum	30 November 2013	On track	
42.	UXO-24	Draft PA/SI Report	January 2014	On track	Update/RTCs
43.	UXO-24	Final PA/SI Report	March 2014	On track	
44.	UXO-27 (Gun Position Owl) ASR # 2.212	Draft Work Plan	September 2013	On track	
45.	UXO-27 (Gun Position Owl) ASR # 2.212	Final Work Plan	November 2013	On track	
46.	UXO-28 (Wallace Creek MRS)	Draft Work Plan	TBD		
47.	UXO-29 (MCAS Former Demonstration range)	Draft Work Plan	September 2013	On track	
48.	UXO-29 (MCAS Former	Final Work Plan	November 2013	On track	

**Fiscal Year 2014 Goals**

Goal #	Site	Goal	Complete by	Status as of 08/21/13	Future Agenda Items
		Demonstration range)			
49.	SDZ	Draft ESI Report	December 2013	On track	RTCs
50.	SDZ	Final ESI Report	February 2014	On track	
51.	VIMS	Draft Annual Report	15 September 2013	On track	
52.	VIMS	Final Annual Report	30 November 2013	On track	
53.	IRP VI Report	Draft Report	December 2013	On track	RTCs
54.	IRP VI Report	Final Report	February 2014	On track	
55.	SMP	Draft FY14 Update	19 July 2013	Complete	
56.	SMP	Final FY14 Update	September 2013	On track	
57.	Five-Year Review Recommendations	Draft OU2 Metals Tech Memo	October 2013	On track	
58.	Five-Year Review Recommendations	Draft Sites 1, 16, 28, and 63 LUCIPs	30 August 2013	On track	

**Red** - high priority document reviews

**Yellow** – upcoming/recent document submittals

**Green** – comments received/finalizing document