

Welcome to...

Implementation of Advanced Geophysical Classification. Lesson Sharing for Technology Application

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Advanced Geophysical Classification (AGC)

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- Traditional geophysics-based projects can be inefficient, costs are dominated by handling non-hazardous material
- AGC was developed by DoD and their partners to improve the quality and efficiency of military munitions remediation
- Advanced electromagnetic induction sensor data can be used to estimate the depth and the intrinsic properties related to the size, material composition, wall thickness, and shape of each buried item
- These properties allow geophysicists to make decisions about whether buried metal objects are potentially hazardous munitions that should be excavated or non-hazardous items that can be left in the ground



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Why AGC?

- Significant cost savings can be realized if successful classification and differentiation between munitions and non-hazardous objects could be applied as part of the remedial response process
- Data collected by DoD over the past several years suggests that project costs have decreased by 30-40% when adopting the use of AGC versus previous remediation practices
- To ensure data quality, the DoD AGC Accreditation Program (DAGCAP) was established, requiring commercial organizations who wish to perform AGC work at MMRP sites be accredited by a third party accreditation body

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DoD AGC Accreditation Program (DAGCAP)

- Provides a means to identify and select testing organizations that meet minimum program requirements
- Provides formal recognition to competent testing organizations
- Provides for ongoing demonstrations of capability and periodic re-evaluation for continued compliance
- Modeled after DoD Environmental Laboratory Accreditation Program (ELAP)
- Third-party Accreditation Bodies (ABs) conduct assessments to Quality Systems Requirements (QSR)
- Two ABs selected/recognized (detailed info on DENIX)

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DAGCAP

- Two step process
 - Assessment of Geophysical Classification Organization (GCO) Quality System documentation
 - APG demo per DAGCAP APG SOP (available DENIX)
- Certificate of accreditation issued by AB and listed on DENIX
- Renewal every two years
- Currently 12 accredited GCOs
 - Includes five small businesses



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https://www.denix.osd.mil/mmrp/advanced-geophysical-classification-accreditation-and-other-tools/

AGC Implementation

- ✓ 2007 Environmental Security Technology Certification Program (ESTCP) initiated the Classification Pilot Program
- August 2015 Interstate Technology and Regulatory Council (ITRC) publishes "Geophysical Classification for Munitions Response"
- ✓ March 2016 Intergovernmental Data Quality Task Force (IDQTF) Publishes the AGC-QAPP
- ✓ April 2016 Office of the Secretary of Defense (OSD) issues DAGCAP policy memo
- ✓ January 2017 DAGCAP becomes a requirement
- ✓ January 2017 Association of State and Territorial Solid Waste Management Officials (ASTSWMO) position paper on AGC

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✓ April 2017 – Formerly Used Defense Sites (FUDS) publishes AGC policy memo, standardizes Performance Work Statement (PWS) language

Industry Perspective of AGC

- All things being equal, AGC technologies are superior over traditional methods
- Live site demonstration and past/ongoing projects prove potential value of AGC
 - Overall Cost Savings
 - Higher Quality Data
- Important to realize AGC is a tool in the contractor tool box

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- Every technology has its limitations
- Not one size fits all



Industry Perspective of AGC

- Challenges posed with transition to new technologies
 - New DAGCAP Accreditation, ISO 17025, QSR Requirements
 - Building labor pool of experienced AGC Geophysicists and Project Teams
 - With any transition, time and lessons learned are important factors

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- Mindful of Maturity and Availability of Commercial Sensor Technology
- Competitive marketplace and Firm Fixed Price Contracting/ Procurement



Future of AGC

- Experience with DAGCAP, ISO 17025, and AGC should reduce risks and challenges
- Third Party QA contracts supporting DAGCAP government oversight
- Commercial AGC sensors are absolutely needed continual improvement
- New sensor types arrays
- Development and sharing of lessons learned
- Industry and government need to continue to communicate and improve partnering/communication where possible

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Q&A AND FEEDBACK

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