

Material Potentially Presenting an Explosive Hazard (MPPEH) Processing

FORMER VIEQUES NAVAL TRAINING RANGE, VIEQUES, PUERTO RICO

Vieques Island, Puerto Rico, has been used for military training since the U.S. Navy purchased portions of the island in 1941 for use as an ammunition storage facility in support of World War II training requirements. The Vieques Naval Training Range (VNTR) began developing facilities to include a gunnery range on the eastern end of Vieques in 1964. In 1965, Air to Ground (ATG) training activity began in the Live Impact Area (LIA) where several mock-ups, such as old tanks and vehicles, were used as targets for aerial bombing. Since the mid-1970s, several point and area targets for ships were constructed to practice (NGFS). For the past several decades, VNTR has been used for an array of training including the training of F/A-18 and F-14 pilots for live ordnance delivery and amphibious assault landings by the Marine Corps.

PROJECT HIGHLIGHTS

- *Cleanup under TCRA*
- *Conducted Pilot Program to Determine Feasibility/Cost Effectiveness of CPC*
- *MEC Clearance*
- *MPPEH Processing*
- *Scrap Management*
- *Two Follow-on Contracts*

Due to the nature of the training activities at VNTR, the Navy identified several Munitions Response Sites (MRSs) areas of concern including Munitions Removal Area-Live Impact Area (MRA-LIA) and the MRA-Eastern Maneuver Area (EMA). These MRSs have been selected based on the high explosive hazards associated with the munitions identified at these locations and due to the trespassing of recreational boaters in these areas from the north and south of the MRSs. The MRA-LIAs are included in the Navy's approved Time Critical Removal Action (TCRA).

Originally, the objective of this project was to conduct a pilot program to determine the feasibility and cost effectiveness of operating a Central Processing Center (CPC) for management of Munitions Debris (MD) and Range Related Debris (RRD) removed from the former VNTR.

SPECIFIC TASKS INCLUDED

- Determining feasibility and cost effectiveness of operating a CPC for management of MD and RRD;
- Maintaining chain of custody and accountability records utilizing closed-circuit process for handling MD and RRD;
- Ensuring that all processed MD and RRD released to the recycling markets is certified 5X, free of explosive hazards;
- Establishing acceptance criteria and levels, and sample sizes and levels of inspection; and
- Publishing a processing report that fully documented all activities performed during the MD and RRD processing pilot program, to include a cost analysis and production rates for the pilot program.

Upon successful completion of the Pilot Program, PIKA commenced activities as a full fledged contract to function as the consolidated range scrap management contractor by establishing the Central Processing Center (CPC). PIKA is sole processor of the range scrap, rather than having each removal contractor responsible for processing of removed MD and RRD from their assigned work areas. The CPC is the sole turn-in point for expended MD and RRD materials that are removed from the grids by the removal contractors and will be utilized by additional contractors that may be selected during the life of the munitions and explosives of concern (MEC) clearance activities at VNTR.

INNOVATIVE TECHNOLOGY

The Pulverizer, PIKA's patented Munitions Reductions Machine, generates 31,630 pounds per square foot of internal, crushing pressure to safely and efficiently demil MD, and can demil up to 105 mm rounds at the rate of 150–200 per hour. For added safety, no personnel are required near the "crushing" area during operations.

