RAB Meeting

Munitions Response Program Update

Former VNTR

Vieques, Puerto Rico
March 2007

Time Critical Removal Action (TCRA) Update

- **The purpose of the Time Critical Removal Action is to remove the munitions from the land surface as quickly as possible in order to reduce the explosive safety risk to the public**

- **Reduce the explosives risk, as appropriate, to meet the U.S. Fish and Wildlife land use plan**

  - Air monitoring results indicate there is no increased risk to the public.

TCRA Summary

- 326 acres surface cleared in the Live Impact Area
- Items located requiring detonation or explosive venting
  - Live Bombs - 148
  - Inert Bombs - 1043
  - Live Projos/Mortars - 2286
  - Inert Projos/Mortars -1887
  - Live Rockets - 110
  - Inert Rockets - 16
  - Flares-Pyrotechnics - 65
  - Live ICMs - 39
- Information as of 16 March, 2007

TCRA Metal scrap processing

- **On-site munitions debris and range related debris processing facility to insure scrap metal shipped off site is free of explosives**
  - Process includes cutting materials into manageable size and heating to insure no explosive residues remain

TCRA Scrap Re-cycling

- Scrap is certified as safe
  - 100% visual inspection
  - thermal processing
- Material that has been certified as safe is loaded into trailers

TCRA Scrap Re-cycling

- The first shipment left Vieques 3/20/07
- 72.42 tons of certified material was shipped from Vieques to a recycling center
- Proceeds from re-cycling will be re-invested in the munitions cleanup

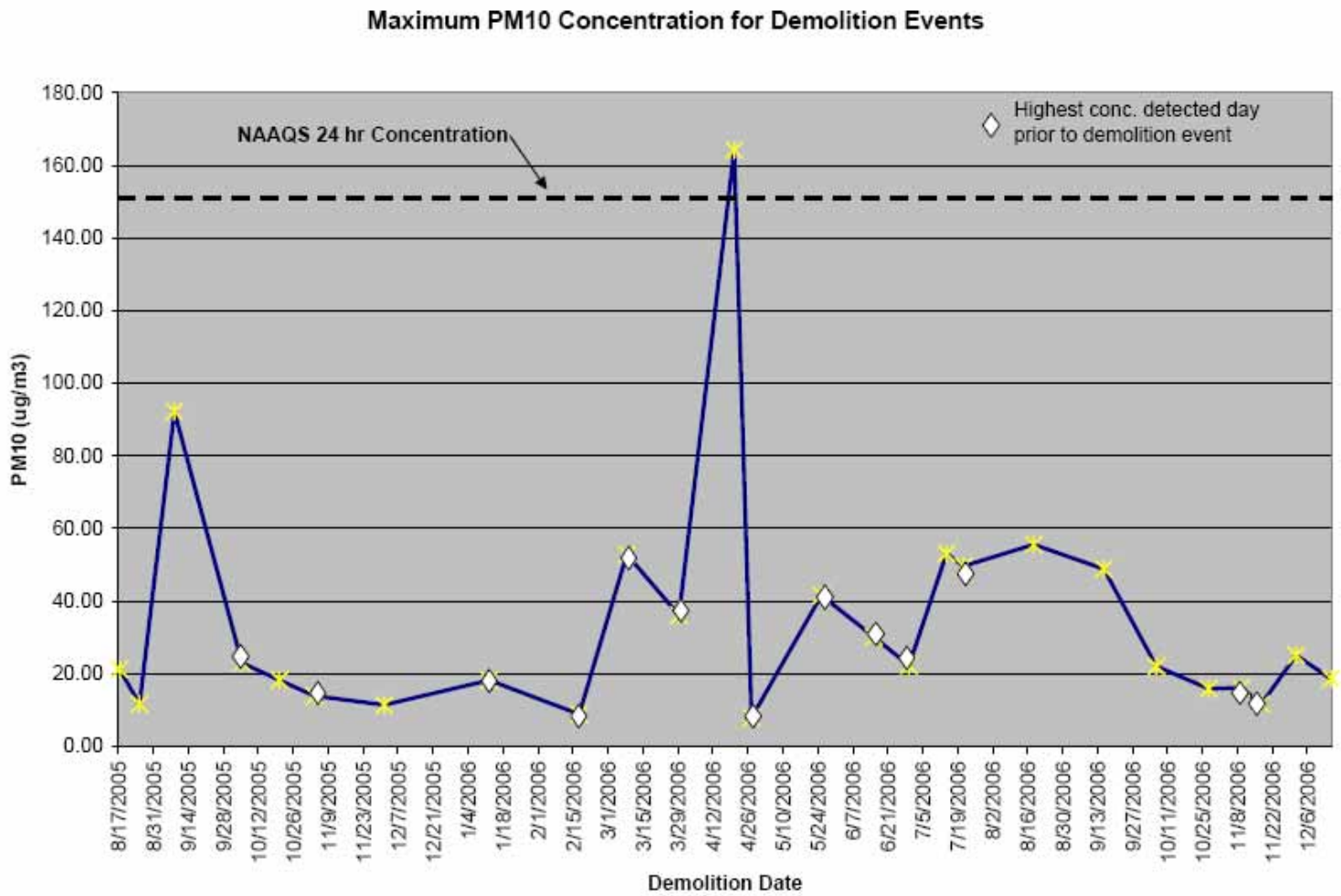
Geophysical Surveys

- Digital Geophysical Mapping of beaches and roads commenced in February.
- Approximately 300 acres of beaches and roads will be mapped to identify anomalies that may be MEC.
- The investigation of selected anomalies will begin when the Navy and Regulators develop the most appropriate approach.

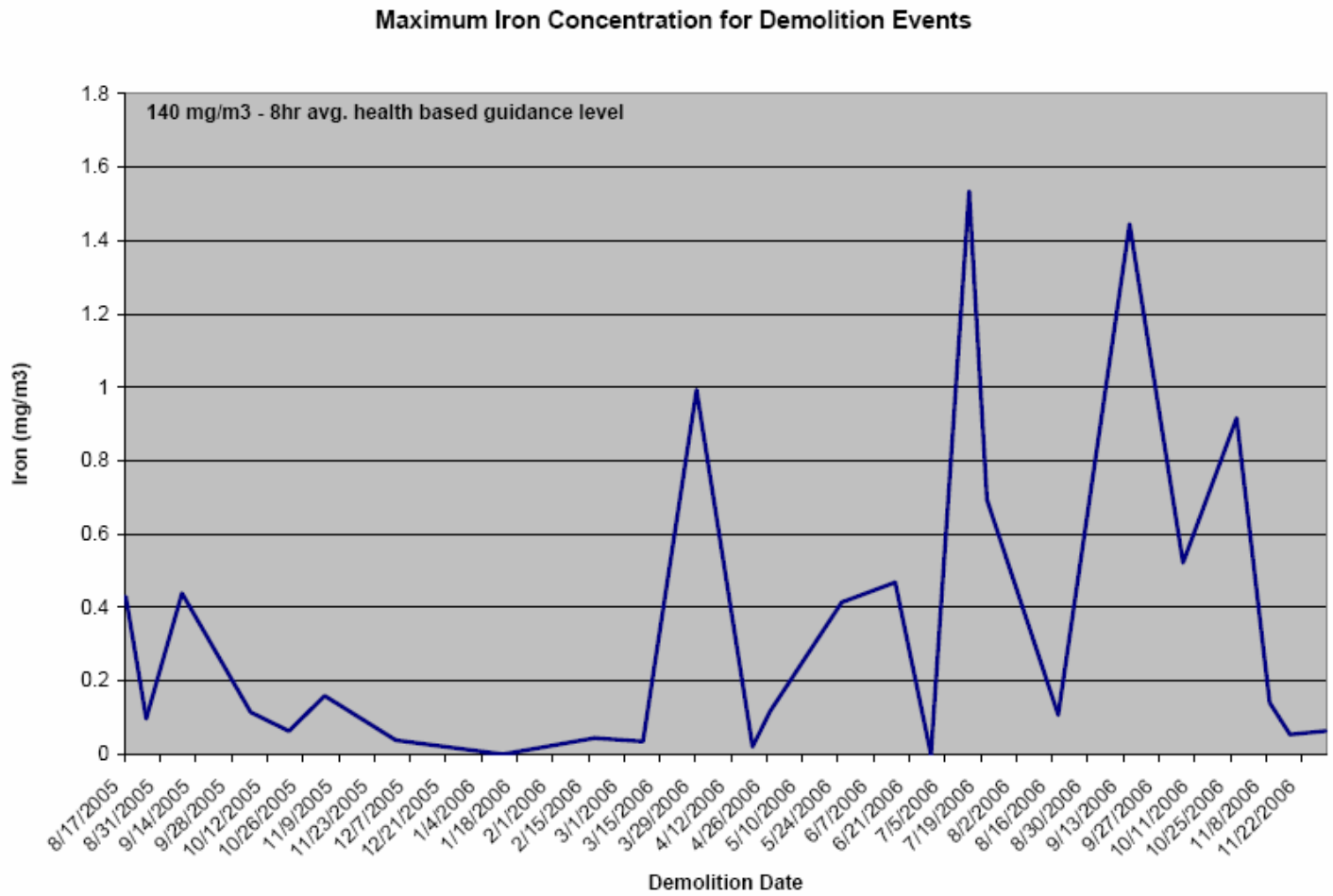
Air Monitoring /Air Modeling Summary

- **Air monitoring data available since August 2005 (26 BIP events)**
- **No explosives have been found at measurable levels**
- **Some metals concentrations were detected within acceptable risk-based criteria.**
- **On one occasion, particulate levels slightly exceeded regulatory criteria**
  - Associated with brush fire following detonations
  - Not likely to impact the populated areas
- **BIP modeling completed**
  - Shows that the highest air emission concentrations would occur in close proximity to the BIPs
  - Demonstrates that particulate or dust (PM10) levels detected on the LIA would decrease to well below NAAQS before reaching the populated areas .
- **Based on the results of air monitoring and air modeling air emissions from BIP detonations do not have a negative impact on the ambient air quality in or around the populated areas of Vieques.**

PM 10 Air Monitoring Results



Air Monitoring Results - Iron



BIP Modeling Results; PM_{10}

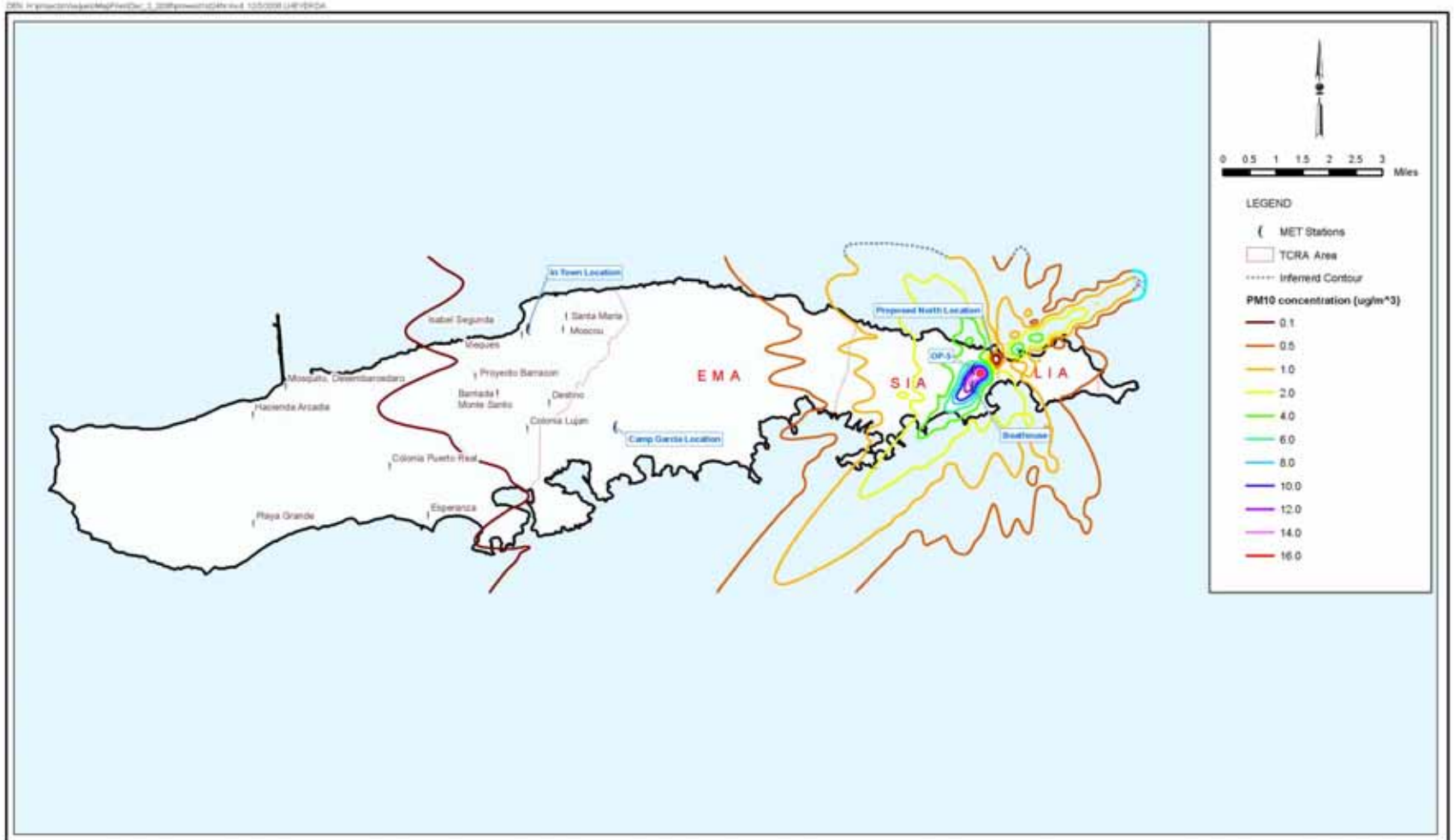


FIGURE 6
BLOW-IN-PLACE OF 2 1000LB BOMBS AT THE WESTERN BORDER OF THE LIA
HIGHEST PM10 TIME-AVERAGE (24-HR) CONCENTRATION (MICROGRAMS/CUBIC METER)
VIEQUES, PUERTO RICO

Air Monitoring Timeline

- 06/06 - the solar power system of the existing monitoring system was upgraded to increase operational time
- 11/06 - The Navy, EQB and EPA reach a consensus on an air modeling plan.
- 12/06 - Several thousand air model runs were completed to assess possible impacts.
- 12/06 – Draft Prescribed Burn Plan was prepared.
- 01/07 - Air monitoring station delivered to mainland Puerto Rico.
- 02/07 - Air monitoring plan, the air modeling report and the controlled burn plan submitted to EPA and EQB.
- 03/07 – The Navy, EQB and EPA agree on relocating air monitoring station close to the public areas
- Following addressing regulatory comments, air monitoring plan will be available for public review

Air Monitoring Location

Figure 1

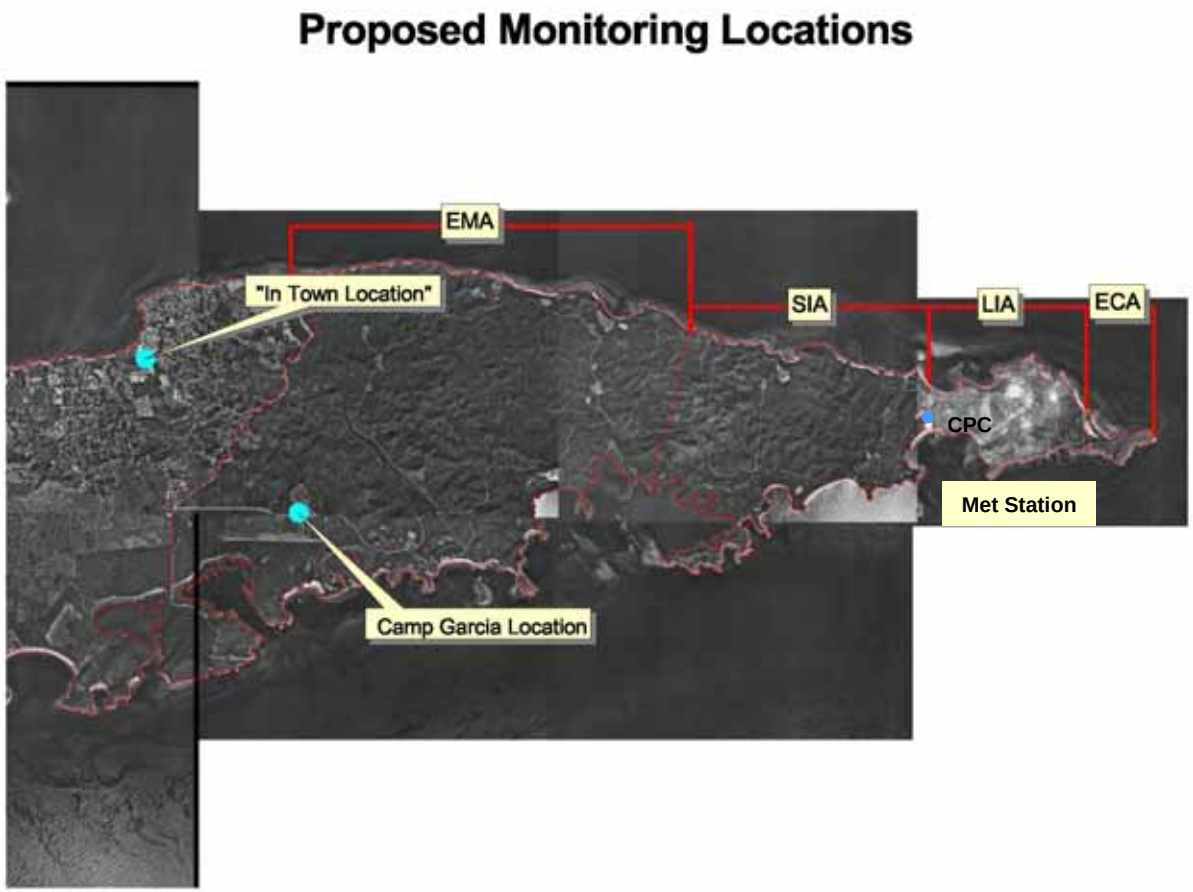
East Vieques Biological Assessment

- **Final biological assessment (BA) for the former Live Impact Area completed May 2006.**
- **Survey approach to support expanded BA developed January 2007.**
- **Additional surveys to supplement the biological assessment being conducted to support future removal action and investigation activities**
  - U.S. FWS, PR DNER, and U.S. Navy joint site visit to assess turtle nesting areas outside of LIA was conducted October 2006.
  - Vegetation surveys to identify threatened and endangered (T&E) plant species within the Eastern Conservation Area (ECA) was completed February 2007.
  - No T&E species were identified during the surveys of the ECA.

Vieques Archaeological Assessment

- **Archaeological assessment approach for East and West Vieques developed between PR State Historical Preservation Organization, U.S. FWS, and U.S. Navy during October 2006.**
- **Surveys will be conducted to support future removal action and investigation activities.**
- **Archaeological assessment of SWMU 4 work areas and Yellow Beach conducted November 2006.**
- **Surveys of beaches within the Eastern Maneuver Area, Surface Impact Area, and ECA initiated the end of February 2007 and will be complete by the end of March 2007.**
  - Potential archaeological sites have been identified.
  - Further analysis of the findings will be conducted to confirm the sites and determine the appropriate mitigation measures.

Site locations



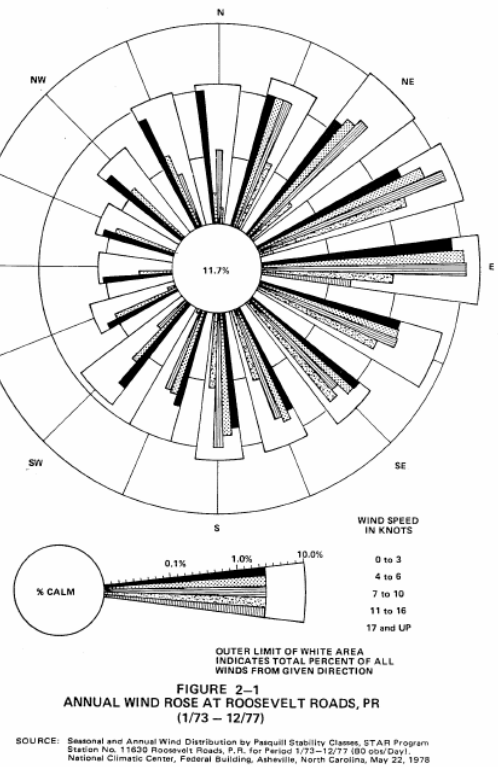


FIGURE 2–1
ANNUAL WIND ROSE AT ROOSEVELT ROADS, PR
(1/73 – 12/77)

SOURCE: Seasonal and Annual Wind Distribution by Pasquill Stability Classes, STAR Program Station No. 11630 Roosevelt Roads, P.R. for Period 1/73–12/77 (80 obs/Day). National Climatic Center, Federal Building, Asheville, North Carolina, May 22, 1978

Future Actions

- **Continue time critical removal action for remainder of LIA and ECA (850 acres)**
- **Submit Controlled Burn Variance Application**
- **Conduct Phase II Site Inspection**
  - Investigate 35 identified munitions response sites
  - Perform digital geophysical mapping of roads and beaches identified in the U.S. Fish and Wildlife Service land use plan
- **Conduct removal action for subsurface MEC at roads and beaches**
- **Train 24 additional sweep personnel**
- **Train 25 additional UXO Technician I**