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DOCKET NUMBER
PROPOSED RULE

PR 20
45 FR 67018

230

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SERVICES



Secretary of the Commission
U.S. Nuclear Regulatory Commission
Attn: Docketing & Service Branch
Washington, D.C. 20555

Ref: Docket No. PR 20 (45 FR 67018)

Gentlemen:

In reference to the above docket number the following comments are proposed:

1). This would appear to be the first practical approach solution to a problem faced by many licensees in a considerable period of time. I would like to commend the Commission in this regard.

2). The proposed limits established for hydrogen-3 and carbon-14 are appropriate. This will be a major step in reducing liquid scintillation waste volume, and hence will reduce significantly the under-utilization of radioactive waste burial grounds.

3). However, this approach does not eliminate the problems associated with liquid scintillation counting, as many other radioisotopes are used as tracers in research (i.e., sulfur-35, phosphorus-32, phosphorus-33, calcium-45, iron-55, iodine-125, iodine-131, etc.). I propose the regulations be ammended to include all radioisotopes in liquid scintillation media, provided the activity per gram of liquid scintillation cocktail is less than 0.05 microcuries. This would result in all liquid scintillation solutions being disposed of as toxic materials rather than radioactive materials. The proposed regulations would impose on institutions the problem of segregating hydrogen-3 and carbon-14 liquid scintillation waste from all other radioactive liquid scintillation wastes which would further burden an already overloaded waste disposal program.

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4). If item 3 above is too general, I propose:

a) hydrogen-3 and carbon-14 to be disposed of as toxic waste (in liquid scintillation media) provided the activity is less than 0.05 microcuries per gram, and

b) all other radioisotopes be disposed of as toxic waste (in liquid scintillation media provided the activity is less than 0.0005 microcuries per gram.

Thank you for the opportunity to comment in the above matter.

Sincerely,


Glenn L. Murphy
Research Coordinator

GLM:cm

cc: Mr. Andrejs Simanis
Radiation Health Unit
State of Georgia