



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 19, 1989

The Honorable Walter B. Jones
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Jones:

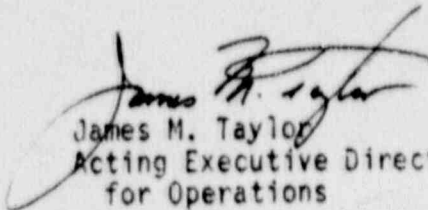
I am responding to your September 27, 1989, letter regarding an inquiry of one of your constituents, Mr. James L. Ritchie, about the proper disposal of smoke detectors containing radioactive material.

In developing the regulation which permits the public to buy and dispose of smoke detectors containing radioactive material by normal means, the Commission determined that there was no significant risk to the public associated with the unrestricted disposal of large numbers of smoke detectors. An analysis of use and disposal of smoke detectors has been documented in an environmental assessment, NUREG/CR 1156, "Environmental Assessment of Ionization Chamber Smoke Detection Containing Am-241." The Environmental Assessment concluded that the manufacture, distribution, use, and disposal of 14 million Am-241 smoke detectors would result in a risk, to the exposed population, of approximately 0.1 fatal cancers per year. However, these devices would have the potential to save 1500 to 5000 lives per year. Thus, the benefit of allowing the public the unregulated purchase, use, and disposal of Am-241 smoke detectors far outweighs the small potential risk of allowing normal disposal of the slight amounts of radioactivity in these devices. We concluded that subjecting the users of smoke detectors to regulatory control would not significantly change the small radiological risk, but might inhibit their extensive use, thus reducing the number of lives that could be saved through early detection of smoke and fire.

Rather than subjecting the individual consumer to regulatory controls, the Nuclear Regulatory Commission (NRC) protects the public health and safety in the use of ionization smoke detectors through control over the design and manufacture of the detectors. The manufacturer must apply for and obtain a license from NRC to distribute the product. The license is granted only after the applicant has demonstrated that the smoke detector is designed and will be manufactured according to specific requirements and safety criteria.

If you or your constituent are interested in the technical details of the assessment and regulations, we have enclosed copies of 10 CFR Parts 30 and 32, and NUREG/CR 1156. We believe these address his concerns in detail.

Sincerely,


James M. Taylor
Acting Executive Director
for Operations

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Enclosures: As stated

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:TE*
:EKraus
10/08/89 *SEE PREVIOUS CONCURRENCE

OFC: IMAB* :IMAB* :OGC* :DD/IMNS*:D/IMNS* :DD/NMSS*:D/NMSS* :EDO

NAME: MLamastra :JGlenn:RFonner:GSJoblom:RCunningham:GARlotta:RBernero:JMTaylor

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