

# Environmental & Munitions Center of Expertise (EMCX)

CEHNC-EMM

US Army Engineering and Support Center, Huntsville

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M2S2 Explosives Safety Webinar

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The Quality Control and Approval Process for Safety Submissions



US Army Corps of Engineers  
**BUILDING STRONG**

# The Quality Control and Approval Process for Required Explosive Safety Submissions (RESS)

- References DoD 6055.09M and EM 385-1-97.
- An (ESP) or, when appropriate, CSP is required for MRS investigations or characterizations.
- An ESS or, when appropriate, CSS is used for the actual Munition Response (MR).
- NOTE: Most important step prior to submitting to CX is PDT/OESS review. This will save you time and money.



# Prior to submitting for Approval What to Look For!

- Does Title Match what is listed in the document (MRS #1 #2 etc cover needs to be specific)
- Is it the right document for the activity being conducted?
- Is the document formatted IAW EM 385-1-97 (ESS/ESP/TCRA) Complex documents may add sections if needed.



# Prior to submitting for Approval

## What to Look For!

- Does verbiage make sense and IAW all guidance documents? BIP/Consolidated shots? Which are you doing?
- Has the correct MGFD been identified?
- Are ESQD arcs correct per:
  - ▶ Fragmentation Data Review Forms
  - ▶ Generic Equation Calculator (GEQ)
  - ▶ Buried Explosion Module (BEM)
  - ▶ Appropriate EDs (MOFB/OFB)



# Prior to submitting for Approval What to Look For!

- Are the correct distances properly identified on the figures?(K40 or HFD/K328 or MFD/Intentional Detonation with Engineering Controls)
- All legends and scales must be in feet.
- Are all the arcs necessary on the figures? (MFD/HFD/Sandbag Mitigation)



# Prior to submitting for Approval What to Look For!

- Site Specific Info:
  - ▶ Mechanized MEC being used? High or Low input?
  - ▶ Consolidated Shots?
  - ▶ Movement of MEC?
  - ▶ Storage of Explosives (donor/DMM/MD)
  - ▶ Processing of MPPEH per DODI 4140.62 or DDESB approved methods.



# Prior to submitting for Approval What to Look For!

## **Excessive Information**

- Use information that applies to Explosive Safety. For example, the terrain and vegetation section is how terrain and vegetation may affect the response, not actual soil conditions and types of grass.
- Reference publication on procedures, don't outline every step in the procedure, i.e., The lightning protection system will be in accordance with DoD 6055.09M, DA PAM 385-64, NFPA 780, and EM 1110-1-4009





# Prior to submitting for Approval What to Look For!

## Cut and Paste

- Insure the document that was plagiarized is applicable to your specific operations.



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# Prior to submitting for Approval What to Look For!

## **Incorrect K Factor Calculations**

- USACE is no longer using the 1.2 Safety factor in all mathematical equations for QD calculations.
- TNT equivalent IAW TP 16 for donor charges and ordnance.



# Prior to submitting for Approval What to Look For!

## **The Use of Military EOD for Disposal**

- If EOD is used for disposal operations on a known FUDS/MRS it is not an emergency response and their operations must be sited IAW DoD 6055.09M



# Prior to submitting for Approval What to Look For!

## No MGFD or Incorrect MSD

- If the MRS is suspected to contain small arms ammo only, or no MPPEH is expected. Do not include in the ESS/ESP.
- One size of ordnance may have several MSDs

81mm	K40	HFD	MFD
M362A1	54'	<b>247'</b>	1342'
M374	54'	239'	1270'
M43	43'	209'	<b>1579'</b>
M45	<b>66'</b>	242'	1199'



# Prior to submitting for Approval What to Look For!

## Misuse of the Acronym BIP.

- Blow in Place is not a generic term for all disposal operations.
- Do not state **ALL** MEC will be BIP then reference consolidated shots and collection points.



# The Approval Process for Safety Submissions

- Only final documents will be submitted to the EMCX for DRU review/approval. Usually 1-3 days turnaround time.
- Review and Approval times have changed recently, allow 4-6 weeks for each phase (Installation/MACOM, USATCES and DDESB) of the approval process after the final document has been submitted to DA.
- In some cases (if justified in writing) Army interim approval may be granted. This is requested by e-mail or memorandum from the Design Center or Installation POC.



# The Approval Process for Safety Submissions

- Formerly Used Defense Sites (FUDS) routing for safety submissions.
  - ▶ US Army Corps of Engineers (USACE) Design Centers will submit the final submission to the EMCX for DRU approval. No issues 1-3 day turnaround.
  - ▶ Environmental and Munitions Center of Expertise (CEHNC-EMM) will provide DRU Approval memo and then forward to USATCES. No issues 1-3 days.
  - ▶ USATCES will review/forward to DDESB. 4-6 wks
  - ▶ DDESB will review and approve or provide comments for resolution which will follow the same process in reverse. 4-6 wks



# The Approval Process for Safety Submissions

- BRAC and Active installations (AEC) routing for safety submissions where USACE is actively involved in the project.
  - ▶ Design Center will submit the submission with MACOM approval memorandum to the EMCX for Direct Reporting Unit (DRU) concurrence.
  - ▶ EMCX will provide to the design center POC the package with DRU (USACE) concurrence memo. No issues 1-3 days
  - ▶ Design center will forward final submission with DRU memo to the BRAC or installation POC. 1 day
  - ▶ BRAC or installation will forward to USATCES.
  - ▶ USATCES will review and then forward to DDESB.





# The Approval Process for Safety Submissions

- BRAC and Active installations (AEC) routing for safety submissions final approvals.
  - ▶ Design center will submit final DDESB approved submission with all approvals to the EMCX for record keeping unless the EMCX is processing for the MACOM.
  - ▶ BRAC or installations can request (thru the design center) in their approval memo for the EMCX to submit on their behalf. If this is requested, then the submission will follow the same routing as a FUDS submission and the USACE will be kept in the loop when approvals are provided.



# The Approval Process for Safety Submissions

- NDAI/NOFA ESS
  - ▶ See SAIE-ESOH memo 4 Feb 2014
  - ▶ If you have an approved ESP or CSP submit NDAI ESS. If not nothing is required

## AAR

If you have an approved ESS or CSS submit an AAR after the Munitions Response is complete



# The Approval Process for Safety Submissions

National Guard Bureau Explosive Safety submissions.

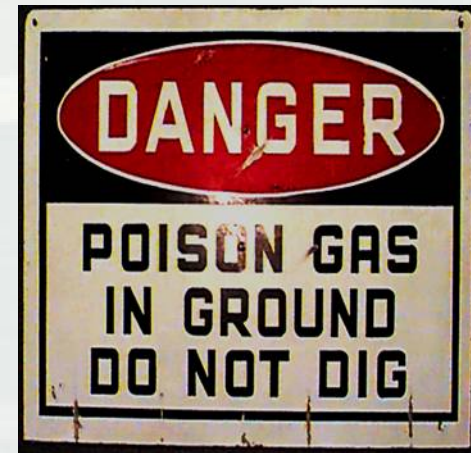
- HQ NGB has provided the USACE authority to approve and process all Explosives Safety submission which the USACE is actively involved. Funding for these submissions must be provided.
- Follow FUDS processing procedures previously mentioned for these submissions.
- The EMCX can provide courtesy reviews on projects which the corps is not participating, but no DRU memo will be issued only an e mail stating the status of the document will be provided.



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# The Approval Process for Safety Submissions



*Questions???*



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