DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND
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DRCSF-P

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11 October 1979

DOCKET NUMBER PR - Misc Notice
PROPOSED RULE Reg Guide

Secretary
US Nuclear Regulatory Commission
ATTN: Docketing and Service Branch
Washington, DC 20555

Gentlemen:

To aid you in finalizing Draft Regulatory Guide and Valued Impact Statement (May 79, Division 3, Task RH 802-4), subject: Calculational Models for Estimating Radiation Doses to Man from Airborne Radioactive Materials Resulting from Uranium Milling Operations, the attached comments are furnished.

Sincerely,

DARWIN N. TARAS
Chief, Health Physics
Safety Office

1 Incl
As Stated

Acknowledged by card. 10/22

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DRDME-VR (17 May 1979) 1st Ind
SUBJECT: Draft Regulatory Guide and Value/Impact Statement, May 1979

US Army Mobility Equipment Research and Development Command,
Fort Belvoir, Virginia 22060 4 JUN 1979

TO: Commander, US Army Materiel Development and Readiness Command,
ATTN: DRCSF-P (Darwin N. Taras), 5001 Eisenhower Avenue, Alexandria,
Virginia 22333

1. The following comments are given after a review of the draft Regulatory Guide and Value/Impact Statement.

a. There is no attempt to recognize the potential for solubility of the uranium compounds. In fact, it is assumed that the material is insoluble. If the material is soluble, then the exposure to the lungs will be reduced, and there will be an extra burden on the kidneys to handle the uranium. There may exist for some individuals a toxicological problem which is not addressed in the methodology.

b. Although the introduction makes it clear that doses refer to dose commitments over a 50-year period, this becomes somewhat confusing when using the Tables. Tables 3, 6 and 8 deal with a 50-year commitment period. Table 4 is for one year of external exposure and Table 10 is for 100 years of commitment.

c. U-235 is not used in the model. Although the amount of U-235 is small, there is a difference in half-life that may make U-235 more important for radiological considerations.

d. There is no attempt to consider other than the radiological impact of the mining and milling operations. A similar methodology needs to be considered for the chemical effects on the kidneys.

e. On page 2, Section B1, "Uranium Mill Source Terms." This section was not useful. It is not clear what is to be accomplished by this section.

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f. Table 3. Change pCi/m^2 to pCi/m^3.

2. Point of contact at MERADCOM is Robert C. McMillan, AUTOVON 354-5133.

FOR THE COMMANDER:

Emil J. York

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nc

EMIL J. YORK
Chief, Material Technology Laboratory