Explosives Safety Siting (ESS) Software

Overview and Army Deployment

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<td>See also ADM002313. Department of Defense Explosives Safety Board Seminar (34th) held in Portland, Oregon on 13-15 July 2010, The original document contains color images.</td>
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Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
Explosives Safety Siting (ESS)

• Agenda
  – Partnerships
  – Purpose
  – Benefits
  – ESS Toolkit
  – ESS Planner
  – Army Direction
  – Return on Investment
• **Partnerships**
  
  – Department of Defense Explosives Safety Board (DDESB)
    • Software development
  
  – Naval Facilities Engineering Support Center (NAVFAC ESC)
    • Collect data, create installation database, provide training, ESS help desk
  
  – Commands
    • Provide data and maintain data
    • Submit site plans
  
  – Army Mapper
    • Army ESS Repository
• **ESS Software Purpose**
  
  – Automate site plan process
  – Calculate and display Explosives Safety Quantity Distance (ESQD) arcs
• **ESS Benefits**
  
  – Analyze one or several Potential Explosion Sites (PES) within minutes
  
  – Elimination of “math” errors in measurements and calculations
  
  – More accurate/complete submittal packages
  
  – Reduce time to create submittal packages
• **ESS Software**
  – Toolkit
    • Data Requirements
  – ESS Planner
    • Analysis Tools
• ESS Tool Kit
  – Used to import and configure data
  – Links three existing datasets from an installation
    1. Geospatial Information System (GIS)
    2. Real Property Inventory (RPI)
    3. Potential Explosion Site (PES)
• ESS Site Planner
  – QD Analysis
  – Site Plan Submittal Package
  – Master Plan Constraints (ESQD Arcs)
  – Mitigation – dealing with violations
  – Consequences – What happens if an explosion occurs?


- **Site Plan Submittal Packages**
  - Cover letter
  - Enclosures
    - QD worksheet (PES/ES info)
    - QD maps
  - Electronic submittal and review
• **Army Deployment**
  
  – Phase I: deployed to 17 installations. Completed Apr 10
  – Phase II: deploying to 50 sites. Due to be completed Sep 11
• Army Deployment Process
  – Identify and prioritize installations
  – Provide web-cast overview to POCs
  – Collect data sets (PES/RPI/GIS)
  – Create database
  – Cleanse data
  – Run software
  – Eliminate violations
  – Train users
• **ESS Return on Investment**
  – DOD standard data
  – Thorough, in-depth analysis
  – Greatly enhanced “what-if” analysis capability
  – Identification of unknown violations
  – Optimized explosives storage capacity
Summary
- Partnerships
- Purpose
- Benefits
- ESS Toolkit
- ESS Planner
- Army Direction
- Return on Investment