

The United States Army
Presents

Sergeant WOOF



PROTECT
yourself and family,
friends and community.
LEARN and FOLLOW
the 3Rs

RECOGNIZE: Realize that you may have found ammo
RETREAT: Do not touch, move or disturb ammo—
carefully leave the area, but do not run
REPORT: Tell a parent or other adult to call
787-707-4911

Recognize
Retreat
Report

<https://www.denix.osd.mil/uxosafety>

Fort Buchanan Munitions Explosive Concern (MEC) Awareness

Agenda

- **Why are we concerned about MEC?**
- **Past MEC finds at Fort Buchanan.**
- **MEC Safety**
- **How to respond to a MEC find.**
- **MEC reporting procedure.**
- **MEC Reporting Summary**
- **Past MEC finds have been evaluated in the Military Munitions Response Program (MMRP) at Fort Buchanan.**

Why are we concerned about MEC?



Past MEC Items found at Fort Buchanan



Munitions Explosives of Concern (MEC) Safety Guidelines for the U.S. Army Garrison, Fort Buchanan

History

The U.S. Army Garrison Fort Buchanan is an active Army Installation. In the past, munitions training took place at the Installation. The former Camp Buchanan Training Area is currently being restored under the Military Munitions Response Program (MMRP). The lead regulatory agency is the Department of Defense (DoD). The clean-up program is being implemented by the United States Army Environmental Command (USAEC) and guided by the United States Army Corp of Engineers (USACE), Baltimore District. The regulatory framework for clean-up is the Comprehensive Environmental Compensation Liability Act (CERCLA). It consists of one (1) Munitions Response Site (MRS) that covers thirty-two (32) acres, inside of the (present day) Fort Buchanan Installation boundary limits. This includes the western half of the golf course, Maxi-Williams Jr. Baseball Field, the 1300 Building area and the limestone hill Mogote area.

During the time frame of the 1920s through the 1940s, Camp Buchanan was used as a small arms firing range (contemporary with .30-06 Springfield rifles). According to an Archive Search Report (ASR 1997), Chemical Warfare Materials were used in training and Civil Disturbances at Camp Buchanan Training Area. Mustard gas was reportedly stored within Fort Buchanan boundaries at that time.

In 1985, thirteen 3-inch stoke mortars were found buried in the sub-surface at two locations in the Maxi Williams Jr. Baseball field. In 2001, a post Korean-Age, M29 3.5-inch practice Rocket was found on the land surface located north of the Maxi Williams Jr. baseball field area. These found items are classified as Munitions Explosions of Concern (MEC). There have been no records found as to where these items would have been fired at Camp Buchanan. They may have been brought in during the construction era. These items have been sub-classified as Discarded Military Munitions (DMM).

In 2010 two MEC items were found during construction of the New Armed Forces Reserve Center. On 27 October 2010, a practice hand grenade (M29) was found a few inches below grade. The spotting charge was spent elsewhere. On 20 December 2010, a Stoke Mortar was found a few inches below grade at the same site. The Mortar reportedly had a charge and was blown up in place.

On 27 January 2011, a body of practice hand grenade (M69) was recovered in the grass area adjacent to the Pee Wee Track Field (Area 575). This item was described as DMM.

MEC items may still exist in the sub-surface and may still contain an explosive charge.

Proposed Construction or Excavation Work in the former Camp Buchanan Area

Before any proposed construction or excavation work can begin, the work needs to be coordinated with the Department of Public Works (DPW) at Fort Buchanan and obtain:

- approval from the Master Planner at Fort Buchanan,
- receive construction support materials from the Environmental Division at DPW,
- approved excavation permit from DPW and DOJM,



3.5 inch Rocket M29 ;Practice Hand Grenade –M29; body of practice hand grenade(M69); Stoke Mortar; CWM Glass Ampule

What to do if you find a Munitions Explosives of Concern (MEC) item

- **Recognize** - Recognize you have a possible MEC item (hand grenade, Stoke Mortar, Rockets, Chemical Warfare-Glass ampules).
- **Retreat** – Retreat to a safe area (at least 300-feet). Cell phones may activate the MEC).
- **Report** (Call: 787-707-4911-Fort Buchanan Security)
- **Do not touch or move the item.**

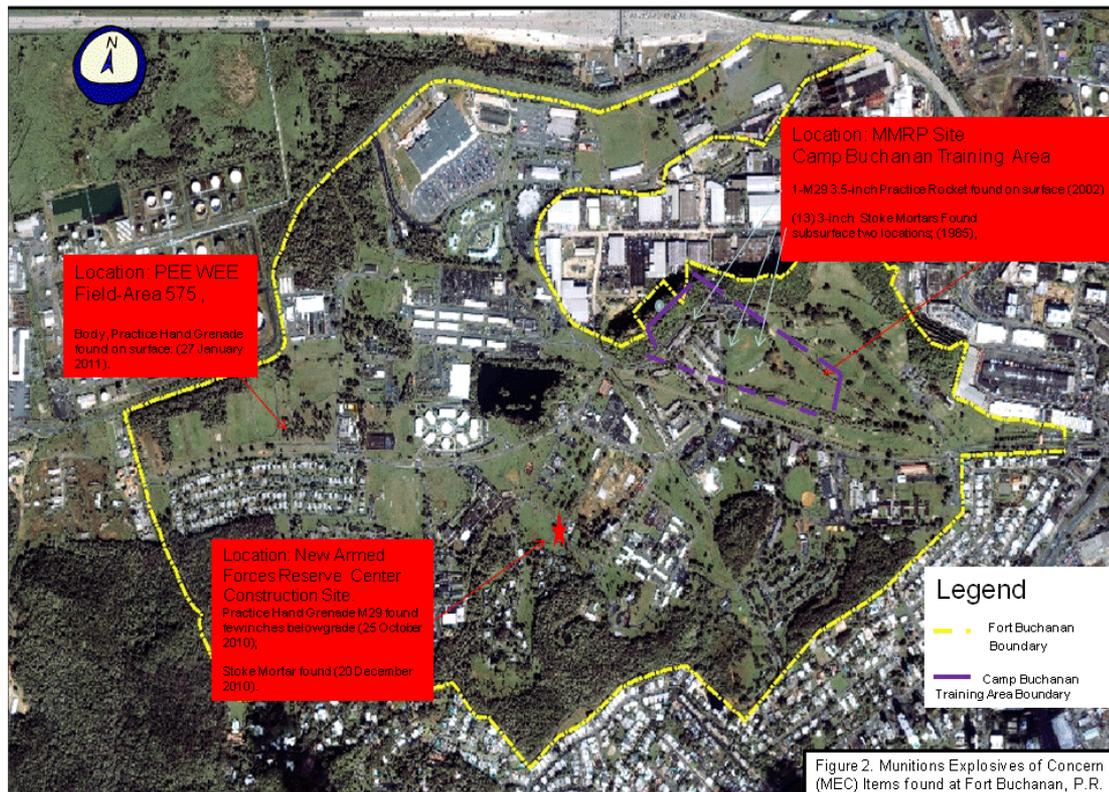


Figure 2. Munitions Explosives of Concern (MEC) Items found at Fort Buchanan, P.R.

**DPW/Fort Buchanan Army Garrison
Presents:**

MEC SAFETY



Topics

- **What is Munitions and Explosives of Concern (MEC) ??**
 - **Ordnance Identification**
 - **UXO Safety Guidelines (The 3 R's)**
 - **UXO Stop Signs**
- 

Munitions and Explosives of Concern

MEC: This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks and is identified as:

Unexploded Ordnance (UXO) as defined in 10 U.S.C. 2710(e)(9);

Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710 (e)((2);

Munitions Constituents (MC) (e.g. TNT, RDX) present in high enough concentrations to pose an explosives hazard.

What is Unexploded Ordnance ?

“UXO”

Military munitions that have been:

- **primed, fuzed, armed, or otherwise prepared for action, and have been**
- **fired, dropped, launched, projected, or placed in such a manner as to**
- **constitute a hazard to operations, installation, personnel, or material and**
- **remain unexploded either by malfunction, design, or any other cause**

(Military Munitions Rule 40 CFR 266.201)

Just remember one
thing, if it is a MEC
item, it can kill you !!!

Don't touch it!!!





ORDNANCE IDENTIFICATION

Projectiles



75 mm
Shrapnel



105 mm

Mortars



81 mm WP

3" Stokes Mortars
have been found in
this area.



60 mm Illume



3.5" Rockets have
been found in this
area !!



2.36 inch Rocket



Rockets

Rocket Propelled Grenade
(RPG)

Ordnance Identification

In general, blue markings are used to describe practice munitions.



Just because something is practice doesn't mean it is safe.

Practice munitions can contain explosive and/or pyrotechnic charges.

NOW WHAT?



MEC SAFETY GUIDLINES

Once you RECOGNIZE a possible MEC hazard, do not continue to move any closer.



Don't worry about being wrong, because if you are right, you might have just saved a life.

MEC SAFETY GUIDLINES

DO NOT STEP ON, PICK UP, KICK, THROW, DROP, GIVE TO FRIENDS, KEEP AS A SOUVINOR, THROW ROCKS AT MUNITIONS.

Even just touching an MEC item can be harmful. Static electricity can discharge from you to the item causing it to function.



MEC SAFETY GUIDLINES

RETREAT, Move at least 300 feet from a MEC hazard and tell others to stay away!!



Things you need to know when you **REPORT** the MEC to the Fort Buchanan Security- 787-707-4911

REPORTING ACTIVITY: You and who you work for

CONTACT METHOD: Point of contact (POC), and telephone number at the site.

LOCATION: Address of the Possible MEC and your location.

TYPE MUNITION: Give a general description of the item you have. Don't worry if you don't know the exact size or type of MEC.

RESOURCES THREATENED: Report any equipment, facilities, or other assets that are threatened.

PROTECTIVE MEASURES TAKEN: Describe any measures you have taken to protect personnel and equipment.

REMEMBER DO NOT TOUCH THE ITEM FOR ANY REASON !!!!!

MEC SAFETY GUIDLINES

Do not operate radios or **CELL PHONES** near MECs.

Make all cell phone calls from the safe area that is at least 300 ft away.



Remember the 3 R's

- **Recognize**- Recognize you have possible MEC item.
- **Retreat**- Retreat to a safe area.
- **Report**- Report the MEC to your local authorities.

MEC STOP SIGNS

What are
MEC Stop Signs??



MEC STOP SIGNS

- Fencing-
to keep
you out
of the
area!



MEC STOP SIGNS

- Danger Signs- to warn you of MEC Hazard !!



MEC STOP SIGNS

- Public Awareness (Training, posters and pamphlets)

Unexploded Ordnance

UXO Don't touch!



If you find any object that resembles this, do not touch or move it. It's UXO and still could explode. **Even fragments are dangerous.** Note the location and **call 911**. Remember, if you **did not** drop it, **do not** pick it up!

Recognize
Retreat
Report

www.denix.osd.mil/uxosafety

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 **NOT EVERY BOMB LOOKS LIKE A BOMB**



If you see anything that looks strange on the ground, be sure to **stay away**. Tell a grownup to **call 911** and report it.

Recognize
Retreat
Report

www.denix.osd.mil/uxosafety

UXO SAFETY

If you see UXO, **stop**, do not move closer

Never transmit radio frequencies near UXO (two-way radio, citizens band radio, or cell phone)

Never touch, move, or disturb UXO

Never remove anything near UXO

Call 911 and report UXO

Avoid any area where UXO is located

Recognize
Retreat
Report

“MEC Safety”, it is
nothing to sleep on !!



Munitions Explosives Of Concern (MEC) Security Awareness Response Procedure

The following procedure was taken out of the draft MEC Management Plan currently being developed by the Fort Buchanan Environmental Division.

4.0 MEC Response and Notification Procedures

The following procedures will be followed when MEC is found at Camp Buchanan or anywhere within Fort Buchanan.

4.1 MEC is Discovered at Camp Buchanan or anywhere within Fort Buchanan

Proper response to found MEC is to implement 3 R's, indicated below:

1. **RECOGNIZE**- Recognize you have a possible MEC item
2. **RETREAT**- Retreat to a safe area (at least 300-feet away).
3. **REPORT**- Report the MEC item to your local authorities (787-707-4911).

Munitions and Explosives of Concern

Incident Response Procedure

I. Personnel or Employee finding the suspect MEC item:

Once it is **RECOGNIZED** you have a suspect MEC item, personnel will **RETREAT** to a distance of at least 300 feet and keep everyone away from the suspect MEC item.

REPORT to the Fort Buchanan Emergency Desk- 787-707-4911, and provide them with the following information:

MEC Response Flow Chart

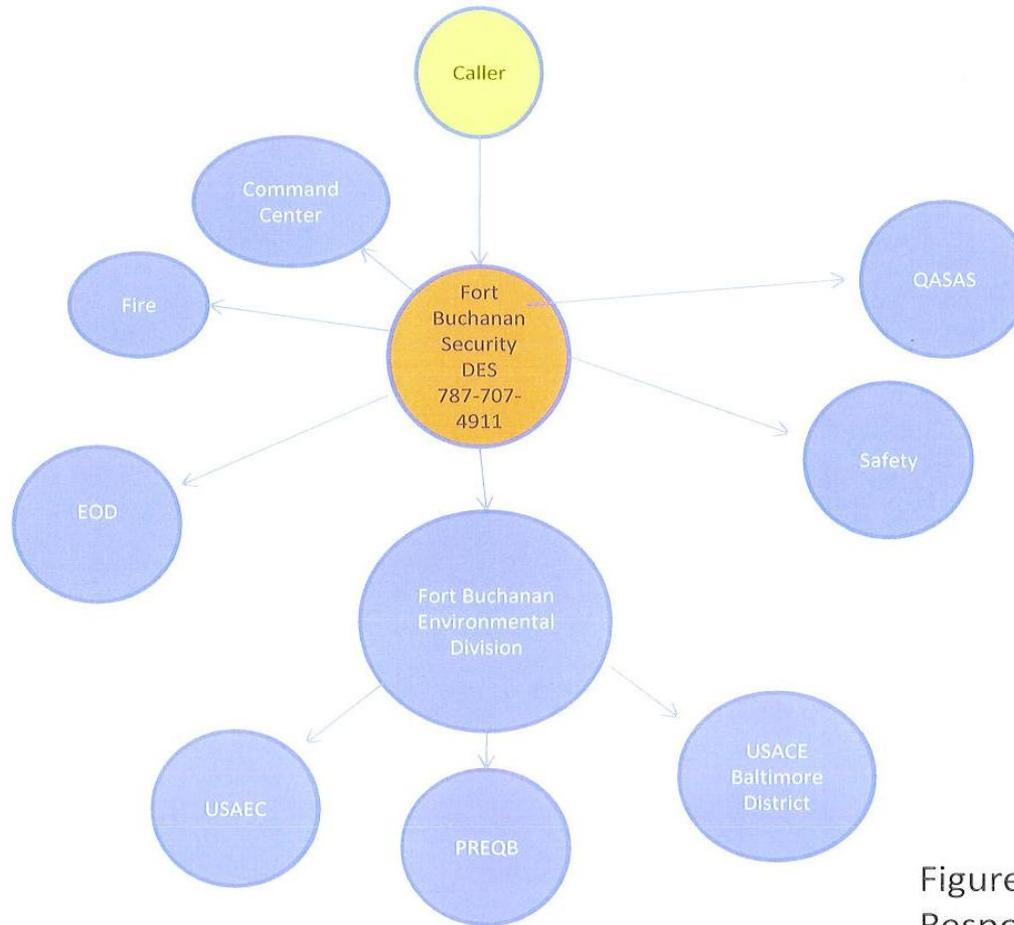


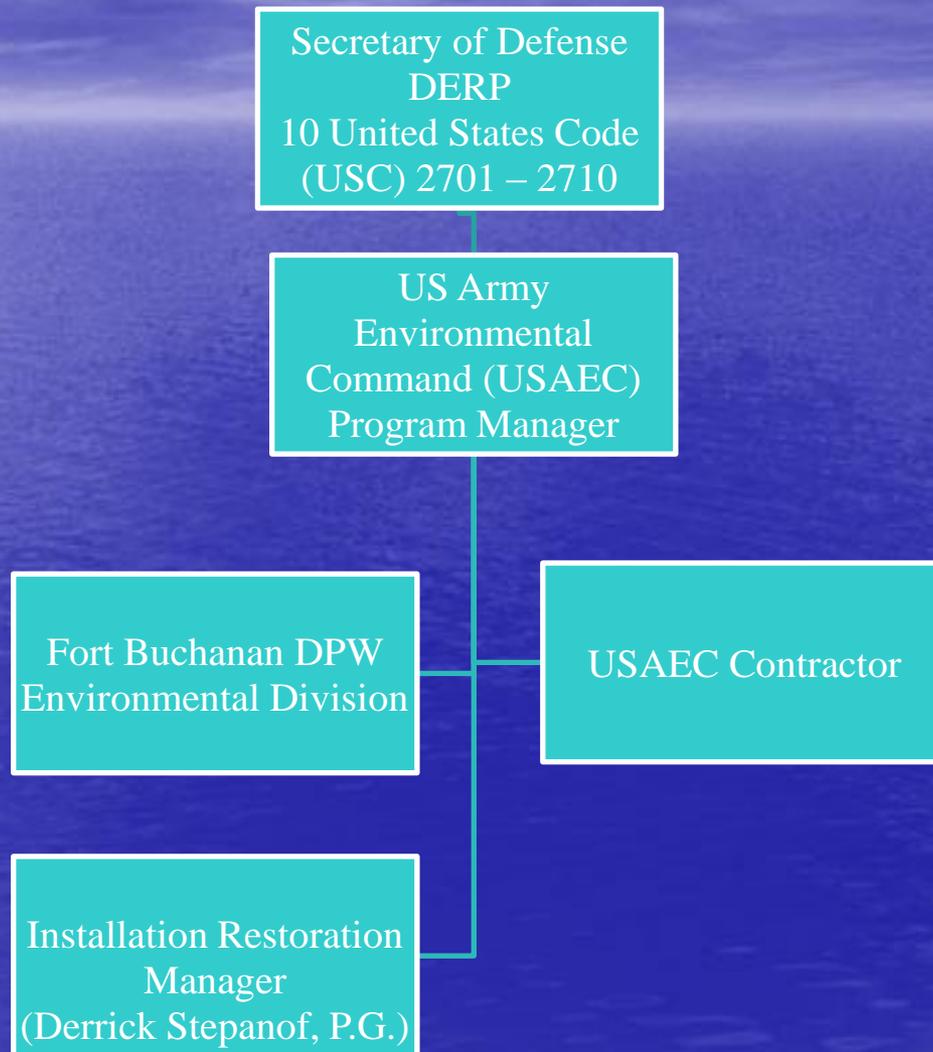
Figure 4-1. MEC Response Flow Chart

MEC Find Response Summary

What to do if you find a Munitions Explosives of Concern (MEC) item

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ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT



Environmental Restoration Program Management

Defense
Environmental Restoration
Program (DERP)
**Active/Operating
Army Installations**
11 Environmental
Restoration Sites

Installation Restoration Program (IRP)

Identify, investigate and
**clean up hazardous
substances**, pollutants and
contaminants at active Army
installations.

(2 Sites)

Military Munitions Response Program (MMRP)

The MMRP addresses **non-operational
range lands** that are suspected or
known to contain unexploded ordnance
(UXO), discarded military munitions
(DMM) or Munitions Constituent (MC)
contamination

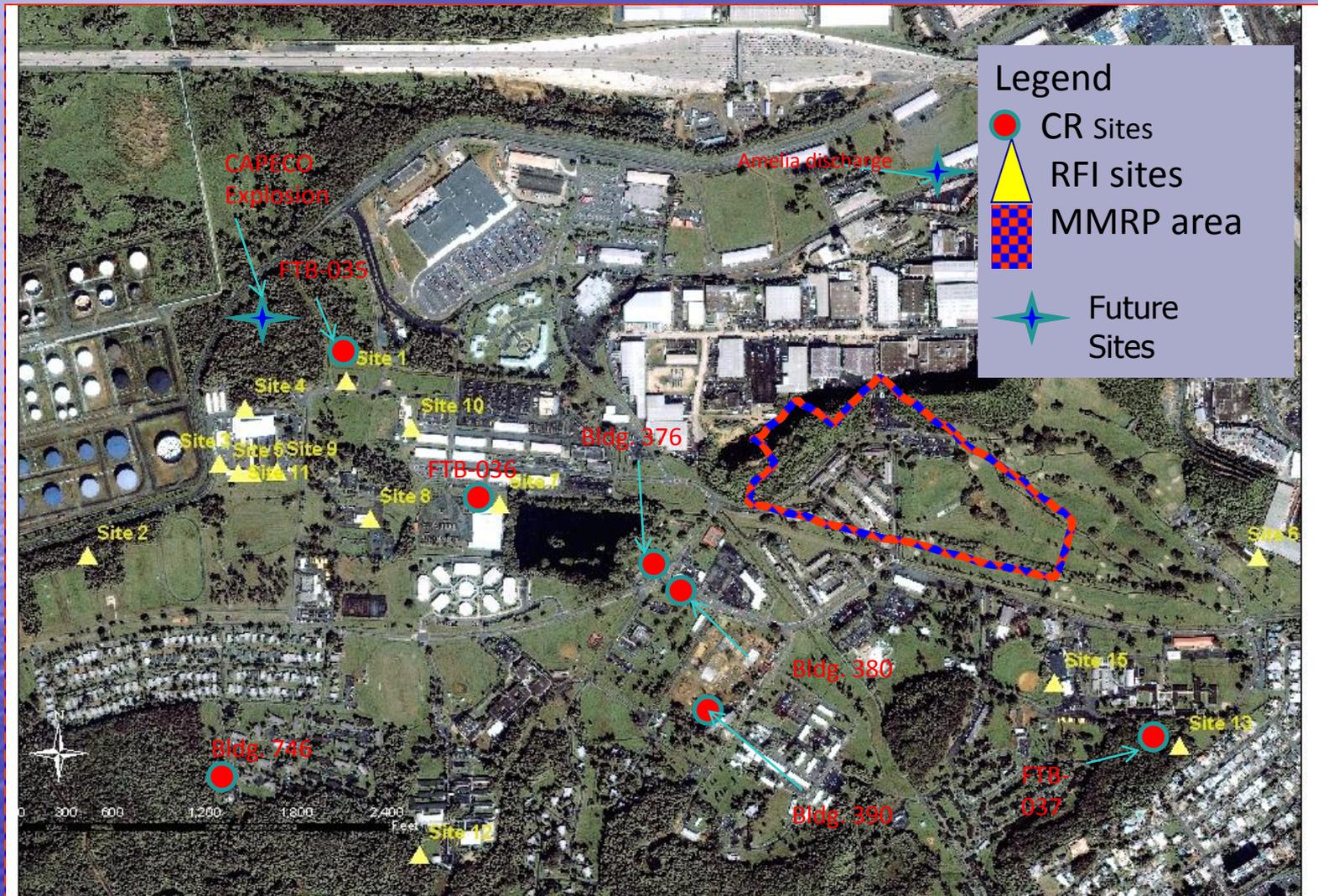
(1 Site)

Compliance Restoration Program (CR)

Acquired in FY10
**compliance related
projects** such as leaking
Underground Storage
Tanks (UST) ; or recent
projects at active Army
installations

(8 Sites)

Restoration Sites Reference Figures



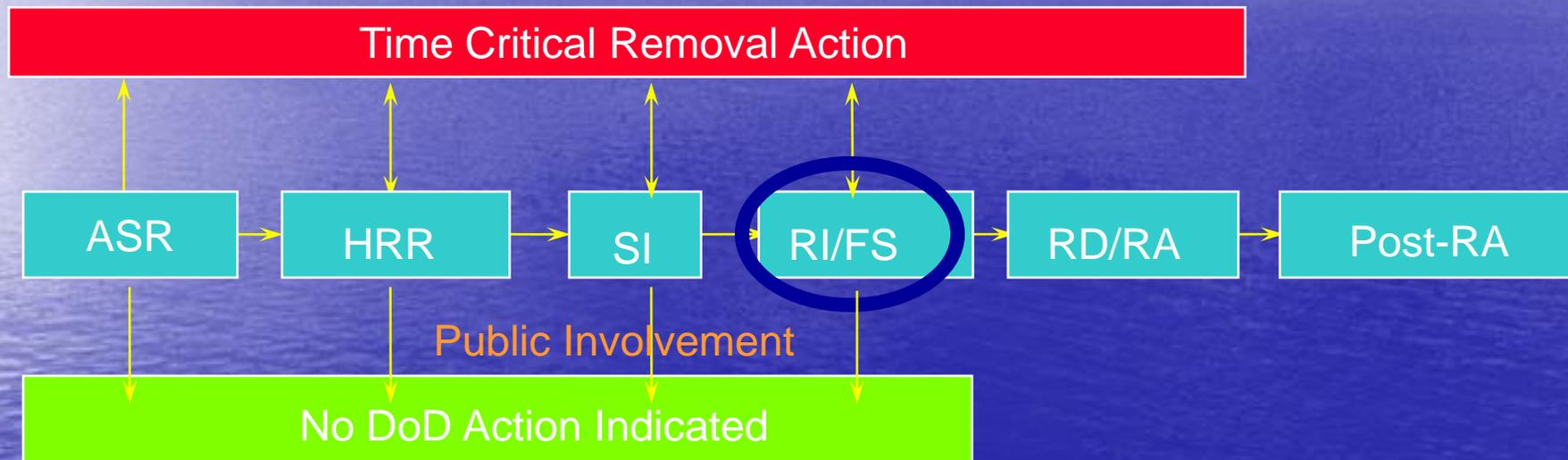
Camp Buchanan Training Site



MMRP-Camp Buchanan Training Area

- Munitions Explosives of Concern (MEC) in the form of Discarded Military Munitions (DMM) have been found. There are no records that these items were ever fired at Camp Buchanan but may have been brought in as fill material and may be deeply buried.
- The DMM items encountered are:
 - In 1985, Thirteen (13) -3-inch stokes mortars were found buried in the subsurface at two locations within the Maxi Williams Jr. baseball field while installing utilities.
 - In 2002 an M29 3.5 inch practice rocket was encountered with a M405 fuse was found on the surface near a fence by the former target butt.
- The DoD is the lead agency, while the Puerto Rico Environmental Quality Board is a participating regulator.
- A Remedial Investigation (RI)/Feasibility Study(FS) phase is being conducted.

Military Munitions Response Program (MMRP) Response Process Parallels the CERCLA Process



- Archive Search Report (ASR) completed in 1997.
- Historic Records Review (HRR) completed in 2008.
- Site Inspection (SI) completed in 2008.
- Remedial Investigation and Feasibility Study (RI/FS) initiated in 2009.
- **RI/FS report submitted draft final in January 2012.**
- Anticipate final RI/FS to be submitted to PREQB in March 2012
- Anticipate public comment and decision document approval in July 2012.
- Anticipate implement Land Use Controls (LUCs) in August 2012

Geophysical Sample Locations and Results



MEC Find Response Summary

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