

EDO Principal Correspondence Control

FROM: DUE: 08/27/03 EDO CONTROL: G20030459  
DOC DT: 07/29/03  
FINAL REPLY:

Lynn R. And Brenda McCardle  
Jack and Linda Sutton  
Michael and Gail Thomas  
Quakertown, Pennsylvania

TO:

Chairman Diaz

FOR SIGNATURE OF : \*\* GRN \*\* CRC NO: 03-0503

Miller, RI

DESC:

Cobalt-60 Food Irradiation

ROUTING:

Travers  
Norry  
Paperiello  
Kane  
Collins  
Dean  
Burns/Cyr  
Virgilio, NMSS

DATE: 08/08/03

ASSIGNED TO: CONTACT:

RI

Miller

SPECIAL INSTRUCTIONS OR REMARKS:

Ref. G20030435.

Template: SECY-017

ERIDS: SECY-01

**OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET**

*Date Printed: Aug 06, 2003 16:27*

---

**PAPER NUMBER:** LTR-03-0503 **LOGGING DATE:** 08/05/2003  
**ACTION OFFICE:** EDO

**AUTHOR:** Brenda McCardle  
**AFFILIATION:** PA  
**ADDRESSEE:** Nils Diaz  
**SUBJECT:** Concerns cobalt-60 food irradiation

**ACTION:** Direct Reply  
**DISTRIBUTION:** Chairman, Comrs, SECY to Ack

**LETTER DATE:** 07/29/2003  
**ACKNOWLEDGED** No  
**SPECIAL HANDLING:**

**NOTES:**  
**FILE LOCATION:** Adams

**DATE DUE:** 08/27/2003 **DATE SIGNED:**

1745 Klines Mill Road  
Quakertown, PA 18951  
(215) 541-4303

July 29, 2003

Dr. Niles J. Diaz, Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Chairman Diaz:

As residents of Milford Township, Pennsylvania, we are writing to ask for your consideration in a cobalt-60 food irradiation controversy. As you are aware from a letter sent to you by U.S. Senators Arlen Specter and Rick Santorum (dated July 18<sup>th</sup>), there is strong public opposition in our community to the nuclear irradiator. The senators' letter eloquently expressed the township constituents' desire to delay approval of an operating license until we have had the opportunity to formally present our health and safety concerns in an evidentiary hearing before the NRC.

Unlike nuclear power plants, CFC Logistics' proposed irradiation facility is not located in a heavy industrial zone. The plant, currently a cold food storage warehouse, is situated about one mile from an elementary school and a middle school, within hundreds of yards of homes in a densely-populated new housing development, and virtually adjacent to the Quakertown interchange of the northeast extension of the Pennsylvania Turnpike.

In advance of an official hearing requested by members of the local citizens' group formed to fight the irradiator, we wish to apprise you of the following serious safety concerns:

- The NRC Region I office in King of Prussia appears to be poised, after less than 6 months, to license CFC Logistics to possess as much as one million curies of cobalt-60, which will entail the regular shipment of very large amounts of Co-60 to and from the facility. Just one of the dozens of Co-60 "pencils" scheduled to go into the irradiator is sufficient to contaminate an area larger than either Philadelphia or Washington, D.C.
- Food irradiation facilities are considered under the Atomic Energy Act as ultra-hazardous operations, which are not insurable by government or the private insurance industry (Section 170).
- Food irradiation facilities are considered as potential terrorist targets under the statute creating the Office of Homeland Security.
- Cobalt-60 is recognized by the International Atomic Energy Agency as a primary ingredient for "dirty bombs."
- The NRC does not currently require criminal background checks to be completed for irradiation facility employees. We are outraged that such a facility could be opened in the United States after 9/11 with only minimal security precautions. Milford Township has no local police force and lacks adequate emergency response capabilities to address threats from acts of malice and theft against a food irradiation facility.
- Neither the NRC nor the company seeking the license has consulted with Pennsylvania state police and local emergency responders from adjacent townships and counties about the facility's dangers. State police officers are equipped only with Level One splash

Letter to Dr. Niles Diaz

July 29, 2003

Page 2

protection equipment (i.e., gloves and mask) which is useless to protect them from radioactive contamination.

- The irradiator will be placed in a densely populated area in Eastern Pennsylvania with a very high water table, which is dependent upon wells for drinking.
- If an irradiator loses its cooling water (its main form of shielding), lethal doses of radiation will prevent emergency responders from coming near the facility, the cladding surrounding the rods could be compromised, and radiation could enter the water supply.
- This is a first-of-a-kind irradiation facility that has not been tried on an industrial scale. There are several important public safety issues that the NRC admitted it did not address at a public meeting on July 16th. For instance, the wall of the irradiator pool holding one million curies is 6.5 inches thick and may be vulnerable to severe damage from the dropping of heavy objects weighing more than two tons that move over and into the irradiator pool dozens of times a day. No other irradiator has this feature. Given this fact, the NRC and the irradiation unit's designer admitted at the public meeting that:
  1. no drop tests have been performed on the pool,
  2. no statistical studies have been completed to determine the probability of heavy objects falling onto the lip of the pool,
  3. no hydrological or seismic analyses have been done. Note that our community lies in the New Madrid seismic zone. A minor earthquake was sustained as recently as 1998. The worst earthquake ever to hit the United States occurred on December 17, 1811. While its epicenter was New Madrid, Missouri, the event was strong enough to ring church bells in Philadelphia. Scientists estimate that the probability of an earthquake with a magnitude of 6 to 7 occurring in this seismic zone within the next 50 years is higher than 90%.

In view of these considerations, we request that the NRC refrain from issuing a license until:

- (a) security, emergency planning, and response needs are properly addressed with local jurisdictions, the Commonwealth of Pennsylvania, Nuclear Regulatory Commission, and Office of Homeland Security;
- (b) the NRC ensures that independently-conducted and certified drop tests are performed on the irradiator pool and undertakes necessary seismic and hydrological reviews.

We urge the Nuclear Regulatory Commission to update its policies concerning cobalt-60 irradiation facilities as soon as possible. In closing, we ask for your support and any assistance you can provide so that we may address these issues of critical importance.

Respectfully,

*Brenda McCardle*  
*Lynn R. Sutton*

Lynn R. and Brenda McCardle

Jack and Linda Sutton

Michael and Gail Thomas

(on behalf of Milford Township residents)

*Carl & Michael Krum*

*Linda & Jack Sutton*

cc: Cheryl Windsor/Vicky Francis, U.S. NRC Hotline Program (via email and fax)  
Jeffrey Vey, Milford Township Manager