DISCLAIMER: Although the subject matter of the following presentation deals with an ongoing or announced program by the Department of Defense, the views presented here are those of the speaker and DO NOT necessarily represent the views of the Department of the Navy, DoD or its components.

Reference: 5 CFR 3601.108
Why MEC Is Important

Guam is a WWII Battlefield; DoD-funded projects require DoD Explosive Safety (ES) requirements on and off DoD real estate

- Every DoD-funded intrusive action (shovel in the ground) must follow ES requirements
- Common construction practice (ES compliant): Scan for anomalies; Process anomalies; EOD response if needed, Remove soil in 6” lifts, REPEAT… to construction depth
- Significant cost/schedule risks to Major Construction Programs (DPRI, APSI, Housing Recap)
- Explosive Safety Submission (ESS) Amendment 7 pending resolution of NOSSA comments
  - More clearly defined policy/requirements
  - Some relief for previously disturbed areas
  - Enables new technologies and contractor innovation

Guam-Specific Deviations

- E1-16B: Conditionally allows digging 36” below surface using 60mm precautions; creates soil mgnt concern
- Letter of Clarification: Not required to enforce safety buffers off DoD property, but requires data collection/planning
- Potential reduced probability for Previously Disturbed Soils

Way Ahead

- After Action Reports are CRITICAL!
- Continue historical record development
- Encourage innovative technical approaches to MEC clearance
MEX Recovery/Likelihood Maps

NOTE:
Only (2) Green Areas

Found Munition Items
- ≤ 75mm Projectile
- 76-105mm Projectile
- ≥ 155mm Projectile
- 3 inch Projectile
- 5-6 inch Projectile
- Flares & Markers
- Incendiary Bomb
- Mortars (All Sizes)
- Rockets or Rocket Warheads
- Grenade
- Misc.
- Military Installations

Map Date: Aug 2015
Data Sources: EEO Incident Reports
DOD Military Installations, Ranges, and Training Areas

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Explosive Safety Submission (ESS)

- ESS details how explosives safety criteria are applied to munitions response actions
- Required before conducting of ground-disturbing or other intrusive activities, including dredging
- Areas assigned “Low” likelihood to encounter MEC occur when supported by historical records and/or on-site investigation data
- Areas with a “Moderate” to “High” likelihood to encounter MEC require on-site construction support by EOD or UXO-qualified personnel
• Programmatic vice Site Specific
  – Covers entire island
• Entire OOB for both US and Japanese
• Reseeding via past construction practices creates a complicated Conceptual Site Model
• Full/Limited Clearance ahead of Construction
• Resource Conservation and Recovery Act (RCRA) Considerations
After Action Reports (AAR)

- Required by NOSSA; confirms actions carried out per ESS
- Completed after site MEC Removal within 6 months
- Same routing as the ESS; through NOSSA to DDESB

AARs must include
- All MEC-related actions taken to date
- Results of any sampling, clearance and other remediation
- Explanation of deviations from approved ESS

End Results
- Allows formation of a Conceptual Site Model (MEC Type, Location X/Y/Z)
- Aids in better decision-making for future MEC removal requirements
Explosive Safety Deviations

• SECNAV has delegated authority to CNO to issue waivers, exemptions, and event waivers when strategic or other compelling reasons dictate

• Event Waivers
  – Issued on a case by case basis
  – For a limited period of time
  – Non-recurring operational requirement

• Waivers
  – Temporary deviation pending corrective actions
  – Two-year maximum
  – Satisfy recurring readiness or operational requirement

• Exemption
  – Long-term deviation; 5-year maximum
  – Satisfy recurring readiness or operational requirement
  – Issued in the best interest of the Government
Contractor Considerations

• **Current Practice**
  – Contractors relying primarily on 6” lifts; proves to be extremely inefficient

• **Recommendations**
  – Continue to advance investments in GIS to inform more area-specific CSM development
    • Consider new area study to incorporate available CSM data (e.g. historical, aerial, geology, lithology, etc.)
  – Implement Advance Classification where appropriate
  – Consider centralized soil screening plants and soil management areas
  – Consider other screening options, including various excavator bucket screens to maximize efficiency in material handling
Questions?
Minimum UXO Personnel Qualifications

- Minimum Unexploded Ordinance (UXO) personnel training and experience requirements identified in DDESB Technical Paper No. 18
- Project specification and applicable ESS may be more stringent

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<th>Title</th>
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Guam-Specific Deviations

• CNO Exemption E1-16A (approved Mar 2016)
  – Permits excavation in areas known or suspected to contain MEC in construction footprint without removing soil in layers, when depth of intrusive activities exceeds the detection limits of the geophysical instruments used
  – After the first 36” have been cleared; 60mm exclusion zone must be maintained
  – Modified for clarification due to numerous questions from Gov’t and Contractor personnel

• CNO Exemption E1-16B (approved Jan 2017)
  – Adjusted Target of Interest (TOI) from 20mm to 60mm
  – Allows re-use of excavated soil based on usage
  – Requires a Soil Management Plan

• ASN Secretarial Acceptance of Risk Memo (issued 24 Jan 2019)
  – Delegated Risk Acceptance Authority to JRM Commander
  – Applicability: Reasonable knowledge of previous disturbance & no MEC found