



January 21, 2015

Ron Curry
Administrator, EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202

Subject: M6 Propellant Recycling

Dear Mr. Curry,

Expal USA is the US subsidiary of the renowned European defense contractor Expal, and has operations in Marshall, Texas and Minden, Louisiana. Expal is part of the Maxam group of companies, one of the largest manufacturers of civil explosives in the world and the leader in demilitarization in Europe.

Expal is a manufacturer of propellants such as the M6 propellant but also manufactures large volumes of gun propellant for the commercial market (Maxam is, in fact, the biggest manufacturer of shot gun shells in the world). As part of its normal activities Expal recycles old propellant for incorporation into its shotgun shell powders in its factory in Galdacano in Northern Spain.

The material in Minden LA would be ideal as a raw material for this process unfortunately its location and its stability mean that it is less than ideal for us. Also at current rates of use Expal would not be able to consume the propellant fast enough to ensure that a decomposition of the remaining propellant would not take place.

There is however, a solution that would have considerable advantages over the current plan to burn the propellant in the open air. This proposed method would involve the following steps.

- Analyze the stability of propellant, ship material meeting DoT requirements to Spain for reprocessing. Shipment could start within 3 months of first stability test results.
- Stabilize the remaining propellant stock.
 - Transfer the propellant to water tight drums and add sufficient water to completely cover it. This process would take approximately 12 months to complete for the 15,000,000 lbs at Minden.
 - Apply for DOT transport authorization. DoT permits for the transport of hazardous materials are currently taking 9 months to process. This 9 months would be in parallel with the above operations
- Ship propellant in water filled drums to Spain for recycling. This would take less than 12 months to complete after the receipt of the DoT EX number for shipment.

We are able to perform this inerting operation and ship the resulting material to Spain at less than the current \$19,292,648.13 budgeted for its destruction. The reason we can do this is that the residual value of the propellant will be used to offset the cost of the shipment to Spain. This inert and packaging process could be completed safely and without air emissions within a 24-month period.

I would like to have the opportunity to present our company and this proposed method to your organization at your earliest convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read "Steve Dart".

Steve Dart
CEO – Expal USA, Inc.

Expal USA Inc
7300 Regency Road
Marshall, Texas 75672

Fax (903) 472 4304
Phone: (903) 472-4970

002609



Expal USA Inc.

Expal USA is the US subsidiary of the renowned European defense company Expal. Expal USA has its headquarters in Marshall, Texas where it has a Load, Assemble and Pack facility and a nascent pyrotechnic capability. Expal USA also operates a continuous energetics pilot plant in Minden Louisiana where it manufactures high energy/ high blast explosives for the US DoD's new generation of weapons. Due to Expal USA's extensive experience in explosive handling it has recently been awarded contracts for the cleanup of energetic materials left over as a result of the collapse of Explo Systems in Minden by GD-OTS, ATK & EQ.

Expal is the defense arm of Maxam, which owns and operates 6 factories in Spain and demilitarization facilities in Spain, Denmark, Bulgaria, Italy, Belarus and Brazil. Expal produces ammunition from 5.56mm to aircraft bombs and is well known for its artillery and mortar systems. EXPAL manages the entire lifecycle of ammunitions and explosives, from their design, development, manufacturing, until their destruction at the end of their working life, allocating all recycled components to their reuse in the civil industry, explosives for public works, mining industry, hunting powder, etc. Maxam has production facilities in more than 40 countries and employs over 6,000 in 140 companies. Since its formation in 1872 by Alfred Nobel it has developed into a leading industrial group for * Development, manufacture and sale of civil explosives and initiation systems for the mining, quarry and infrastructure industries. * Production of chemicals and fertilizers * Hunting cartridges and gunpowder for sporting use * Products for the defense industry * Energy and environmental consulting

Camp Minden cleanup experience

In addition to its core activity of the manufacture of new explosives for the US DoD, Expal USA is currently using its expertise in the handling of explosives in the remediation of a variety of environmental hazards left by Explo Systems. Expal USA has 28 personnel licensed for the handling of explosives in Louisiana and has successfully completed various activities including.

M30 Removal – The retrieval of M30 propellant (approximately 109,000 lbs.) from Camp Minden magazine, movement to a repack building for inspection, repackaging, inventory and ultimate hazardous waste disposal in a clean-up effort of the Explo residual materials left after their shutdown.

TCD – Tritonal Contaminated Debris (TCD) was generated by the demilitarization of Bombs performed by Explo Systems at Camp Minden. Expal carried out the movement of the TCD from Camp Minden magazines, transport to a repack building for segregation of the TCD into two (2) waste streams (1 – Tritonal contaminated wax, tar and pieces of Tritonal & 2 – Tritonal contaminated wood, paper, metal parts & cable) for repackaging and out bound shipment and destruction.

NC – Nitrocellulose (NC) in drums was also residual materials left by Explo after their shutdown and is stable when wet. If the material dries it will become very unstable and sensitive to shock, elevated temperature, and ignition sources. As NC becomes dry it will decompose with time and generate heat. Without enough water to absorb and disperse this heat, the material temperature will continue to

EXPAL

MAXAM

elevate becoming more sensitive to shock until an auto ignition temperature is reached resulting in detonation. Expal designed the processes used to evaluate the drums prior to transport to a repack building, the proper method of handling the drums and also the methods used to re-hydrate the drums with water to allow transport to a disposal facility.

EA - Extracted Aluminum (EA) was generated by the demilitarization of bombs performed by Explo Systems at Camp Minden. The EA is TNT contaminated aluminum agglomerate. Expal carries out the processes used to transport the EA to a repack building, screen the EA into acceptable (OK to ship, 4" x 4" x 8"), large and fines. Each group is then repackaged accordingly and the large and fines are returned to the magazine and the acceptable is packaged and DOT labeled for outbound shipment.