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The Honorable Saction Charles

DEC \$ 1981 DEC 11 A10:20

See 3629

United States Senate
Washington, D.C. 20510

Dear Senator Chiles:

DOCKET NUMBER PR-30, 32, 70, 150 PROPOSED RULE (45 FR 70874) SMELTED ALLOYS

The following information is provided in response to your inquiry of November 30, 1981 concerning your constituent Angela Sager and her interest in the proposed amendments to the Nuclear Regulatory Commission regulations to exempt from regulations smelted alloys containing residual contamination of certain radioactive materials.

The rulemaking in question was originally undertaken by the Commission at the request of the Department of Energy and pursuant to a 1974 amendment (P.L. 93-377) to the Atomic Energy Act (AEA) of 1954. The rulemaking would permit the recycling of scrap metal from discarded equipment at DOE's uranium enrichment plants. This scrap metal is sometimes contaminated with small amounts of byproduct or special nuclear material resulting from the enrichment process. This contamination cannot practically be removed but is considered too insignificant to constitute a radiation health or safety problem.

Until Congress amended the AEA in 1974, it was necessary for the Commission to issue a specific license for the possession of this type of radioactive material, no matter how small the quantity. In amending the Act, Congress gave the Commission the authority to exempt minute quantities of special nuclear material from its licensing requirements if it finds that a licensing exemption "will not constitute an unreasonable risk to the common defense and security and to the health and safety of the public."

We would like to emphasize that under the proposed amendments persons who smelt scrap contaminated with technetium-99 or low-enriched uranium or who are the first transferors of such smelted alloy would not be exempt from licensing requirements. Such persons would be under license and would be required to submit a description of the decontamination and smelting procedures and sampling and analytical procedures to be used. This would assure that the smelted alloys subsequently to be used under the exemption meet the proposed maximum contamination limits.

It also should be noted that the scope of the exemption is narrow permitting only the technetium-99 and low-enriched uranium as the contaminants. Contaminants such as plutonium, high-enriched uranium or other transuranics are not included in the exemption. The Tc-99 and low-enriched uranium would be minor constituents (less than 5 parts per million (ppm) and 17.5 ppm, respectively) of representative samples of smelted alloys.

The resulting levels of contamination would be at or below those of many products commonly in use which contain traces of unenriched uranium. For example, most building materials contain some traces of uranium (granite, 4.7 ppm; cement, 3.4 ppm; by-product gypsum, 13.7 ppm). Dental porcelain, used in

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making false teeth. has been found to contain from 10 to 990 ppm uranium. The NRC upper limit for unimportant quantities of unenriched uranium is 500 ppm. There is essentially no difference in the nature of the radioactivity emitted from this unenriched uranium and the low-enriched uranium being considered for exemption.

The NRC staff has prepared a Draft Environmental Impact Statement (EIS) in support of the proposed rule. Without the exemption, thousands of tons of government-owned nickel, copper, iron and steel scrap would have to be disposed of as radioactive waste at substantial cost to the taxpayers. If exempted, this metal could be smelted down and resold for in excess of \$40 million. Further, energy savings from recycle have been estimated at the equivalent of about 170,000 barrels of crude oil or 30,000 Mg of coal. By comparison with these benefits, the risk of cancer from release and unrestricted use of the entire inventory of smelted alloy is estimated to be considerably less than one. This means that it is highly unlikely that the recycled alloy would cause even one cancer in one person in the total U.S. population.

Notice of the proposed rule was made in the Federal Register and the press on October 27, 1980. The comment period expired December 11, 1980. Over 3,300 public comments were received. Comments will be reviewed and addressed in the Final EIS before any decision is made by the Commission on promulgation of a final rule.

We hope this reply is responsive to the concerns of your constituent. Should further information on the subject be required, please contact my office.

Sincerely, Edward S. Fay

Carlton Kammerer, Director Office of Congressional Affairs

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## United States Senate

APPROPRIATIONS
BUDGET
GOVERNMENTAL AFFAIRS
SPECIAL COMNUTTEE ON AGING
DEMOCRATIC STEERING COMMITTEE

November 30, 1981

Mr. Carlton Kammerer, Director Office of Congressional Affairs Nuclear Regulatory Commission 1712 A Street, NW Washington, D.C. 20555

Dear Mr. Kammerer:

I have recently received the enclosed correspondence regarding a matter involving your agency, and because of my desire to be responsive to all inquiries, I would appreciate having your comments and views.

Your early consideration of this matter will be appreciated. If convenient, I would like to have your reply in duplicate and to have the enclosure returned.

Please refer to Angela Sager in your reply.

With kindest regards, I am

Most sincerely,

LAWTON CHILES

LC/dm Enclosure

12/2...To OCA for Direct Reply.. Suspense: Dec 18..docket..81-2409

Dupe 8112040484

4949 194 aru. SW. naples, 1. 33999 Senator Sauton M. Crues Room 347, Russell Senace Office Blag. Washington, DC 20510 Dear Sexator Chilles, is an writing to you about President Reagan's idea concurring therecycling queid suitonium. I feel if the United States does recycle the flutonium, it will have disastrous expects on with the United States and the rest of the world of the plutoxue ne is recipled, unat well become of the waste. The administration Claims than he lasely and safely disposed Do, but whis really true? Similar statements have been made in the past, but often puplinare hees killed and permanently damaged as a result of being exposed to nuclear wasti I there the worst problem is, what y someone else gets control of this recycled plutonium?

Ungruendly nations, terrorists, or maxiaco could get control of the eliment and use it to destroy or corrupt nations. The recycled plutoxum maste will also run the ecology wherever it is disposed of, causing midations in livestock overops), as has happined before. I hope you will wing this issue up in the sexate and discuss the results that the recycling of the plutoneum well cause. Sixcerely Sager



United States Senate Washington, D.C. 20510

Dear Senator Warner:

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

The Honorable John W. Warner

DOCKET NUMBER FR-30. 32. PROPOSED RULE (45 FR 70374) SWELTED ALLOYS

The following information is provided in Pesponse to your inquiry of November 18, 1981 concerning your constituents Leland and Eileen Stouter, and their interest in the proposed amendments to the Nuclear Regulatory Commission regulations to exempt from regulations smelted alloys containing residual contamination of certain radioactive materials.

The rulemaking in question was originally undertaken by the Commission at the request of the Department of Energy and pursuant to a 1974 amendment (P.L. 93-377) to the Atomic Energy Act (AEA) of 1954. The rulemaking would permit the recycling of scrap metal from discarded equipment at DOE's uranium enrichment plants. This scrap metal is sometimes contaminated with small amounts of byproduct or special nuclear material resulting from the enrichment process. This contamination cannot practically be removed but is considered too insignificant to constitute a radiation health or safety problem.

Until Congress amended the AEA in 1974, it was necessary for the Commission to issue a specific license for the possession of this type of radioactive material, no matter how small the quantity. In amending the Act, Congress gave the Commission the authority to exempt minute quantities of special nuclear material from its licensing requirements if it finds that a licensing exemption "will not constitute an unreasonable risk to the common defense and security and to the health and safety of the public."

We would like to emphasize that under the proposed amendments persons who smelt scrap contaminated with technetium-99 or low-enriched uranium or who are the first transferors of such smelted alloy would not be exempt from licensing requirements. Such persons would be under license and would be required to submit a description of the decontamination and smelting procedures and sampling and analytical procedures to be used. This would assure that the smelted alloys subsequently to be used under the exemption meet the proposed maximum contamination limits.

It also should be noted that the scope of the exemption is narrow permitting only the technetium-99 and low-enriched uranium as the contaminants. Contaminants such as plutonium, high-enriched uranium or other transuranics are not included in the exemption. The Tc-99 and low-enriched uranium would be minor constituents (less than 5 parts per million (ppm) and 17.5 ppm, respectively) of representative samples of smelted alloys.

The resulting levels of contamination would be at or below those of many products commonly in use which contain traces of unenriched uranium. For example, most building materials contain some traces of uranium (granite, 4.7 ppm; cement, 3.4 ppm; by-product gypsum, 13.7 ppm). Dental porcelain, used in

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making false teeth, has been found to contain from 10 to 990 ppm uranium. The NRC upper limit for unimportant quantities of unenriched uranium is 500 ppm. There is essentially no difference in the nature of the radioactivity emitted from this unenriched uranium and the low-enriched uranium being considered for exemption.

The NRC staff has prepared a Draft Environmental Impact Statement (EIS) in support of the proposed rule. Without the exemption, thousands of tons of government-owned nickel, copper, iron and steel scrap would have to be disposed of as radioactive waste at substantial cost to the taxpayers. If exempted, this metal could be smelted down and resold for in excess of \$40 million. Further, energy savings from recycle have been estimated at the equivalent of about 170,000 barrels of crude oil or 30,000 Mg of coal. By comparison with these benefits, the risk of cancer from release and unrestricted use of the entire inventory of smelted alloy is estimated to be considerably less than one. This means that it is highly unlikely that the recycled alloy would cause even one cancer in one person in the total U.S. population.

Notice of the proposed rule was made in the Federal Register and the press on October 27, 1980. The comment period expired December 11, 1980. Over 3,300 public comments were received. Comments will be reviewed and addressed in the Final EIS before any decision is made by the Commission on promulgation of a final rule.

We hope this reply is responsive to the concerns of your constituents. Should further information on the subject be required, plese contact my office.

Carlton Kammerer, Director

Office of Congressional Affairs

JOHN W. WARNER VIRGINIA United States Senate WASHINGTON, D.C. 20510 November 18, 1981 Mr. Carlton Kammerer Director Office of Congressional Affairs Nuclear Regulatory Commission 1717 H Street, N.W. Washington, D.C. 20555 Dear Mr. Kammerer: I am writing to bring to your attention the enclosed comments from my constituent, Mr. and Mrs. Leland Stouter. I shall appreciate your reviewing this correspondence and preparing a report on the stated concerns. Please send your reply in duplicate to the following address: Office of Senator John W. Warner 235 Federal Building 180 West Main Street Abingdon, Virginia 24210 My constituent and I appreciate your assistance in this matter. I am grateful for all you can do to review this matter within the existing laws, rules and regulations of the Nuclear Regulatory Commission. Thank you for your time and courtesy. With best wishes, Sincerely, JWW/jah Enclosure 11/24...To OCA For Direct Reply... Suspense: Dec. 9... Cpy to: Docket ... 81-2379.

1981 OCT 21 AM 11: 20

1156 Janaf Place Norfolk, Virginia 23502 October 18, 1981

The Honorable John W. Warner United States Senate Washington, D. C. 20510

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According to Critical Mass Energy Journal for April, 1981, "...for the lest 10 years the federal government has been accumulating 31,000 tons of radioactive scrap metal as a byproduct of processing uranium for commercial reactors and weapons." As you know, the disposing of all this radioactive waste is an immense problem.

The solution proposed by the Nuclear Regulatory Commission is unbelievable. It plans to lift restrictions on re-using radioactive iron, nickel, copper and aluminum...which would allow commercial scrap dealers to buy the metals and sell them to firms that would use them in consumer and industrial products. Once the plan goes into effect, all of us will be subjected to low levels of radiation every moment of every day, unless we test everything coming into our homes with a Geiger counter.

How do you feel about installing permanent water pipes in your home which will release radiation continually into your water supply? How do you feel about cooking utensils which are continually emitting radiation...or buying food in cans made of radioactive materials?

Personally, the whole prospect is very frightening. Please take whatever action is necessary to prevent NRC's proposed solution from becoming a fact.

We would appreciate hearing from you on this matter.

Very truly yours,

Leland and Eileen Stouter



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

DEC 2 1981

The Honorable John W. Warner United States Senate Washington, D.C. 20510

Dear Senator Warner:

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SECRETARY & SERVICE ANCH 3627

DOCKET NUMBER FR-30, 32, 7

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Sincerely

Carlton Kammerer, Director Office of Congressional Affairs JOHN W. WARNER Minited States Senate WASHINGTON, D.C. 20510 November 18, 1981 Mr. Carlton Kammerer Director Office of Congressional Affairs Nuclear Regulatory Commission 1717 H Street, N.W. Washington, D.C. 20555 Dear Mr. Kammerer: I am writing to bring to your attention the enclosed comments from my constituent, Mr. and Mrs. Leland Stouter. I shall appreciate your reviewing this correspondence and preparing a report on the stated concerns. Please send your reply in duplicate to the following address:

Office of Senator John W. Warner 235 Federal Building 180 West Main Street Abingdon, Virginia 24210

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Thank you for your time and courtesy.

With best wishes,

Since Ly,

John W. Warner

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