

# Morgan General Ordnance Depot

## Formerly Used Defense Site

### Remedial Investigation

## Middlesex County, New Jersey

August 2024



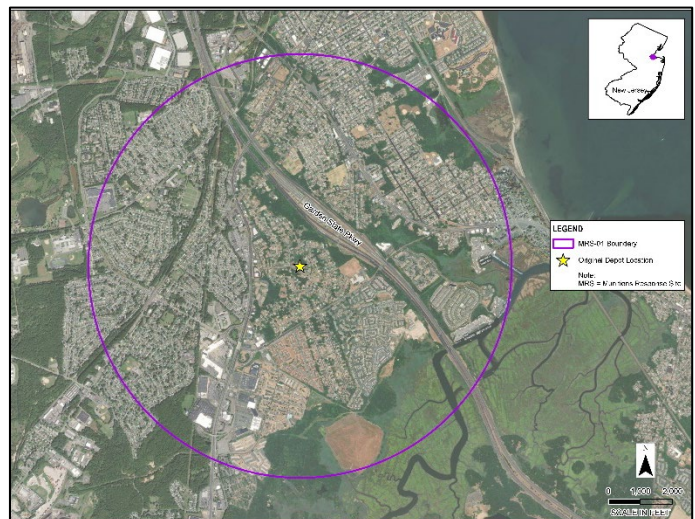
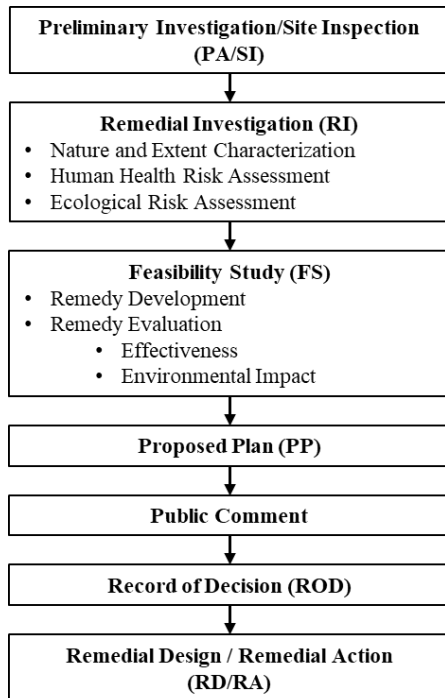
### Introduction

The United States Army Corps of Engineers (USACE) has initiated a Remedial Investigation (RI) at the Morgan General Ordnance Depot Formerly Used Defense Site (FUDS), in Middlesex County, New Jersey (NJ). The purpose of the RI is to evaluate whether historical Department of Defense activities at the Morgan General Ordnance Depot have impacted current environmental quality at the site from munitions and explosives of concern (MEC) and munition constituents (MC), and if so, to identify what cleanup or remediation is needed to protect human health and the environment. The entire process can span over several years depending on site complexity site and the amount of contamination present. The RI is being conducted under the Department of Defense's Military Munitions Response Program (MMRP). The MMRP program began in 2001, and addresses explosives safety, health, and environmental issues caused by past munitions related activities at current and former military installations and adjacent properties. The program follows the requirements of the National Contingency Plan as set under the 1980 CERCLA and its amendments of 1986.



Source: Unknown photographer - 1918 news photograph, re-published in 2012 book "Explosion at Morgan", by Randall Gabrielan, 2012.

The 3,156- acre Munitions Response Site (MRS) under investigation at the Morgan General Ordnance Depot encompasses portions of the Borough of Sayreville, the City of South Amboy, and the Township of Old Bridge in Middlesex County, New Jersey.



### What prompted the Remedial Investigation?

Morgan General Ordnance Depot was part of an artillery shell loading plant constructed and operated by the T.A. Gillespie Loading Company as an agent appointed by the United States. On 4 October 1918, a series of severe explosions and fires occurred over three days at the facility, destroying production lines and halting operations. As a result of these explosions, debris and munitions were scattered throughout the area.

Currently thousands of residential structures and commercial businesses occupy most of the MRS. Current usage also includes elementary schools, a home for the elderly, parks, and numerous other common structures and organizations found in a developed municipal area. The Garden State Parkway and New Jersey Route 35 travel through the site and the southeastern portion of the MRS lies within Cheesequake State Park. Historically, development within the MRS had led to numerous munitions finds.

Between 1993 and 2000, USACE conducted historical records reviews, engineering evaluations and cost analysis, time critical removal actions, and other studies to understand and address munitions response related activities at the Morgan General Ordnance Depot. These previous studies and findings were used to develop the scope for the RI. This scope of work consists of non-invasive surveys on parcels within the MRS and investigation of selected subsurface items.

### Remedial Investigation Field Work

A Right-of-Entry request was sent to all property owners where USACE would like to conduct remedial investigation field work. USACE will not enter any property where a Right-of-Entry was not granted. The following five activities may be conducted on properties with Rights-of-Entry during the RI to determine nature and extent of any contamination from the 1918 depot explosions.

#### 1. Landscape and Civil Surveys

A landscape survey (with photographs and video) will be conducted to inventory and appraise vegetation, hardscapes (e.g., driveways, sidewalks, walkways, patios, retaining walls, and fencing) and moveable objects (e.g., yard ornaments, playsets, and trampolines) that may interfere with the investigation.

Prior to any work being conducted, all work will be explained to the property owner to confirm understanding of the work and answer any questions.

A professional land surveyor will establish temporary control points to be used in conjunction with field activities.

A site walk with the property owner will be conducted after all work is complete to determine if restoration is required. Any required restoration tasks will be conducted by a professional arborist/landscape company as agreed upon with the property owner.

#### 2. Phase 1 Geophysical Mapping Surveys

Geophysical detection sensors will be used to scan selected accessible areas of the property to locate subsurface metallic items.

#### 3. Phase 2 Geophysical Mapping Surveys

Locations with identified subsurface metal from the Phase 1 are surveyed again to collect more robust data for characterization purposes.

#### 4. Targets of Investigation

Items characterized as likely being munitions related will be investigated by hand and removed. The use of mechanized equipment, such as a backhoe, may be required for items at depths greater than 4-ft. Locations where digging occurs will be backfilled or covered daily. Evacuation of businesses and/or residences may be required during removal. If evacuations were to be required, they are to be scheduled and coordinated in advance and accommodation made for the property owner and/or occupants of said residence or business.

#### 5. Soil Sampling

Surface soil sampling will be completed in select areas of the MRS based on historical information and results of the geophysical surveys and target investigations. Sampling of other media (e.g., subsurface soil, sediment, surface water, groundwater) may be warranted based on the results of the surface soil samples.

### Remedial Investigation Timeframe/Schedule

Fieldwork is planned to begin in October 2024. The anticipated schedule for the entire effort per property is approximately six to nine months. All RI fieldwork is expected to be completed by the end of 2026.

### Quality and Safety

Quality assurance from USACE and strict project quality control procedures are in place for the fieldwork. The New Jersey Department of Environmental Protection (NJDEP) and local stakeholders/officials (i.e., townships) are provided an opportunity to review and comment on significant project documents to ensure the quality of the document and compliance with Department of Defense guidance and environmental regulations. Rigorous safety and environmental training are completed by all project personnel.

### Three Rs of Explosive Safety

Should you recognize an item that you are concerned possesses an explosive hazard, follow the 3R's of explosives safety;

**Recognize, Retreat, and Report (call 911).** The attached QR Code and web address provides additional information for munitions recognition and safety.

**Recognize** – Recognizing when you may have encountered a munition is key to reducing the risk of injury or death.

Remember, munitions are sometimes hard to identify, if you encounter or suspect you may have encountered a munition, consider it extremely dangerous.

**Retreat** – If you encounter or suspect you may have encountered a munition, do not approach, touch, move or disturb it, but immediately and carefully - do not run – leave the area following the same path on which you entered. If you can, mark the general area, not the munition, in some manner (e.g., with a hat, piece of cloth, or tying a piece of plastic to a tree branch).

**Report** – When you think you may have encountered a munition, notify your local law enforcement - **call 911.**

### Public Information and Administrative Record

Project related documents are available at the local library.

Sayreville Free Public Library  
1050 Washington Road  
Parlin, New Jersey 08859  
<https://sayrevillelibrary.org/>

If you have any questions regarding the Remedial Investigation, please contact Gina Kaso, Project Manager, U.S. Army Corps of Engineers, at (978) 318-8180 or [gina.a.kaso@usace.army.mil](mailto:gina.a.kaso@usace.army.mil).

