

NOTATION VOTE
RESPONSE SHEET

RELEASED TO THE PDR
12/2/92
date initials

TO: SAMUEL J. CHILK, SECRETARY OF THE COMMISSION
FROM: COMMISSIONER CURTISS
SUBJECT: SECY-92-238 - FINAL TECHNICAL POSITION ON
ALTERNATE CONCENTRATION LIMITS FOR TITLE II
URANIUM MILLS

APPROVED X/in part DISAPPROVED X/in part ABSTAIN _____
NOT PARTICIPATING _____ REQUEST DISCUSSION _____

COMMENTS:

See attached comments.

9212110199 920818
PDR COMMS NRCC
CORRESPONDENCE PDR

RELEASE VOTE

☒

WITHHOLD VOTE

☐

ENTERED ON "AS" YES ☒ No _____

Jim R. Letini
SIGNATURE

August 18, 1992

DATE

090058

LEF 110

Commissioner Curtiss' comments on SECY-92-238:

The final Alternate Concentration Limit (ACL) guidance document in the subject SECY paper represents a significant and important milestone that I trust will be useful to both staff and licensees in the implementation of the uranium mill tailings regulatory regime. I commend the staff for the work that has gone into this effort. I do, however, have one significant concern with the guidance document. The approach recommended by the staff for evaluating proposed ACLs explicitly endorses a risk level of $1E-6$ lifetime (approximately $1E-8$ annual) for potential exposures to members of the public from the consumption of groundwater, with licensees given the option of justifying risks in the range of $1E-4$ to $1E-6$ lifetime (approximately $1E-6$ to $1E-8$ annual). I am not prepared to endorse these risk levels as a basis for evaluating the acceptability of proposed ACLs. Instead, I believe that decisions on potential risks to members of the public should be based on the following approach:

In making the required finding that a proposed ACL does not represent a substantial present or future hazard to human health when use of groundwater for drinking purposes must be considered, as well as in determining that the proposed ACL is ALARA, a demonstration that the combined risks from the radiological and nonradiological constituents is equivalent to the risks for members of the public in 10 CFR Part 20 represents a reasonable upper bound. Recognizing that a 50 millirem per year dose is used to calculate permissible concentrations for unrestricted releases to air and water in revised Part 20, this 50 millirem dose would represent an annual individual risk of about $3E-5$.¹ A reasonable lower bound for ALARA efforts would be an annual individual risk of $1E-6$, if it is determined that achieving this level would be cost-beneficial.

The risk reduction that would be achieved with an annual risk standard of $3E-5$ for ACLs is, in my view, sound and defensible when compared to other radiological risks already subject to existing regulations. In particular, this approach is consistent not only with 10 CFR Part 20, but with EPA's fuel cycle standards in 40 CFR 190, as well as with NRC's regulations in 10 CFR Part 61 for low-level waste facilities. Moreover, further reductions beyond this level will not, in my view, result in a substantial reduction of significant risk to the public health and safety and the environment. Accordingly, I would recommend that the discussion of risks in the guidance document be deleted and the foregoing inserted in lieu thereof. The analysis of comments should be revised accordingly. EPA should be advised of this

¹ Assuming a risk conversion factor of $5E-4$ per rem.

- 2 -

action in accordance with section B of the Memorandum of Understanding.