May 30, 2012

To: DDTCResponseTeam@state.gov
Publiccomments@bis.doc.gov

From: Bill Root, waroot23@gmail.com, tel. 301 987 6418

Subject: ITAR Amendments - Category V RIN 1400-AD02
EAR Revisions - Energetic Materials RIN 0694-AF53

On May 17, 2012, the following comments were presented to the Materials Technical Advisory Committee for its consideration.

The State proposed rule asks the public to identify any potential lack of coverage in the proposed State and Commerce rules compared with Wassenaar Munitions List Item 8. It also refers to the "the national security objective of greater interoperability with U.S. allies." The following not only identifies present WML (and MTCR) coverage omitted from the proposed rules but also coverage identified in more than one item in the proposed rules and proposed coverage not now included in WML. Such proposed U.S. unilateral coverage would be more effective if included on the WML.

<u>It is recommended that the United States seek Wassenaar agreement along the lines of the proposed rules before putting them into effect in U.S. regulations.</u>

<u>The two proposed rules would omit the following WML 8 coverage:</u>

8.a.34 Organic explosives not listed elsewhere in ML8.a and having all of the following:
- a. Yielding detonation pressures of 25 Gpa (250 kbar) or more; and
- b. Remaining stable at temperatures of 523K (250°C) or higher, for periods of 5 minutes or longer.

to the extent not covered by 1C608.n

8.b.1 Any United Nations (UN) Class 1.1 solid "propellant" with a theoretical specific impulse (under standard conditions) of more than 250 seconds for non-metallized, or more than 270 seconds for aluminized compositions;

8.b.2 Any UN Class 1.3 solid "propellant" with a theoretical specific impulse (under standard conditions) of more than 230 seconds for non-halogenized, 250 seconds for non-metallized compositions and 266 seconds for metallized compositions

to the extent not covered by proposed

V.b.1 Any solid propellant with a theoretical specific impulse (see paragraph(k)(4) of this category) greater than:
- (i) 240 seconds for non-metallized, non-halogenated propellant;;
- (ii) 250 seconds for non-metallized, halogenated propellant; or
- (iii) 260 seconds for metallized propellant

8.b.6 Any “propellant” containing substances specified by ML8.a
to the extent not covered by 1C608.h or k

8.e.6 Energetic monomers, plasticizers or polymers, specially formulated for military use and containing any of the following:

a. Nitro groups;
b. Azido groups;
c. Nitrate groups;
d. Nitraza groups; or
e. Difluoramino groups

to the extent not covered by 1C608.n

8.f.4.e Other adducted polymer ferrocene derivatives
to the extent not covered by proposed V.f.4.v - xv

<u>The proposed rules include duplicative coverage of the following:</u>

IRFNA V.d.10 and 1C111.a.3.e

HTPB V.e.7 is a subset of 1C111.b.2 (The objectives of both are the same, to control a missile binder. V.e.7 does so with technical precision.)

<u>It is recommended that MTCR revise 4.C.5.b to be identical to V.e.7, which is identical to WML 8.e.12, and that then 1C111.b.2 be deleted.</u>

chlorine trifluoride 1C111.a.3.f and 1C238

Spherical aluminum powder 1C111.a.1.b is a subset of 1C111.a.1.a

<u>The proposed rules include the following not now covered by WML 8:</u>

V.a.11 DNAN

V.a.13.I, iii, iv DAAF, DAAFox, ANF, ANAzF

V.a.14 GUDN

V.a.23.iii difluorinated derivatives of RDX

V.a.27.ii LAX

V.a.37 ionic materials

V.b.1 to the extent not included in WML 8.b.1 or 2 (see above for reverse)

V.c.5		fuel, pyrotechnic, or energetic mixtures having any nanosized aluminum, beryllium, boron, zirconium, magnesium, or titanium, as follows: particle size less than 200 nm in any direction; and 60% or higher purity
V.c.6.ii	MTV	
V.e.8		DAMTR
V.e.9.iii, iv, v		NENAS N-Propyl, N-Butyl, N-Pentyl
V.e.11		PNO
V.f.4.v-xv		specified ferrocene derivatives to the extent not adducted polymer
V.f.16.i		HX
V.f.21		TEPB
V.g.2		DADN
V.h		classified
V.i.		developmental
1C608.a		propellants having nitrocellulose with nitrogen content greater than 12.6%
1C608.b-g, j		shock tubes, cartridge power devices, detonators, igniters, oil well cartridges, boosters, commercial pyrotechnic devices