



# USAF Utah Test and Training Range (UTTR) Hard-Case Bomb and Bomb Dummy Unit Recycling Project 2006

Performed by:

**CH2M HILL Inc.**

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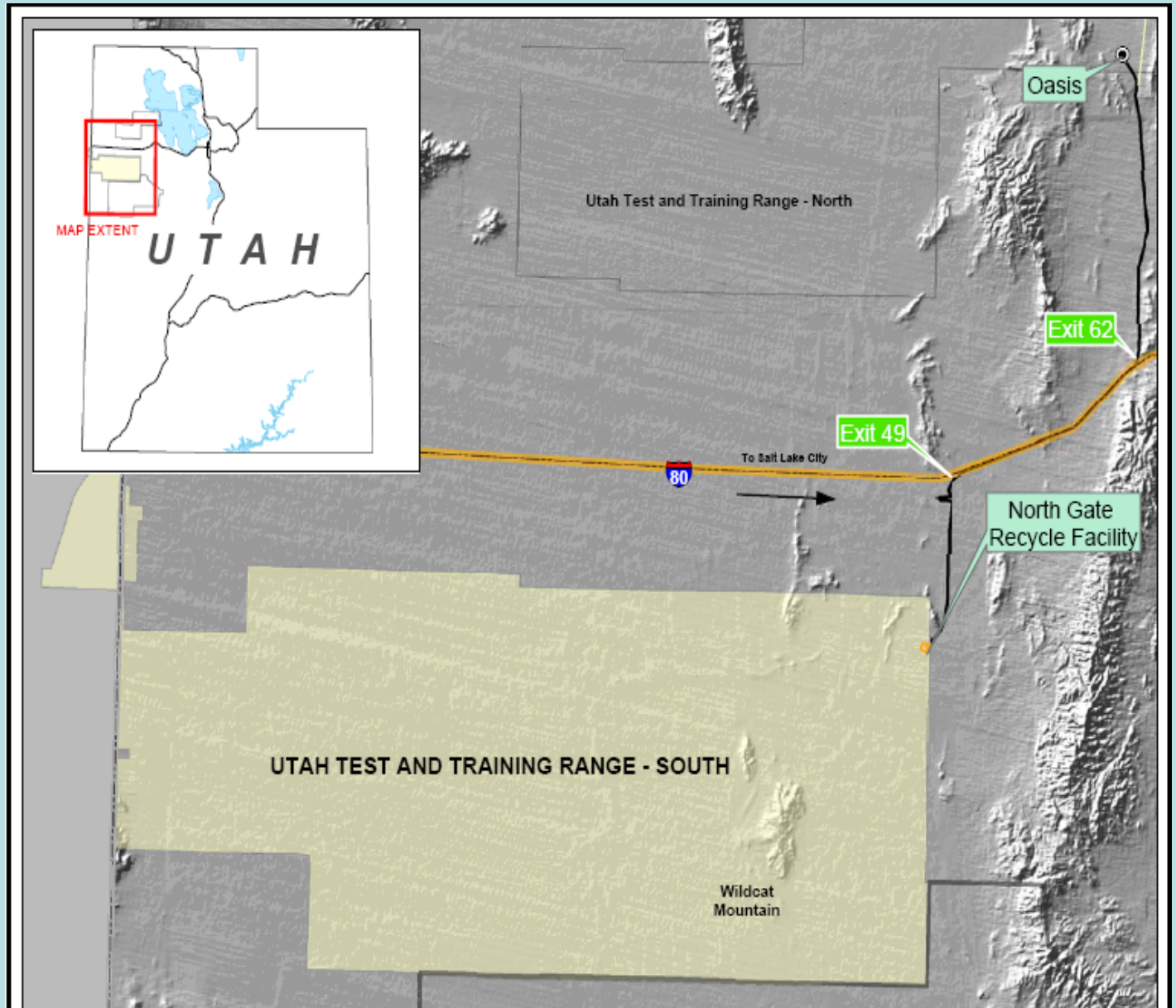
**Bering Sea Eccotech, Inc.**

# North Gate Recycle Facility, Utah Test & Training Range -South Hill Air Force Base, Utah



75 CEG/CEVR  
Environmental Management Division  
Civil Engineer Group

*Contract No: F42650-03-D-0002*  
*Delivery Order 0013*



# Project Objectives

- Demilitarization of 2,545 hard case MK-80 series Bombs to allow metal to be recycled
- Demilitarization of approximately 300 tons of Bomb Dummy Units (BDU) – 33's
- Inspection, certification and verification of demilitarized metals for recycling
- Classification and Segregation of other Munitions and Munitions Related Items for disposition by USAF



MAY 3 2006



# MK 80 Series Hard Case Bomb Operational Processes

1. Confirm explosive counter charge to tail and thermal cut to nose
2. Sheer Hard Case MK 80 series bombs
3. Separate internal fill and plumbing from casings
4. Perform 100% visual inspection of casing
5. Segregate and Secure Casings for Smelting















# Mk 80 Series Total Salvable Metal

- 2,545 MK 80 Series Hard Case Bomb metals = 515.81 tons in salvage weight
- 20 yard roll-offs averaged 16 tons per load
- 33 transportation loads

# Bomb Dummy Unit (BDU) 33's Preparation for Recycling

1. Segregate BDU 33's from other Munitions and Munitions' related items and target debris
2. Process BDU 33's cast iron bodies to 4-inch minus
3. Separate pot metals (tails) lugs, cartridge cases, and plungers from cast iron
4. Process separately MK106 and other Munitions and Munitions related debris for crushing/shredding for recycling
5. Stage cast iron for reuse by USAF





























# BDU 33's Demilitarized Weights

BDU-piles and Containers **372.19 Tons**

- 323.75 tons cast-iron
  - 1.13 tons aluminum parts (carts)
  - 38.30 tons tail fins (pot metal)
- 363.18 tons

Other pile munitions & munitions related Items

9.01 tons

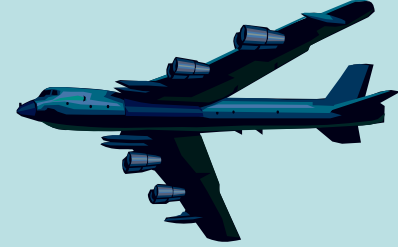
– **372.19 Tons**

# Qualified Scrap Recycler





# Summary



- Demilitarization efforts = 1, 775,620 lbs of metals

Demilitarize 2,545, Mk 80 series bombs

- 515.81 tons of recyclable steel

Demilitarize 300 tons of BDU 33's

- 363 tons (actual)
- 9 tons of other munitions/related items
- 372 tons total





# QUESTIONS

Kevin Lombardo      ([kevin.lombardo@ch2m.com](mailto:kevin.lombardo@ch2m.com))

Munitions Operations Manager  
CH2M Hill Inc., WDC Office  
15010 Conference Center Drive  
Suite 200  
Chantilly VA 20151

Tel:                    (703) 376 - 5175

Fax:                    (703) 376 - 5010

