

STATEMENT OF RESPONSE TO MUNITIONS AND EXPLOSIVES OF CONCERN

Surf City and Ship Bottom Public Beaches

17 May 2007

This statement documents the Time Critical Removal Action (Phase I) completed in response to munitions and explosives of concern (MEC) found on public beaches in Surf City and Ship Bottom, New Jersey. The military munitions found were inadvertently placed on the beach areas during a recent coastal storm damage reduction project. The affected beach areas have been carefully investigated, and all detectable MEC has been removed.

The coastal storm damage reduction project (approximately 71-acre site) included placement of about 800,000 cubic yards of sand over 8,100 linear feet of berm (flat beach) to approximate depths of eight feet from North 25th Street in Surf City, New Jersey, to South 5th Street in Ship Bottom, New Jersey. A pre-existing dune was supplemented to create a project dune of 6,600 linear feet with a crest elevation of + 22 feet NAVD, a 30-foot wide flat top, sloping down seaward 70 feet to the flat beach. The coastal storm damage reduction project also included the surf zone, or the underwater area adjacent to the beach, from North 25th Street in Surf City to South 11th Street in Ship Bottom.

Prior to conducting the Time Critical Removal Action (Phase I), a Geophysical Prove-Out (GPO) study was performed in a test plot on the Surf City beach. A variety of geophysical instrumentation was used to determine the maximum detection depth for the type and size of munitions expected to be encountered. The study concluded that Digital Geophysical Mapping (DGM) using an EM-61 towed array was capable of consistently detecting 34 of 36 GPO seed items buried at depths from 0 to 36 inches below the ground surface for a 94.4% detection rate. The handheld Schonstedt Magnetometer detected 20 of 30 GPO seed items to depths of 18 inches below the ground surface. The Forester Mk 26 Magnetometer detected all GPO seed items buried at 36 inches below the ground surface.

The Time Critical Removal Action (Phase I) investigated the following five beach areas for MEC:

1. The 6,600 linear feet of Dune Top was investigated by Digital Geophysical Mapping (DGM) using an EM-61 towed array of four coils. All anomalies were analyzed and those that provided a signature indicative of MEC were intrusively investigated and resolved to the detection depth.

