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**U.S. Army Corps of Engineers, Savannah District  
Formerly Used Defense Sites Program**

# **PROPOSED PLAN**

**Conway Bombing and Gunnery Range, MG/RR MRS,  
Horry County, South Carolina DERP-FUDS # I04SC002507**

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**June 2023**

## **INTRODUCTION**

This Proposed Plan (PP) is presented by the U.S. Army Corps of Engineers (USACE), Savannah District, to facilitate public review and comment on USACE's plan to take no action for Conway Bombing and Gunnery Range (BGR), Machine Gun/Rifle Range (MG/RR) Munitions Response Site (MRS) (MRS-07) located in Horry County, South Carolina (Figures 1 and 2). This site is part of the Defense Environmental Response Program (DERP) Formerly Used Defense Sites (FUDS) program. Other MRSs at the Conway BGR FUDS are addressed in a separate PP.

USACE is the lead agency for investigating, reporting, making remedial decisions, and taking remedial action for Conway BGR MRS-07 (formerly MRS-R09) (Figures 1 and 2).

This PP highlights information from prior investigations, which are the basis for USACE's recommendation for No Action for munitions and explosives of concern (MEC) and munitions constituents (MC). USACE documented the Remedial Investigation (RI) in the 2018 RI Report and concluded there are no explosive hazards because MEC was not identified and there are no human health or environmental risks from MC. Accordingly, the RI included a recommendation that no action be taken at MRS-07 for MEC and MC (USACE, 2018).

This PP, and other supporting documentation, are part of the Administrative Record (AR) file. USACE encourages the public to review these documents contained in the AR to gain a better understanding of the investigations and other activities that occurred at the Conway BGR FUDS.

USACE is issuing this PP as part of its public participation responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §117(a) and the National Oil and Hazardous

Substances Pollution Contingency Plan (NCP) §300.430(f)(2).

USACE requests comments from the public on this PP. Public comments will be accepted during a public review and comment period from June 28 through July 27, 2023.

A public meeting will be held on July 12, 2023, at 6 pm at Horry County Memorial Library-Conway, 801 Main Street, Conway South Carolina 29526.

USACE, in coordination with the South Carolina Department of Health and Environmental Control (DHEC), may modify the proposed path forward presented in this PP based on new information or public comments submitted during the public comment period. Therefore, the public is encouraged to review and comment on this PP.

### **PUBLIC COMMENT PERIOD:**

**June 28 through July 27, 2023**

The USACE will accept written comments on the PP during the public comment period (see contact information at the end of this notice).

### **ADMINISTRATIVE RECORD:**

For more information on the site, see the Administrative Record at the:

Horry County  
Memorial Library  
801 Main Street  
Conway, SC 29526  
843-915-7323

and

U.S. Army Corps of Engineers  
100 West Oglethorpe Avenue  
Savannah, GA 31401

Figure 1: General Location of the MG/RR MRS at the Conway BGR FUDS

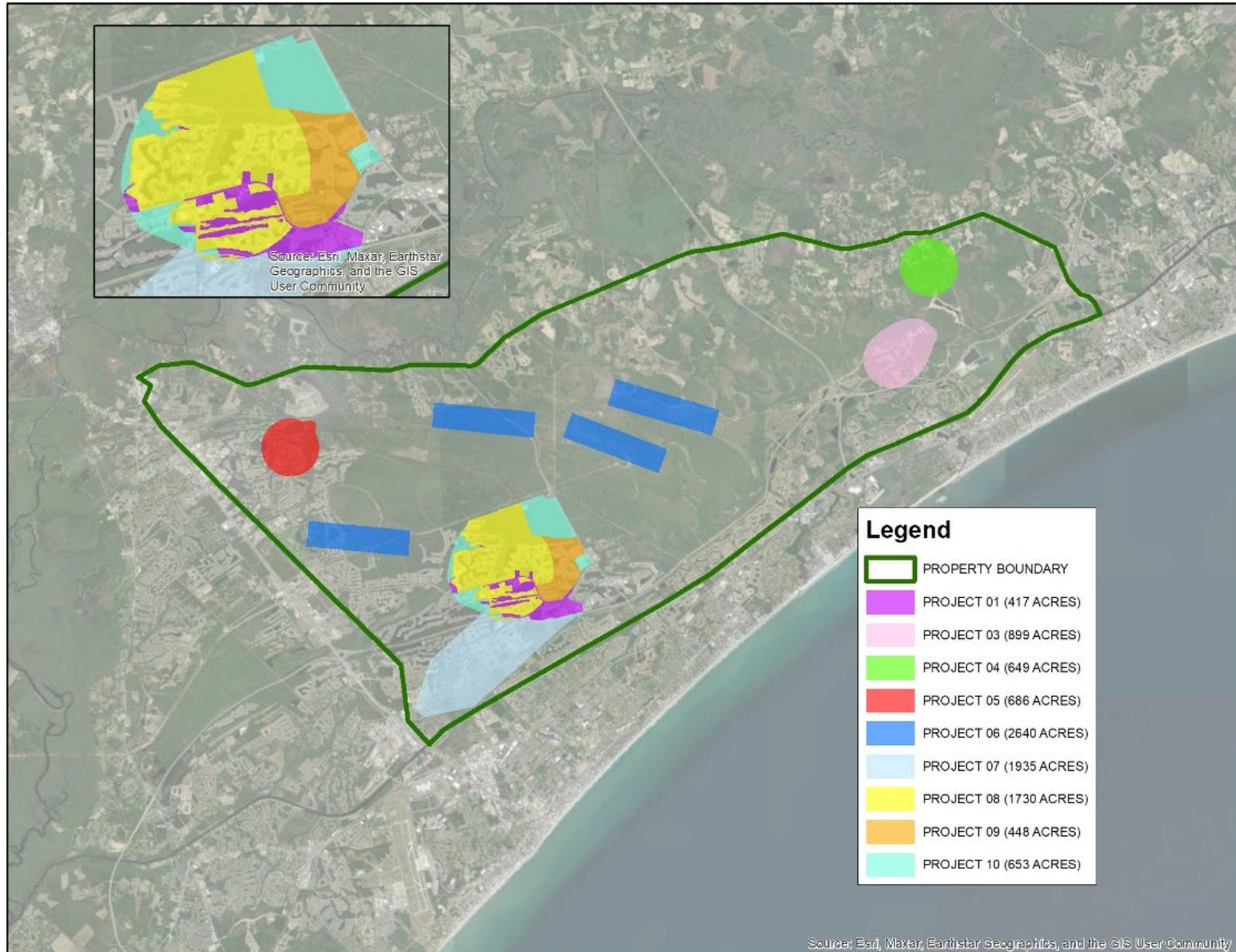
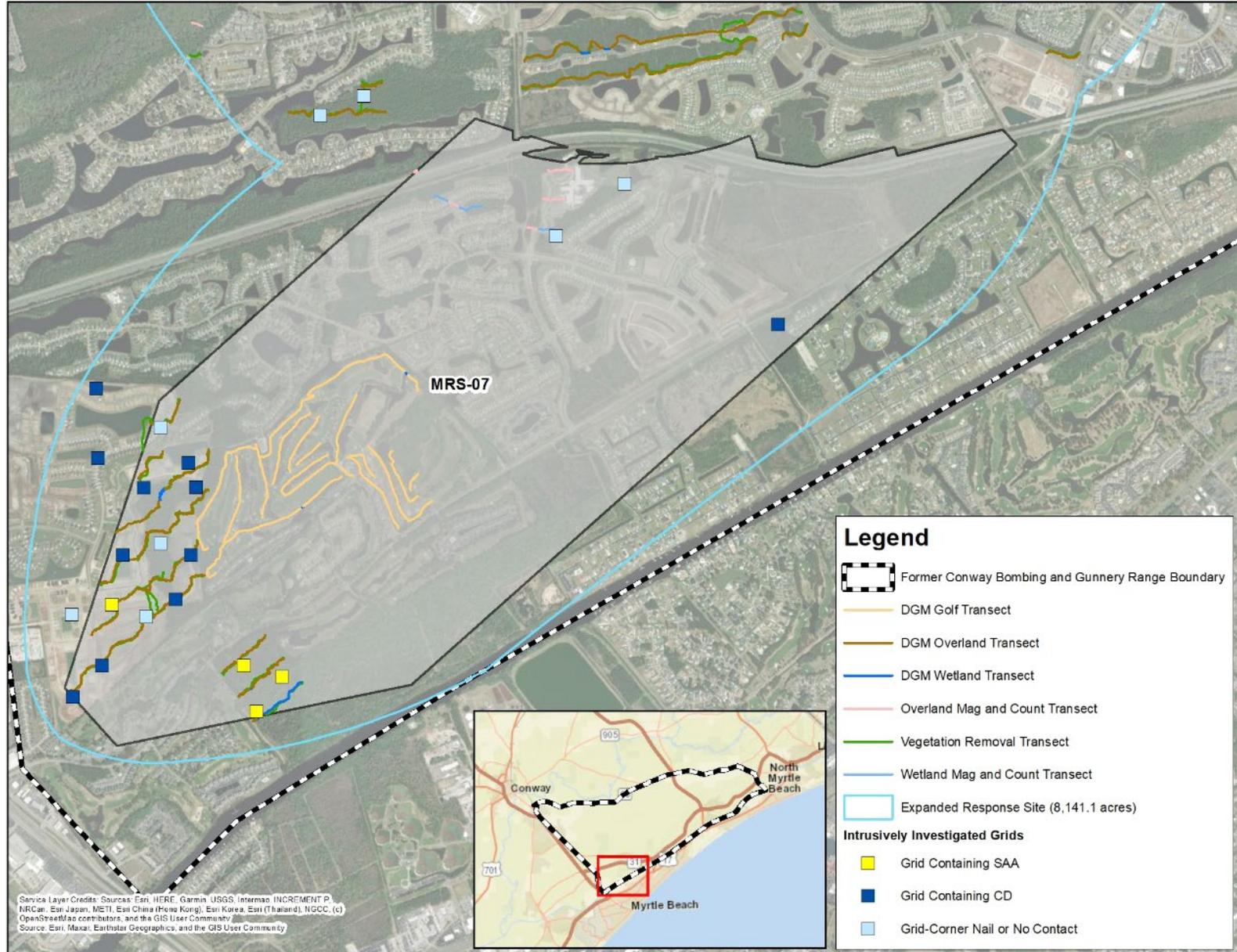


Figure 2: Location of the MG/RR MRS at the Conway BGR FUDS



Figure 3: Remedial Investigation Geophysical Transects & Grids for the Machine Gun/Rifle Range MRS at the Conway BGR FUDS



After public comments have been considered, USACE will prepare a Record of Decision (ROD). USACE's consideration of public comments on this PP will be contained in the "Responsiveness Summary" section of the ROD.

## SITE BACKGROUND

The Conway BGR FUDS encompassed approximately 55,854 acres in Horry County, South Carolina. The Department of Defense (DoD) established the Conway BGR in 1941 when the 112<sup>th</sup> Observation Squadron began supporting operations for several bombing and gunnery ranges in the Myrtle Beach and Conway area as part of the Myrtle Beach Army Airfield. The Conway BGR FUDS was active from 1941 until 1948. Training included air to ground gunnery and bombing and direct-fire training using rockets, small arms, and small artillery.

The Conway BGR FUDS consisted of 19,246 acres in fee and 36,608 acres acquired by lease by the War Department. Of the acreage acquired in fee, 3,610.55 acres was assumed by the Federal Farm Mortgage Cooperation in October 1945 and 15,635.44 acres were assumed by the War Assets Administration in November 1948. The leased acreage was terminated between 1945 and 1948 and the land returned to the International Paper Company.

Historical documentation indicates activities at MRS-07 were limited to small arms training activities. The Engineering Evaluation/Cost Analysis (EE/CA) was completed in September 2003 and included investigations of the majority of MRSs at the Conway BGR FUDS. MRS-07 was included in Area G (Remaining Land) in the EE/CA. Based on the Archives Search Report (USACE, 1995), Area G was not considered for further investigation in the EE/CA based on a lack of confirmed or potential ordnance evidence. The EE/CA concluded no DoD action was recommended for Area G (USACE, 2003).

## PROJECT CHARACTERISTICS

Conway BGR FUDS is bounded to the west by U.S. Highway 501, to the south by the Atlantic Intracoastal Waterway, the east by the Robert Edge Parkway, and the north by South Carolina Route 90. MRS-07 is in the southwest portion of the Conway BGR FUDS. The MRS consists of approximately 1,935 acres located in Horry County.

Horry County is within the Lower Atlantic Coastal Plain province and the Pee Dee River Basin. The physiographic area is characterized by minor topographic relief and several wetlands associated with the surrounding Carolina Bays. Elevation varies from sea level to approximately 40 feet above mean sea level.

The nearest open water receptor is the Atlantic Intracoastal Waterway, which is within 2,000 feet to the south. Land use within MRS-07 includes residential, commercial, and recreational (River Oaks Golf Club) use and future land use is anticipated to remain the same.

A RI Report was completed in July 2012. While MRS-07 was a former small arms range and MEC were considered unlikely to be present, the report concluded there was a potential presence of MEC at MRS-07 because of its proximity to other MRSs at the site. The RI did not assess MC at MRS-07 and recommended further investigation (USACE, 2012).

A second RI report, dated May 2018, was prepared due to data gaps identified after completion of the 2012 RI. Based on historical information and previous investigative results, the area associated with the MRS investigated in the 2018 RI were expanded to adequately address the data gaps identified in the 2012 RI. This included investigation of those areas where access was previously denied and areas outside of the original MRS 07 boundary. Investigative activities conducted for MRS-07 for the 2018 RI included approximately 8.55 miles of digital geophysical mapping (DGM) transects, 10 DGM grids (0.57 acres), 162 anomalies intrusively investigated, and collection of 10 incremental soil (ISM) samples for analysis of MC (USACE, 2018).

Results of the intrusively investigated anomalies indicated 26 anomalies associated with non-munitions related debris (i.e., cultural debris) and 8 anomalies associated with small arms ammunition. The remaining 92 anomalies were determined to be shared targets with another nearby target investigated/removed, "no contact" locations where the anomaly is possibly associated with geology, or QC or survey items. The sum of these intrusively investigated anomalies doesn't match the 162 anomalies intrusively investigated due to multiple items found within the same hole. No MEC or munitions debris (MD) were discovered at MRS-07 during

the RI, which confirmed the initial expectation that MEC were considered unlikely to be present at this former small arms range and no action for MEC was recommended.

ISM soil samples that were collected by USACE to analyze MC were initially screened by comparing the analytical results to background data. USACE did not identify any Contaminants of Potential Concern (COPC) that would create risks to human health. Lead and zinc were identified as Contaminants of Potential Concern (COPEC) for ecological receptors.

## SUMMARY OF PROJECT RISKS

USACE did not discover MEC at MRS-07 during the 2018 RI. Due to the absence of explosive hazards, the 2018 RI does not include a MEC Hazard Assessment for MRS-07. Accordingly, the 2018 RI includes a recommendation that no action be taken for MEC at MRS-07.

USACE did not identify any COPCs for human receptors as part of the 2018 RI initial screening process for MC. Given this absence of COPCs, USACE did not perform a Human Health Risk Assessment (HHRA) for MRS-07.

USACE identified lead and zinc as COPECs for ecological receptors during the 2018 RI initial screening process for MC. Accordingly, USACE prepared, as part of the BLRA, a Screening Level Ecological Risk Assessment to further evaluate COPECs. The maximum detected concentration of the COPECs (lead and zinc) were compared to USEPA ecological soil screening levels for each ecological receptor (plants, soil invertebrates, birds, and mammals). The maximum detected concentrations of lead and zinc exceeded the ecological soil screening levels for birds. Food web modeling was conducted to assess potential exposure of birds to bioaccumulate chemicals and concluded no threats were identified for exposure of ecological receptors to MC in soil at the MRS-07. The BLRA concluded no MC was detected at levels constituting a risk to human health or the environment.

## CONCLUSION

USACE has coordinated this PP with DHEC to gain concurrence. However, DHEC does not concur with the proposed action as expressed in correspondence regarding the RI report on September 12, 2017, February 21, 2018, and

May 22, 2018. DHEC requests educational methods be implemented for the entire FUDS property including small arms ranges. In addition, DHEC's position is USACE is responsible for addressing small arms ammunition (SAA) debris as waste left in place. USACE responded SAA does not present an explosive hazard and a CERCLA response cannot be conducted for these areas where an unacceptable risk has not been identified.

As documented in the 2018 RI, the BLRA concluded there are no unacceptable MEC explosives hazards and no risks to human health or the environment from MC for current and reasonable future receptors at MRS-07. Therefore, in accordance with CERCLA, USACE recommends that no action be taken at MRS-07.

## COMMUNITY PARTICIPATION

USACE is soliciting public input for this PP for MRS-07 at the Conway BGR FUDS. Announcements were placed in the local newspapers and project information can be found in the Administrative Record file. The dates for the public comment period, location, and the time of the public meeting and the locations of the Administrative Record files are provided on the front page of this PP. Representatives from USACE will be present at the meeting to explain the PP, listen to any concerns, answer questions, and accept public comments.

Written comments will be accepted throughout a public comment period of June 28 through July 27, 2023.

### Comments and requests for further information on the site should be directed to:

Mr. Stephen Fox Project  
Manager Phone: (912)  
652-6210

E-mail: [Stephen.M.Fox@usace.army.mil](mailto:Stephen.M.Fox@usace.army.mil) or

Ms. Cheri Pritchard  
Senior Public Affairs Officer  
Phone: (912) 652-5014  
Email:

[Cheri.E.Dragos-Pritchard@usace.army.mil](mailto:Cheri.E.Dragos-Pritchard@usace.army.mil)

US Army Corps of Engineers  
Savannah District  
100 W. Oglethorpe Avenue  
Savannah, GA 31401-3604

## GLOSSARY OF TERMS

**Administrative Record (AR)** – A compilation of all documents relied upon to select a remedial action pertaining to the investigation and remediation of the project site.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** – Congress enacted CERCLA (42 USC § 9620 et seq.), commonly known as Superfund, on 11 December 1980. This law addresses the funding for, and remediation of abandoned or uncontrolled hazardous waste sites. This law also establishes criteria for the creation of key documents such as the RI, FS, PP, and DD.

**Digital Geophysical Mapping (DGM)** – Method of geophysical surveying using an instrument that acquires geophysical and position data using self-recording instruments. The data is then post-processed by analysts to identify anomalies for further investigation.

**Formerly Used Defense Sites (FUDS)** – Locations which were previously under the jurisdiction of DoD and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances.

**Munitions Constituents (MC)** – Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

**Munitions Debris (MD)** – Remnants of munitions (for example, penetrators, projectiles, shell casings, links, and fins) remaining after munitions use, demilitarization, or disposal. Munitions debris is confirmed inert and free of explosive hazards by technically qualified personnel.

**Munitions and Explosives of Concern (MEC)** – This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means (a) unexploded ordnance; (b) discarded military munitions; or (c) explosive MC (for example, TNT and RDX) present in high enough concentrations to pose an explosive hazard.

**Munitions Response Site (MRS)** - A discrete location that is known to require a munitions response.

**National Oil and Hazardous Substances Pollution Plan (NCP)** – More commonly called the National Contingency Plan, the NCP is the Federal government's blueprint for responding to both hazardous substance releases.

**Proposed Plan (PP)** – The plan that identifies the preferred remedial alternative for a site and is made available to the public for comment.

**Record of Decision (ROD)** – A document establishing the reasoning for the choice of a cleanup plan or final remedial action at CERCLA sites.

**Remedial Investigation (RI)** – An investigation conducted to determine the nature and extent of contamination, assess human health and environmental risks posed by the contaminants, and provide a basis for the development of response action alternatives.

**Unexploded Ordnance (UXO)** - Military munitions that (a) have been primed, fuzed, armed, or otherwise prepared for action; (b) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (c) remain unexploded either by malfunction, design, or any other cause.

**ACRONYMS and ABBREVIATIONS**

<b>AR</b>	Administrative Record
<b>BGR</b>	Bombing and Gunnery Range
<b>BLRA</b>	Baseline Risk Assessment
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>COPC</b>	Contaminant of Potential Concern
<b>COPEC</b>	Contaminant of Potential Environmental Concern
<b>DERP</b>	Defense Environmental Restoration Program
<b>DHEC</b>	South Carolina Department of Health and Environmental Control
<b>DoD</b>	Department of Defense
<b>EE/CA</b>	Engineering Evaluation/Cost Analysis
<b>USEPA</b>	United States Environmental Protection Agency
<b>FUDS</b>	Formerly Used Defense Site
<b>HHRA</b>	Human Health Risk Assessment
<b>MC</b>	Munitions Constituents
<b>MD</b>	Munitions Debris
<b>MEC</b>	Munitions and Explosives of Concern
<b>MG/RR</b>	Machine Gun/Rifle Range
<b>MRS</b>	Munitions Response Site
<b>NCP</b>	National Oil and Hazardous Substances Pollution Contingency Plan
<b>RI</b>	Remedial Investigation
<b>ROD</b>	Record of Decision
<b>SAA</b>	Small Arms Ammunition
<b>USACE</b>	United States Army Corps of Engineers

## REFERENCES

USACE, 2018. Final Remedial Investigation Report, Former Conway Bombing and Gunnery Range, Horry County, South Carolina, MRS-R01, Range II; MRS-R02, Range III; MRS-R03, Range IV; MRS-R09, Machine Gun/Rifle Range. May. Prepared for USACE by HydroGeoLogic, Inc.

USACE, 2012. Final Report, Revision 01 for the Remedial Investigation Former Conway Bombing and Gunnery Range, Horry County, South Carolina. July. Prepared for USACE by EOD Technologies, Inc.

USACE, 2003. Final Engineering Evaluation/Cost Analysis (EE/CA) Conway Bombing and Gunnery Range, Conway, South Carolina. September. Prepared for USACE by Parsons under Contract Number DACA87-95-D0018, Deliver Order 0039.

U.S. Army Corps of Engineers (USACE), 1995. Archives Search Report for Conway bombing and Gunnery Range, Horry County, South Carolina, Project Number I04SC002501. September.

