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# *Department of the Air Force*

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*Innovate, Accelerate, Thrive - The Air Force at 75*

# *USAF/USN Energetic Material Recertification Plan for Contractor Partners*



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## Overview

- **USAF/USN have successfully collaborated with contractor partners to establish an approach for approving Energetic Material Recertification Plans (EMRP)**
- **This discussion/presentation seeks to explore additional opportunities to partner in developing EMRPs**
  - **Who, What, When, Where, Why, How**
  - **Sidebar conversations**



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## *What/Who*

- **What**

- **An EMRP works in conjunction with the Age of Energetic Material requirements outlined within the USAF AirSpec / USN Contract**
  - Aging energetic materials have known degradation of performance
  - USG efforts to increase quality of sources and materials
- **An EMRP is a test/surveillance program, applied to specific energetic materials and contractor partners, to verify materials meet intended performance characteristics and have not degraded or become unstable**

- **Who**

- **All contractor partners that are required to adhere to the USAF AirSpec / USN Contract recertification requirements**



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## Why

- **An EMRP formalizes the practices that are already being performed**
  - Not “reinventing the wheel”
- **An EMRP can assist and reduce the number of Request for Variance (RFV)s needed to comply with age of energetics requirements**
  - Reduction in manpower
- **An EMRP implements industry best practices for material surveillance, improving product quality, and ensuring material performance**
  - Improved LAT performance



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## *Where/When*



- **You can start to develop your EMRP today!**
- **Reach out to your representative agency engineer**
  - **Sidebar conversations available during this TEW**
- **Approved EMRPs can be incorporated into existing and new contracts**



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## How



- **An EMRP is cooperatively developed**
  - **USG can provide a basic format/expectation**
  - **Contractor will provide a list of energetic materials and their recommendations/standards for recertification testing (Draft EMRP)**
    - **Test methodology**
    - **Frequency of testing**
  - **USG reviews Draft EMRP and provides collaborative (USAF/USN) comments/feedback**
  - **Iterative and cooperative process to develop Final EMRP**
  - **Upon USG approval, each respective contracting office will:**
    - **Modify the existing contracts to include allowance of EMRP**
    - **Include EMRP within future contracts (recommend to note within proposals)**



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## *Lessons learned*

- **Developing an EMRP can take a long time... so we would recommend to:**
  - Establish a dedicated team
  - Meet on a regular/recurring basis with all stakeholders
- **Test methodology and frequency of testing may vary from contractor partner to contractor partner**
  - Chemical composition (single/double base, HE, composite, etc)
  - Age of material may justify increased frequency of testing
  - In-house vs outsourced capability
  - Storage conditions
  - USG seeks to maintain industry best practices across industrial base



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## *Notable Statements*

- **Reviews and modifications**
  - **EMRPs will require a biennial review**
  - **Any proposed modifications to an existing EMRP will require USG approval**
  - **USG can request to review the EMRP and any related recertification documentation at any time**
- **Exceptions**
  - **It is understood that not all energetic materials will require recertification, based on frequency of use / DOM**
  - **Energetic materials not listed in the EMRP will maintain AirSpec/Contract requirement**
  - **Raw materials (sub components) are typically not included in the EMRP**





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## *Notable Statements (Cont'd)*

### • Use

- In place of individual RFVs for recertification of aged energetic materials, contractor partners will follow their EMRP (methodology and frequency) for any given energetic material, and then reference the approved EMRP within the ADC
    - The ADC should note which energetic materials were recertified per the approved EMRP
  - Once approved, contractor partners are free to follow their approved EMRP without USG involvement throughout the process
  - Documentation is retained by the contractor partner, and only provided to USG upon request
- 
- Seeking collaboration between USG agencies for overarching EMRP development (ex: Countermeasures/Flares)

