



DEPARTMENT OF THE ARMY
U. S. ARMY COMBAT SYSTEMS TEST ACTIVITY
ABERDEEN PROVING GROUND, MARYLAND 21005-5059

MS 16
25

REPLY TO
ATTENTION OF

STECS-SO (385-11m)

28 SEP 1991

MEMORANDUM FOR U.S. Nuclear Regulatory Commission, Region I, 475
Allendale Road, King of Prussia, PA 19406-1415

SUBJECT: Additional Information on Mail Control No. 115043;
Request for Immediate Increase of Possession Limit

1. Request approval for an immediate increase to my possession limit. We are at 95 percent of our limit; consequently we will have to cease operations if your approval is not received immediately. The cessation of our testing will have devastating effects to the Army.

2. Our request dated 12 July 1991, also included an amendment to remove the flight tunnel (blast attenuation tube). Please respond to the two issues separately. We cannot afford to wait until you have reviewed our response, before approving the increase.

3. The following has been prepared in reference to your letter dated 19 September 1991:

a. All testing of 105mm, and larger depleted uranium (DU) munitions is performed with the flight tunnel in place at our test buildings. The mass of these munitions is generally between 3 and 4 kilograms a piece.

b. In a 1985 study prepared by Pacific Northwest Laboratory (encl), the percentage of total DU accounted for per round, collected in the flight tunnel, amounted to about 1.2 percent. This amounts to about 0.048 kilograms, deposited inside the entire flight tunnel, per each 4 kilogram round fired. The amount collected appears reasonable; given that the projectile, and air stream forces are towards the back wall.

c. The 12 July 1991 request was only for removal of the flight tunnel during tests involving 25mm DU munitions; with a mass of about 90 grams each.

d. Given the mass of the projectile, and normal flow rate of evacuation for the test building (18,000 CF/M); the most any DU deposited outside the entrance port that can be expected during 25mm testing is about 1 gram per round.

e. Whenever the flight tunnel is removed for 25mm DU munition testing, high volume airsamplers will be located at the entrance port; to confirm any building leakage.

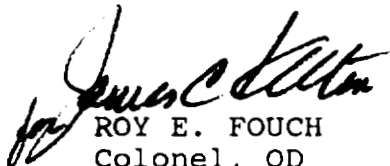
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4. My point of contact is Mr. Lawrence S. Davis, telephone
(301) 278-3607.

Encl


ROY E. FOUCH
Colonel, OD
Commanding

CF:

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