DOCKETED
USNRC

'82 AGO 30 P1 :09

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

DEPARTMENT OF ENERGY
CHICAGO OPERATIONS OFFICE
NEW BRUNSWICK LABORATORY, D-350
9800 SOUTH CASS AVENUE
ARGONNE, ILLINOIS 60439

August 24, 1982

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

DOCKET NUMBER
PROPOSED RULE PR- Misc. Notice
(Reg Guide)

Attention: Docketing and Service Branch

Dear Sir/Madam:

The following comments are submitted related to the proposed revision to
Regulatory Guide 5.34.

1. p. 2, last paragraph - Suggest changes to read "NDA % scrap consisting of
    dense materials using gamma-ray spectrometry can be unreliable ....". It
    is not gamma-ray spectrometry which is unreliable, but rather its appli-
    cation for assay purposes to scrap containing dense materials.

2. Footnote, p. 4 - It should not be necessary, nor is it felt to be appro-
    priate, to provide two sets of coefficients for the equation used to
    compute "effective 240". It is stated that an uncertainty of approxi-
    mately ± 5 % exists. As an alternative, use the equation in the footnote
    on page 10.

3. p. 9, next-to-last paragraph - First sentence should read: "Calibration
    standards .... with standard reference material of the National ....".
    Nuclear SRMs are no longer stored at NBS but at NBL.

4. p. 10, Table 2 - To be complete, the approximate abundance of Pu-238
    should be included on Table 2. The indicated values for Pu-240eff are
    not obtained using Table 2 abundances and the foot-noted equation.

5. Appendix, p. 15 - The variance is defined as σ^2. Equation (5) should be
    rewritten as:

    $$\sigma^2_{Pu} = \left[[....] \ldots [....] \ldots [....] \right] \times M \text{ (total Pu)}^2$$

    The next equation should read: $\sigma^2_{Pu} = M \text{ (total Pu)}^2 [....]$.

Thank you for the opportunity to comment.

Sincerely,

Carleton D. Bingham
Director

DS09.
add:
Ed Hull
5650 NL

cc: S. McDowell, OSS, HQ

Acknowledged by card. 8/31/82 emp