1881 SEP 21 PM 12: 42. M. Mathews 4200 Glenmere No. Little Rock, Arkansas 72116

Sept. 15, 1981

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

Attn: Docketing and Service Branch

Re: Federal Register/Vol. 46, No. 142/Friday, July 24, 1981,

Proposed Rules.

Dear Sir:

I have just finished reading the above listed proposed rules and am submitting the following comments with regard to some serious defeciences in the manuscript.

I failed to see the logic of 20.311(h). In this section the shipper of a package is penalized because of someone else's mistakes. In the event that a trucker loses the package or in the event that the receiver fails to notify the shipper, then it is (according to paragraph h) the obligation of the shipper to conduct an investigation and file a written report with the commission regional office.

While I agree that shipments of any type must reach their destination I fail to see any logic of picking a whipping boy to penalize for anything that goes wrong. The NRC, the Department of Transportation and any other agency of the government that is involved should do do their job properly and refrain from needlessly penalizing users of radicactive materials. My final comments are in relation to section 61.5 and 61.56. I have been completely unable to establish any line of reasoning for the numbers listed in Table 1 and consequently with the class A, class B, class C, ratings

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associated with these numbers. To merely list a sample of the confusion that I encounter, the norp total body burden for iodine 129 is 200 microcuries and the corresponding total body burden for strontium 90 is 20 microcuries. Both these concentrations refer to soluble materials and the values listed in Table 1, column 1 shows an allowable concentration of iodine only 1/50 of the allowable concentration of strontium 90 while the body burden for iodine is 10 times higher than that for strontium 90. In the event that these numbers are somehow related to a classification of hazard or danger, then a statement explaining how they are chosen would be very beneficial.

Moreover, there is no indication of any value being considered for the numbers in Table 1 with regard to the chemical composition of the radio isotope under consideration. It is my contention for example that iodine the form of lead iodide which has a very low solubility would be of less hazard than iodine in the form of potassium iodide which has a rather high solubility.

Although the number in the Table are definitely not arbitrary, much better grouping of numbers could be obtained for such an all inclusive use as radioactive waste disposal. It is my hope that these numbers will be reconsidered and these two sections revised before forcing these items on every user of radioactivity in the United States.

Very truly yours,

D. M. Mathews, Ph.D.

cc: R. Dale Smith

cc: Senator David Pryor

cc: Representative Ed Bethune