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45 FR 70874

TO: Director, Office of Congressional Affairs
FROM: Arlen Specter
DATE: January 20, 1981

The attached letter has been received by a constituent.
Will you please provide me, attention Bill Wilcox, with
the necessary information to respond to the letter.



8103050024

44-1, PR-20

ECOLOGY/ALERT

BOX 621

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Jan 12 -81

Dear Sen Specter —

REC'D JAN 15 1981

Exciting news.

Last week, we received a December newsletter from Susquehanna Alliance, Lewisburg PA.

And guess which Federal agency is expressing an interest in economy, and recycling?

The Nuclear Regulatory Commission!

Their first proposal appears in the Federal Register, Oct 8-80, page 67018.

If adopted, it could save hospitals and research labs about \$16 millions a year, in disposing of liquid scintillation media, and animal carcasses contaminated with same.

The scintillation media contains "trace quantities" of tritium and carbon-14 in a toluene solvent. The proposal notes: "Liquid scintillation media are flammable and are suspected of leaching radioactive chemicals out of the burial trenches...(they) are chemically toxic and are suspected of being carcinogenic..."

The hospitals and labs now use between 200-400 thousand gallons of the stuff each year, which requires about 400,000 cu ft of space at a radioactive waste burial ground.

The NRC's solution to the problem is simple.

Instead of shipping used media to a radioactive waste burial ground, licensees would dump it in sanitary sewerage systems - provided the quantity of tritium does not exceed 5 curies per year, and carbon-14 does not exceed one curie per year.

(This limitation seems unrealistic, even discriminatory. In Feb -80, Victor Stello, Director of the NRC Office of Inspection and Enforcement, said a normally operating atomic reactor releases an average 1000 curies per month to the atmosphere.

But the NRC's NUREG 0367 - a report on emissions by operating reactors - shows in 1976 the Millstone Point I reactor released an average 42,000 curies per month. The Dresden I reactor released an average 37,000 curies per month.

Doesn't it seem unrealistic to expect hospitals and labs to

limit themselves to dumping less than 5 curies of tritium a year into the sewerage systems?)

The NRC's second proposal concerning recycling is in the Federal Register, Oct 27-80, page 70875.

It seems that the Dept of Energy is making improvements at its uranium enrichment plants at Oak Ridge TN, Portsmouth OH, and Paducah KY.

This has generated some scrap metal: 31,800 metric tons of iron and steel, 3400 metric tons of nickel, 1600 metric tons of copper. They're contaminated with technetium-99 and/or low-enriched uranium. All this would have to be buried in a radioactive waste burial ground, unless some relief is found.

Again, the solution is absurdly simple.

The NRC proposed the contaminated scrap be recycled by smelting it with other scrap - provided the technetium-99 content would be less than 5 parts per million, and the low-enriched uranium content would be less than 17.5 parts per million.

Just how the slightly radioactive end-product would be used, the proposal doesn't say. Would it end up in coins? Toys? Surgical or dental instruments?

Isn't it ~~frustrating~~ futile, these days, to worry whether you'll get cancer or leukemia, or whether your children will have birth defects?

Let us offer ^{some} ~~anecdotal~~ words of ^{partial} ~~unsubstantiated~~ comfort.

A medical report issued last May said that ordinarily, leukemia victims live for about a year after they achieve initial remission. However, with high doses of drugs, radiation, and bone marrow transplants, some patients were still alive 35 months later. (Bone marrow transplants cost about \$50,000).

The stigma of birth defects may be resolved quite easily. Instead of labelling such children as "brain damaged" or "defective", wouldn't it be much nicer to call them "exotic" children?

E. Kenneth
 Sec'y
 E. Kenneth