# **Camp Minden Dialogue Committee**

Technical Workgroup Meeting Monday March 9, 2015 11 AM to 1 PM central time

#### On-line link

https://epa.connectsolutions.com/mindendialogue

### **Call-in Information**

(800) 450-5189

Conference ID number: 96418465

#### DRAFT AGENDA AND TOPICS

### **Process Update**

- Expectations for how Agency processes will proceed
- Expectations for the scope of Dialogue Committee Input

### **Technology Information Update**

- status of Vendor responses
- status of EPA and Army input on vendor information

### New information from Army, any questions

- Description of the DDESB approval process
- White Paper on submersion of M6 propellant in water
- White Paper on Camp Minden Propellant Stabilization

## Technology Screen

- Screening Table
- Workgroup discussion
  - Eliminate any technologies that clearly do not work
  - Identify those with clear potential
  - Identify those with potential but more information still needed

#### Possible Performance Indicators

Discussion of key factors important to Dialogue Committee participants

### Next Steps

Additional activities, call or meeting to prep for 3/11

#### 3/9/15 PRELIMINARY INFORMATION FROM VENDOR RESPONSES--NOT INTENDED TO REFLECT VIEWS OF THE DIALOGUE COMMITTEE

GREEN-appears to meet the basic criteria

YELLOW-may meeting criteria but additional questions remain

RED- does not meet basic criteria

Name	ESB approval	Availability	Proven for M6	Time to Implement	Destruct. Efficiency	Volume reduction	Manage Residues	Manage emissions	Capacity/ time to complete	Comments
HYDROLYSIS										
ARCTECH Actodemil Hydrolysis	at other facilities	modified commerical equipment	Used on prepellants, nitroellulose	6 to 8 weeks	99%+	20 to 1	results in liquid fertilizer	NOx wet scrubber	80K lbs per day, using 10 units	
General Atomics SWCO	at multiple facilities, permit at Camp Minden	existing unit at Camp Minden	tested on wide range of propellants	3 months	six 9s	no solids remain, liquid effluent	wastewater at 3-10 gpm	CO and O2 monitoring	61K lbs/day using 3 units	
Munirem netralization		would be constructed new on site	tested on small amonts of propellants			M6 mass reduced 95%	2-3 MG wastewater requires treatment and cellulosic solids, landfill	Nox, NH3, VOCs, air scrubbers and continuous monitoring	multiple tansk, 34K per day	
Field Deployable Hydrolysis	On A/E list		not suitable for M6- as per Army							
THERMAL DESTRUCTION		•	,	•		•	•	•	•	•

CH2M Hill		would be constructed new on site		10 months	99.95%		waste ash	requires pollution control system, contin monitoring	2 furnaces, 1200 kg/hr, 10 months	
Eldorado Rotary Kiln		would be constructed new on site	yes (Belgium)	6 months	99%+	99%+	small quant of particulate, disposed as nonhaz waste	requires pollution control, has met European standards	150-300 lbs per hour per unit	
Clean Harbors		would be constructed new on site	yes, up to 1,200 lbs/hr	4 months	99.90%	greater than 99%		requires pollution control system, contin monitoring		requires proprietary material handling
US Demil		one unit exists, more would be fabricated	no, used on bulk explosives containing propellants	6-7 months	100%	100%	no residue	pollution abatement, wet scrubber, catalytic converter, continous monitoring	1000 lbs.hr per machine	
ATON	no previous experience	would be constructed new on site	not tested on M6, no US demil exp.	one year	100%	sand is added		emissions unknown until testing	4 to 6 tons per hour	
CO2AL	no	new machine to be built	not tested on M6, no demil exper.	6 months	100%	adds .5 lb of catalyst (aluminum ) per pound of M6,	residue of alumina lb for lb of M6	Alumina, salts, Carbon are captured, H captured or burned, N recycled	can be sized to meet needs	

APE Rotary Kiln	On A/E list	no		6-12 months					Very small throughput	
IWP and CRTDA	On A/E list	no						,	Very small throughput	
Tactical Missile Demil.	On A/E list		not intended for M6							
DETONATION CHAMBERS										
DAVINCH	On A/E list	yes	yes	5 weeks	Six 9s				Limited throughput	
Dynasafe Static Deton. Chamber	On A/E list								Very small throughput	
Explosives Destruction System	On A/E list		no						Very small throughput	
Donovan Chambers	On A/E list		no intended for bulk propellants						Very small throughput	
BURNING										
Eldorado Contained Burn Indoors	no	would be constructed new on site	other propellants	6 months	over 99%	high	small quant of particulate, disposed as nonhaz waste	advanced pollution control system	50K lbs per day	
Open Burn								no		
(comparison)								110		

