

RAB Meeting

Munitions Response Program Update

Former Vieques Naval Training Range

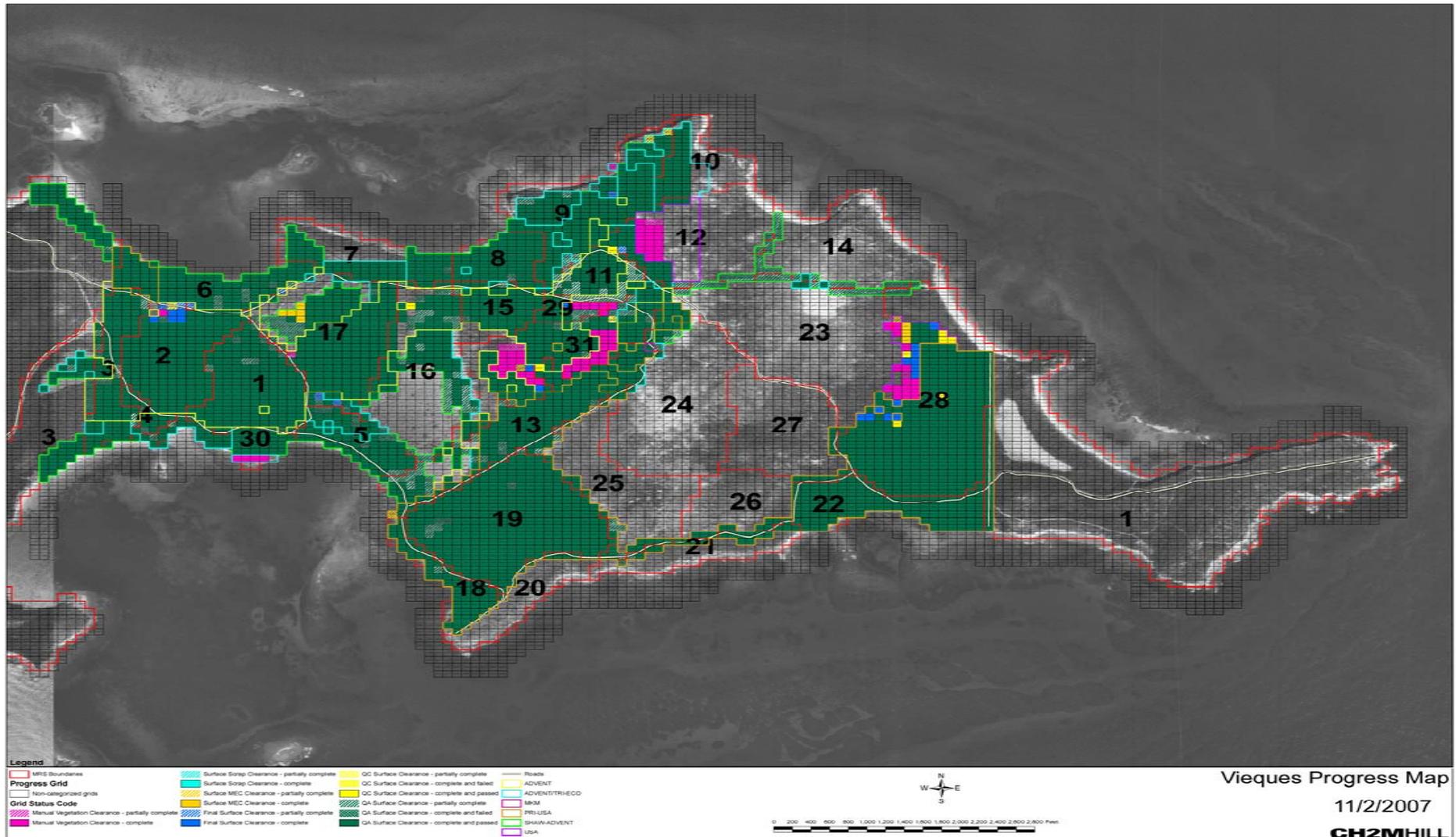
(VNTR)

Vieques, Puerto Rico

November, 2007



VNTR Progress



TCRA Munitions Removal Summary



- ❖ **523 acres surface cleared in the Live Impact Area (LIA)**
- ❖ **Items located requiring detonation or explosive venting**
 - **Live Bombs - 329**
 - **Inert Bombs - 2678**
 - **Live Projos/Mortars - 3683**
 - **Inert Projos/Mortars - 2126**
 - **Live Rockets - 249**
 - **Inert Rockets - 26**
 - **Flares-Pyrotechnics – 209**
 - **Live ICMs - 618**

- ❖ **Information as of 26 October, 2007**

TCRA Metal scrap removal and processing update



- **Material Removed from the LIA**
 - 6.23 million pounds (3115 Tons) of metal debris has been removed from the LIA and transported to the CPC
 - 3.514 million pounds (1757 Tons) has been processed at the CPC and shipped to off island recyclers



Summary

- **Approximately 60 percent of the TCRA within the LIA is complete**
- **There have been no serious injuries to date**
- **More than 5500 items that could have caused serious injury or death have been destroyed**
- **More than 6 million pounds of unsightly metal debris has been removed and will be eventually recycled**

Beautiful Boats in a Beautiful but Dangerous Place



Labor Day Weekend



On Land Even More Dangerous



Trespassing

- **Trespassing continues to be a major problem**
- **Most are unauthorized recreational activities by persons not from Vieques**
- **Obvious concern for the safety of the trespassers**
- **Work can be affected if trespassers are in an EZ. This will have a major impact during the sub-surface removal of the beaches**
- **Trespassing is illegal**

Security Efforts to Prevent Trespassing

- **Installation of barricades and gates**
- **Installation of warning signs by restricted roads and beaches**
- **EQB provided orientation to students and teachers about munitions dangers**
- **EQB Monthly Information Bulletin**
- **EPA established a permanent office in Vieques**
- **Monthly Flyers with warning notices**
- **Fact Sheets / Newsletters**
- **UXO educational video**
- **Meetings with DNER, Coast Guard, PR Police, Federal District Attorney, EPA, EQB, FWS**

Security Efforts to Prevent Trespassing

- **FWS Outreach Program**
- **Publication of Safety Notice in Vieques Event**
- **RAB meetings**
- **Distribution of Warning Flyers by Coast Guard Auxiliary Units**
- **Vieques Informa Radio Talk**
- **UXO Awareness Event**
- **Advice to trespassers by Navy, contractors, and law enforcement personnel**
- **Emailed Safety Notice to La Regata Newspaper**
- **Notice to Airmen and Mariners (NOTAMs)**

RAB Members View BIPs



RAB Members View BIPs



RAB Site Visit 18 October, 2007

- ❖ **Six RAB Members visited on 18 October**
- ❖ **Safety briefs and video at Camp Garcia**
- ❖ **A total of six detonations were observed from OP-1**
- ❖ **Net Explosive Weight (NEW) ranged from 233lbs to 773lbs**

Air Sample Analysis Timeline

- ❖ Samples are collected and delivered to the laboratory within 4 days following BIP actions.
- ❖ Sample preparation and documentation by the laboratory takes 4 to 6 days.
- ❖ Sample analysis for metals is conducted by the “first” lab who contractually has 3 weeks to conduct analysis.
- ❖ Samples are shipped to the second lab for explosives analysis.
- ❖ Explosives analysis by the “second” lab is conducted within 3 weeks (contractual).
- ❖ Data review and entering to the database is then conducted in 2 to 4 days.



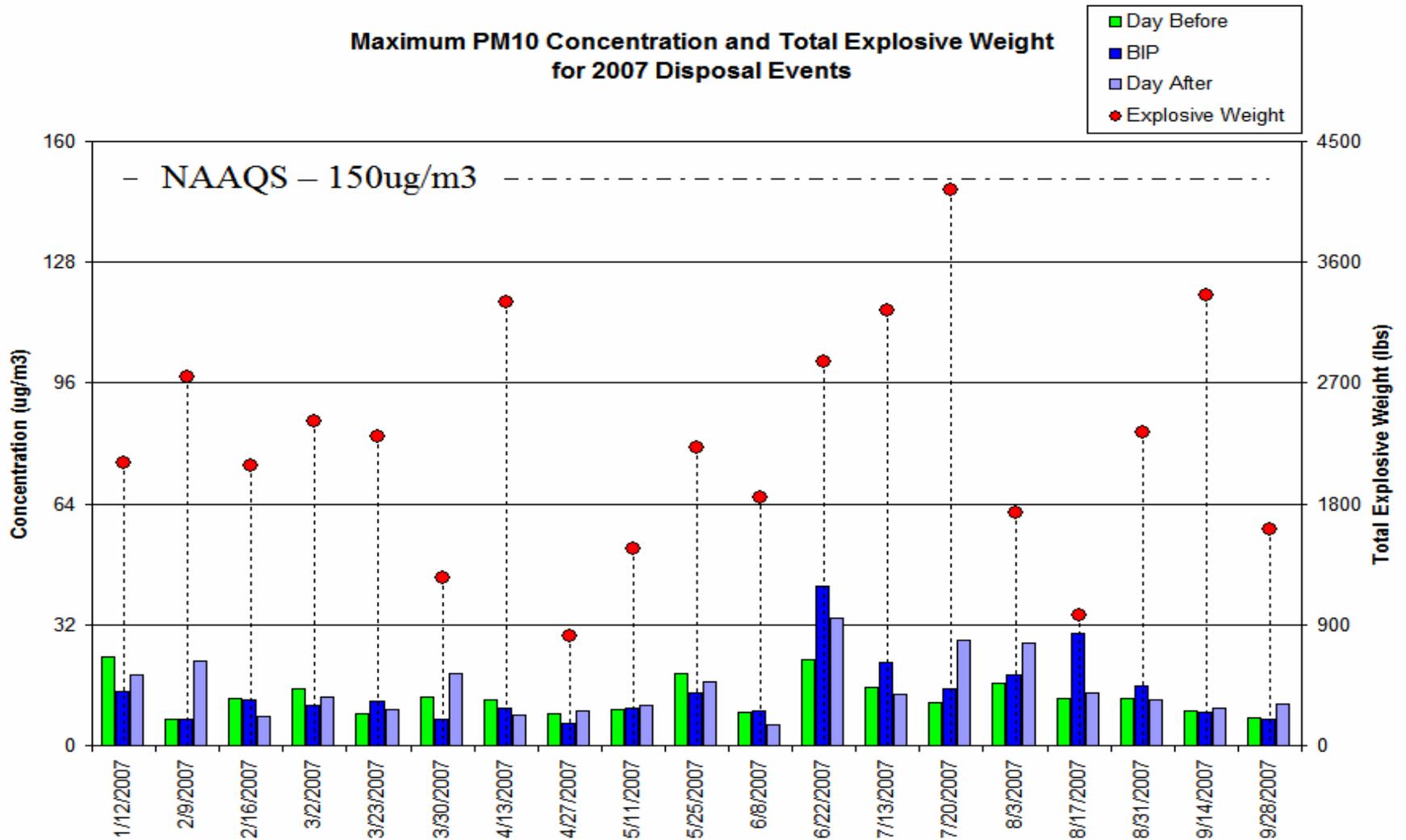
2007 BIP Air Monitoring Summary



- **Air monitoring since August 2005**
- **Data presented is from 2007**
- **No explosives have been detected in air**
- **Some metal concentrations (iron, copper, nickel, chrome) were detected; <1% of action levels.**
- **No correlation between PM10 or metals concentrations and Net Explosive Weight**
- **Based on the results of air monitoring, air emissions from BIP detonations do not have a negative impact on the ambient air quality in or around the populated areas of Vieques.**
 - **Here are the data:**

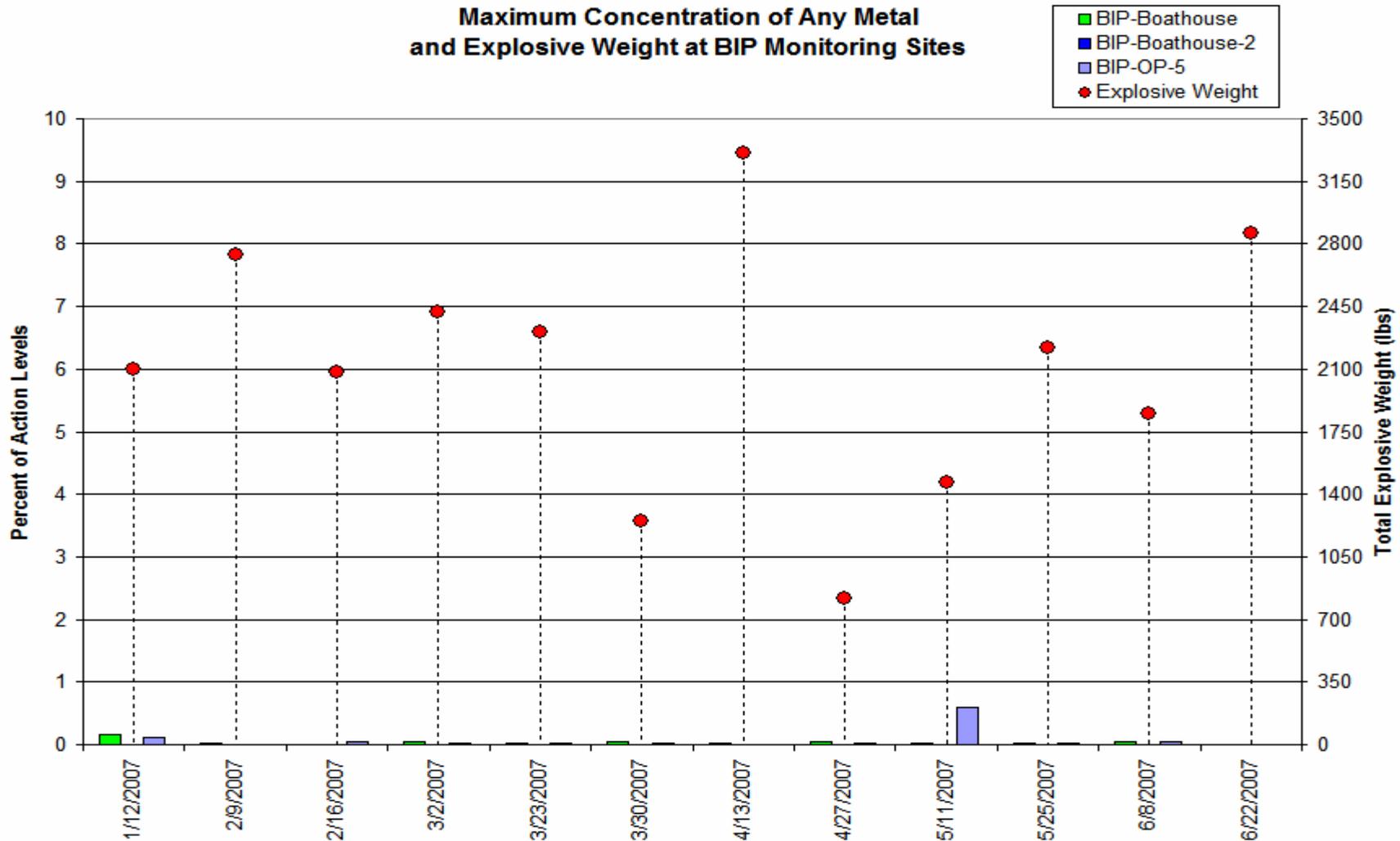
BIP Air Monitoring Results – Particulates

Maximum PM10 Concentration and Total Explosive Weight
for 2007 Disposal Events



BIP Air Monitoring Results – Metals

Maximum Concentration of Any Metal
and Explosive Weight at BIP Monitoring Sites



BIP Monitoring - Conclusions

- **Air Monitoring has shown that the particulates from the BIPs do not exceed regulatory standards**
- **Air Monitoring has shown that the Metal concentrations from the BIPs do not exceed action levels**
- **Air Monitoring has shown that there are no detectible levels of explosives in the air**
- **Air Monitoring data shows no correlation between maximum (above background) particulate concentration and Net Explosive Weight**
- **Air Monitoring data shows no correlation between metal concentrations and Net Explosive Weight**

PR-1 Air Sample Results Summary

- ❖ Summary of perimeter monitoring station results – April through June 2007
- ❖ Particulate Matter (PM10)
 - ❖ High and Low both detected the days following a BIP
- ❖ Metals
 - ❖ No apparent pattern for detections relative to BIP events
- ❖ Explosives
 - ❖ No explosives were detected during this period.

Parameter	Micrograms per cubic meter			
	Screening Criteria	Average	High	Low
PM10	150	9.14	13.28	5.06
Iron	140	0.031	0.096	0.005
Nickel	70	0.013	0.02	0.007
Copper	70	0.006	0.008	0.004
Arsenic*	0.7	0.004	0.004	0.004

*only one detection

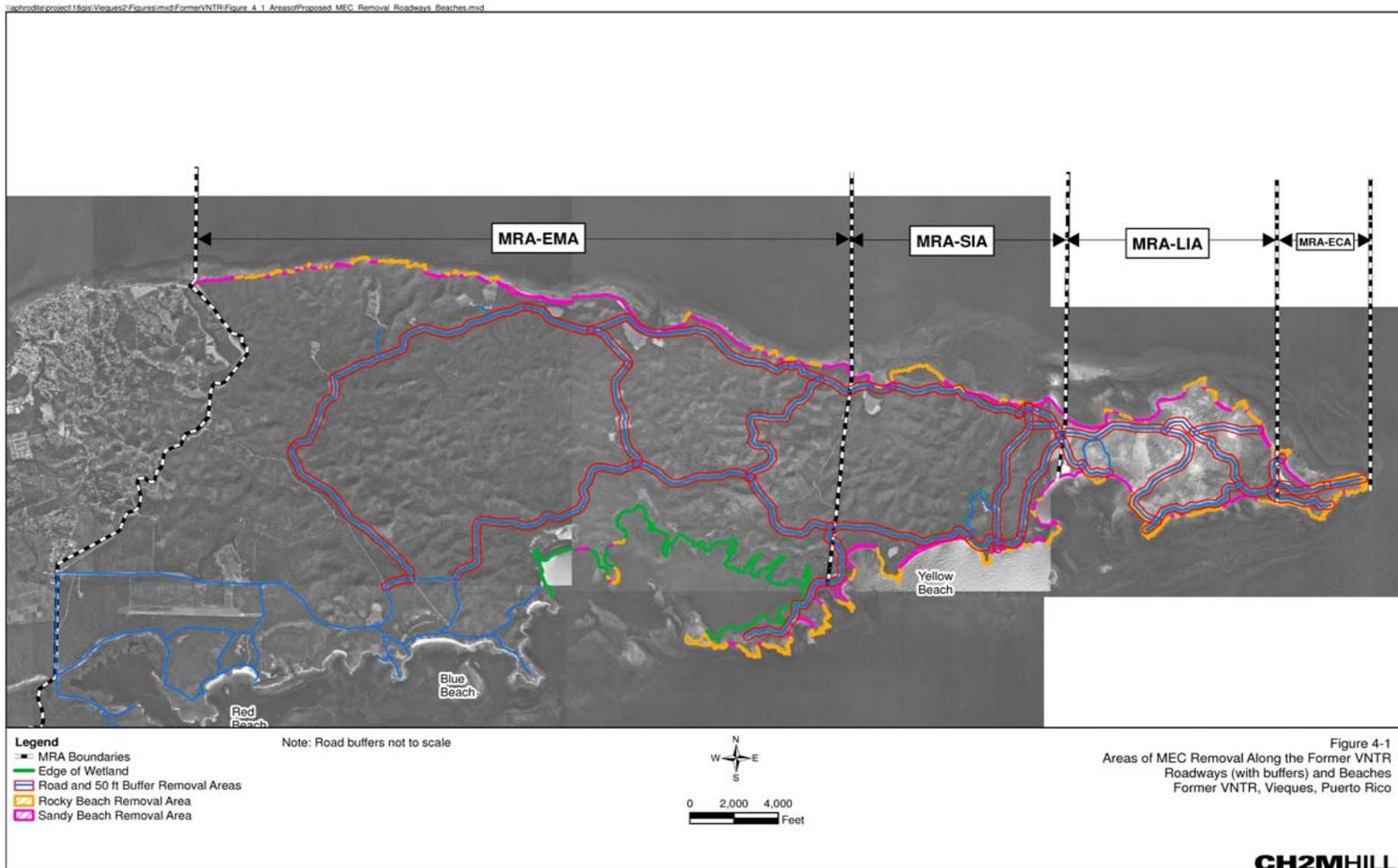
Engineering Evaluation and Cost Analysis (EE/CA)

- **The purpose of this EE/CA is to:**
 - Provide CERCLA documentation to support a NTCRA (sub-surface removal) for selected roads and beaches within the former VNTR and portions of West Vieques (SWMU 4)
 - Three removal alternatives are presented in the EE/CA
 - The selected alternative will minimize the potential hazards associated with Munitions and explosives of Concern (MEC)
 - This is an interim action. The final remedy will be determined as part of the CERCLA process
 - Public comment period October 3rd through November 5th

Non-Time Critical Removal Action

- **80 acres of beaches geophysically surveyed**
- **24 acres of roads geophysically surveyed**
- **DGM operations suspended 12 October**
- **DGM will resume when the sub-surface removal begins**
- **Eventually approximately 300 acres will be geophysically surveyed and will undergo a sub-surface removal action**

East Vieques Roads and Beaches



SWMU 4 Roads and Beaches

