Crysler, Ruby

From:	Doyle, Randy A CIV USARMY JMC (USA) <randy.a.doyle.civ@mail.mil></randy.a.doyle.civ@mail.mil>
Sent:	Monday, February 10, 2020 10:30 AM
To:	Crysler, Ruby
Cc:	Doyle, Randy A CIV USARMY JMC (USA); Hilger, William J; Miller, Keith; Pezzulo, Michael J CIV USARMY JMC (USA)
Subject:	IAAAP Request for Emergency Permit for the OB of Propellant
Signed By:	randy.a.doyle.civ@mail.mil
Importance:	High

Ms. Crysler,

In accordance with the provisions of the Iowa Army Ammunition Plant (IAAAP) Hazardous Waste Management Permit (Sep 18), IAAAP respectfully request the issuance of an Emergency Permit per section II.E.1.

IAAAP has need to safely dispose of up to 60,000 pounds of M14 propellant determined by analysis to have a faulty stabilizer. Currently, 12,650 pounds has tested faulty, but that amount is expected to rise after further testing. This propellant is in Category D and unstable. The AO and Army Safety Departments at the IAAAP, have determined the propellant is unsafe for future storage on-site and is also unsafe to transport off-site by truck for treatment at another location. On-site treatment by open burning in pans enhances public safety in that we eliminate moving this highly dangerous propellant over public highways. There are no other on-site treatment methods available.

Due to the large quantity of propellant, the open burning is proposed for an open burning period of time to be initiated upon issuance of the emergency permit and to continue until the entirety of the M14 propellant is open burned. The M14 propellant is stored in fiber drums with a weight of 140 pounds of propellant per drum. The intent is to load each burn pan (2) with up to 1500 pounds each of propellant. Each pan will be ignited separately and burned independently. The pans will not be reloaded until the Safety Officer determines they are cooled enough to eliminate any danger.

5-8. Shipment of "Unstable, Condemned or Deteriorated" Propellant

a. The CFR 49, paragraph 173.54 (d) states, "Unless otherwise provided in this subchapter, the following explosives shall not be offered for transportation or transported: Propellants that are unstable, condemned or deteriorated."

b. "UNSTABLE" propellants are those that have deteriorated to the point that they are generating acrid, reddish-brown nitrous fumes under ambient temperatures. The visible presence of fumes may not always coincide with the acrid smell as the fumes may dissipate. The fumes signal the onset of instability. Unstable propellant may not be transported on public roads, rails or waterways, and it is prohibited from transport by air.

c. When levels of stabilizer in lots of propellant become so low as to fall into SC-D, SB 742-1 states that they "present a potential safety hazard and are unsafe for continued storage in bulk, bulk-packed components, or as separate loading propelling charges." It is important to note that while category "D" propellant is considered seriously deteriorated and is condemned for further retention or military use it is NOT considered "unstable" unless it is fuming at ambient temperature. 8

d. The lowered level of stability that must be reached by a deteriorated propellant to be placed into SC-D has been set at a level that allows the services a "safe" period of sixty (60) days from the date of NAR issue for the demilitarization of the SC-D propellant. Unless other directions are specified, the NAR will state that any storing installations with the permanently suspended propellant are allowed 60 days for its demilitarization. Demilitarization consists of either Resource Recovery and Recycling (R3) action or treatment (these terms are explained in Chapter 6). The action you take will usually consist of one of the following:

(1) Destruction by burning at the storing installation.

(2) Shipment to a location that is licensed and capable of destroying the propellant by burning.

(3) Movement to a propellant conversion or reprocessing facility that is capable of quickly rendering the propellant into separate, stable compounds such as nitrogen-based fertilizers, or otherwise made safe, such as blending with other energetic materials to make slurry explosives or blasting gels, within the 60-day window.

d. Propellant that is in SC-D and has exhausted the 60-day demilitarization window requires urgent demilitarization action prior to the onset of instability. Transportation of such propellant over public transportation routes (road, rail, air or waterway) must be carefully coordinated with the Surveillance Division at JMC. A physical inspection of each container should be completed immediately prior to any shipment. Close tracking of the shipment from origin to destination is essential since the precise date the propellant may become unstable is unknown. Such propellants will likely be designated WMM by the Designated Disposition Authority (DDA) per the Munitions Rule Implementation Policy (MRIP).

e. Propellants with unknown levels of stability must be determined to be stable for shipment to prevent the shipper from violating the Federal Regulation noted in paragraph 5-8a. above. Unless the stability is at a known, tested level, shippers are unable to measure the extent of propellant deterioration. On an exception basis and with the written approval of JMC, propellant of unknown stability may be shipped if each container of propellant has been individually examined to assure that it is not unstable at time of shipment.

Thanks

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Randy Doyle

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IAAAP ICE Survey: https://ice.disa.mil/index.cfm?fa=site&site_id=1209&dep=DoD