

EDO Principal Correspondence Control

FROM: DUE: 07/31/02

EDO CONTROL: G20020442  
DOC DT: 07/19/02  
FINAL REPLY:

Representative Edward J. Markey

TO:

Chairman Meserve

FOR SIGNATURE OF : \*\* PRI \*\*

CRC NO: 02-0504

Chairman Meserve

DESC:

ROUTING:

FedEx Shipment from Switzerland that was Emitting  
High Levels of Radiation

Travers  
Paperiello  
Kane  
Norry  
Craig  
Burns/Cyr  
Zimmerman, NSIR  
Lee, IP

DATE: 07/22/02

ASSIGNED TO: CONTACT:  
NMSS Virgilio

SPECIAL INSTRUCTIONS OR REMARKS:

Coordinate response with IP.



EDWARD J. MARKEY  
7TH DISTRICT, MASSACHUSETTS  
www.house.gov/markey

ENERGY AND COMMERCE COMMITTEE  
RANKING MEMBER  
SUBCOMMITTEE ON  
TELECOMMUNICATIONS AND  
THE INTERNET  
RESOURCES COMMITTEE

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-2107**

July 19, 2002

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(202) 225-2836

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5 HIGH STREET, SUITE 101  
MEDFORD, MA 02155  
(781) 396-2900  
188 CONCORD STREET, SUITE 102  
FRAMINGHAM, MA 01702  
(508) 875-2900

The Honorable Richard A. Meserve  
Chairman  
Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Chairman:

I am writing to request additional information regarding a FedEx shipment from Switzerland that was emitting high levels of radiation but was not detected until after it was delivered in Louisiana. I remain concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist or are not being enforced, and also that I have received conflicting and confusing accounts of the circumstances surrounding this event.

As you know, a January 10, 2002 article in the New York Times reported that FedEx shipped a 300 pound package containing 9400 curies of radioactive iridium-192 from Paris to the Source Production and Equipment Company in St. Rose, Louisiana. The package was reportedly emitting so much radiation by the time it was delivered that an individual exposed to it could have developed symptoms of radiation poisoning within several hours. For some reason, the radiation leak went undetected by officials at both U.S. Customs and FedEx.

This event raises numerous concerns. This matter may have endangered the health of the individuals who handled (or came close to) the package, and may be indicative of a more systemic problem with the manner in which these shipments are processed, and incidents such as this one could be occurring on a regular basis. Moreover, many reports have detailed the attempts of members of Al Qaeda to obtain radioactive materials in order to create and detonate dirty bombs or improvised nuclear bombs that could kill many people and radioactively contaminate entire communities. The apparent inability to detect radioactive shipments as they enter the U.S. raises the possibility that terrorists could be using our postal and consignment carriers such as FedEx and UPS to send radioactive materials to the U.S. for use in future attacks, just as the hijackers used our flight schools and our airplanes to commit the attacks of September 11.

On January 16, 2002 I sent letters to you, Fedex, UPS and the U.S. Customs (attachment 1). On April 29, 2002, U.S. Customs responded to my letter, stating that, among other things: 1) Customs inspectors with these "highly

sensitive" PRDs who were located in the vicinity of the leaking Fedex package were not alerted by the PRDs to the presence of any radiation and therefore 2) "this suggests that damage to the packaging occurred during the transport to New Orleans [i.e. after it had already passed through U.S. Customs], and that this damage caused radiation leakage" (attachment 2).

However, a May 2, 2002 press release issued by the French Nuclear Safety Agency (see [http://www.asn.gouv.fr/data/information/17\\_2002\\_cdp.asp](http://www.asn.gouv.fr/data/information/17_2002_cdp.asp)) indicates that medical examinations of FedEx agents in France showed that the package was already leaking when it was sent to Roissy airport, and that these individuals had been exposed to about 15 millisieverts of radiation. According to the release, the maximum allowable dose for a member of the public is 1 millisievert per year, and the maximum allowable dose for a nuclear industry worker is 20 millisieverts per year. The release went on to say that some of the stoppers of the tubes containing the radioactive sources had been unscrewed, and the sources fell out of the tubes, which was why the package was leaking.

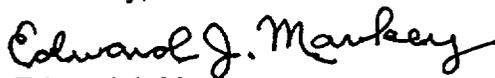
The finding that the package was leaking before it left France appears to be in direct conflict with the April 29, 2002 U.S. Customs response to my January 16, 2002 letter. On May 17, I therefore wrote another letter to the U.S. Customs service (attachment 3) requesting additional information. The July 3, 2002 U.S. Customs response (attachment 4) references the NRC several times, and I am therefore writing to you requesting your prompt assistance in answering the following questions:

- 1) The U.S. Customs response indicates that NRC advised Customs that "it may not be possible to determine the exact point at which the container first became compromised and the rate of exposure/emissions that occurred as the container was transported from Sweden to New Orleans via France."
  - a) Did NRC make this statement to U.S. Customs? If so, please provide a copy of the document in which this statement was made.
  - b) Is the French report that some of the stoppers of the tubes containing the radioactive sources had been unscrewed, and that the sources fell out of the tubes, which was why the package was leaking, true? If so, why wouldn't it be possible to determine the exact point at which the container first became compromised? How could the stoppers have become unscrewed after the package was sealed, unless someone either improperly screwed on the stoppers in Sweden, or, alternatively opened the package, unscrewed the stoppers and then resealed the package? If the French report is true, doesn't this mean that the package was compromised throughout the entire journey?
  - c) Why would it not be possible to calculate the rate of exposure/emissions that occurred? Wouldn't this rate be constant throughout the package's journey, and equal to the rate that was measured at the point of the package's arrival? Why or why not?

- 2) The U.S. Customs response indicates that it has not yet received the final findings from the NRC or the Department of Transportation regarding this situation. When will the NRC findings be completed and sent to U.S. Customs? Please provide a copy of these findings if they have been completed. If they have not yet been completed, please provide me with a copy when they are finalized.
- 3) The U.S. Customs response states that NRC "informed the U.S. Customs Radiation Safety Officer (RSO) that no Customs personnel were exposed."
  - a) Is this true? What is the basis for such a finding? Please provide a copy of the document in which this finding was conveyed and copies of all supporting analysis used to reach this conclusion.
  - b) Do you still believe that no Customs officials were exposed, in light of the French report that Fedex officials were exposed in France? Why wouldn't Customs officials have been exposed?
- 4) Were NRC officials present when the package was opened in Louisiana? If so, please provide a copy of those officials' report/description of the incident.
- 5) Please provide me with a complete list of measures the NRC has taken since September 11 to ensure that radioactive materials are better controlled both within this country and in shipments to this country. For each such measure please indicate whether it is intended to be a permanent or temporary change to NRC procedures.

Thank you very much for your consideration of this important matter. Please provide your responses no later than close of business on Friday August 9. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff or Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,



Edward J. Markey  
Member of Congress

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FRAMINGHAM, MA 01702  
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January 16, 2002

Michael L. Eskew  
Chairman & Chief Executive Officer  
United Parcel Service, Inc.  
55 Glenlake Parkway, NE  
Atlanta, GA 30328

Dear Mr. Eskew:

I am writing to request information regarding the regulations and requirements used by UPS to ensure that radioactive materials are not improperly or illegally shipped to the U.S. from abroad. Based on recent press reports concerning a FedEx shipment that was emitting high levels of radiation but was not detected until after it was delivered, I am concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist or are not being enforced.

A January 10, 2002 article in the New York Times reported that FedEx shipped a 300 pound package containing 9400 curies of radioactive iridium-192 from Paris to the Source Production and Equipment Company in St. Rose, Louisiana. The package was reportedly emitting so much radiation by the time it was delivered that an individual exposed to it could have developed symptoms of radiation poisoning within several hours. For some reason, the radiation leak went undetected by officials at both U.S. Customs and FedEx.

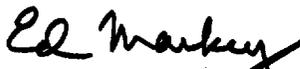
This event raises numerous concerns. In addition to the fact that this matter may have endangered the health of the individuals who handled (or came close to) the package, the incident may be indicative of a more systemic problem with the manner in which these shipments are processed, and incidents such as this one could be occurring on a regular basis. Moreover, many reports have detailed the attempts of members of Al Qaeda to obtain radioactive materials in order to create and detonate dirty bombs or improvised nuclear bombs that could kill many people and radioactively contaminate entire communities.

The apparent inability to detect radioactive shipments as they enter the U.S. raises the possibility that terrorists could be using our postal and consignment carriers such as FedEx and UPS to send radioactive materials to the U.S. for use in future attacks, just as the hijackers used our flight schools and our airplanes to commit the attacks of September 11. Consequently, I ask for your prompt attention in answering the following questions:

- 1) Are exporters of radioactive materials seeking to make a shipment to the U.S. required to ensure that the recipient is licensed by the NRC to possess the material being requested? If so, please fully describe how this requirement is met and who at UPS (presumably working with the NRC and/or U.S. Customs) ensures that this has been done prior to shipment within the U.S. If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 2) Please fully describe the measures taken by UPS to ensure that packages labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors required in each UPS facility/vehicle, the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to government officials), and procedures for handling packages found to be leaking radiation to minimize adverse consequences to public health.
- 3) Please fully describe the measures taken by UPS to ensure that packages not labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors in each UPS facility/vehicle, the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to government officials), and procedures for handling unlabeled packages found to be leaking radiation to minimize adverse consequences to public health.
- 4) Is every package entering the U.S. required to be screened using a radiation detector? If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 5) Do you now plan to conduct radiation screening on all packages (both those labeled as containing radioactive materials and those that are not), now that the public health risk associated with not doing so has been made more clear by this incident? If not, why not?

Thank you very much for your consideration of this important matter. Please provide your responses no later than close of business on Thursday January 31. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff or Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,



Edward J. Markey  
Member of Congress

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7TH DISTRICT, MASSACHUSETTS  
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MEDFORD, MA 02155  
(781) 396-2900  
188 CONCORD STREET, SUITE 102  
FRAMINGHAM, MA 01702  
(508) 875-2900

January 16, 2002

Frederick W. Smith  
Chairman, President & Chief Executive Officer  
FedEx Corporation  
942 South Shady Grove Road  
Memphis, TN 38120

Dear Mr. Smith:

I am writing to request information regarding the regulations and requirements used by FedEx to ensure that radioactive materials are not improperly or illegally shipped to the U.S. from abroad. Based on recent press reports concerning a FedEx shipment that was emitting high levels of radiation but was not detected until after it was delivered, I am concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist or are not being enforced.

A January 10, 2002 article in the New York Times reported that FedEx shipped a 300 pound package containing 9400 curies of radioactive iridium-192 from Paris to the Source Production and Equipment Company in St. Rose, Louisiana. The package was reportedly emitting so much radiation by the time it was delivered that an individual exposed to it could have developed symptoms of radiation poisoning within several hours. For some reason, the radiation leak went undetected by officials at both U.S. Customs and FedEx.

This event raises numerous concerns. In addition to the fact that this matter may have endangered the health of the individuals who handled (or came close to) the package, the incident may be indicative of a more systemic problem with the manner in which these shipments are processed, and incidents such as this one could be occurring on a regular basis. Moreover, many reports have detailed the attempts of members of Al Qaeda to obtain radioactive materials in order to create and detonate dirty bombs or improvised nuclear bombs that could kill many people and radioactively contaminate entire communities.

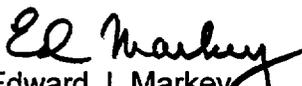
The apparent inability to detect radioactive shipments as they enter the U.S. raises the possibility that terrorists could be using our postal and consignment carriers such as FedEx and UPS to send radioactive materials to the U.S. for use in future attacks, just as the hijackers used our flight schools and our airplanes to commit the attacks of September 11. Consequently, I ask for your prompt attention in answering the following questions:

- 1) Are exporters of radioactive materials seeking to make a shipment to the U.S. required to ensure that the recipient is licensed by the NRC to possess the material being requested? If so, please fully describe how this requirement is met and who at FedEx (presumably working with the NRC and/or U.S. Customs) ensures that this has been done prior to shipment within the U.S. If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 2) Please describe the process by which FedEx packages entering the U.S. are screened for radioactive materials.
  - a) Please fully describe the measures taken by FedEx to ensure that packages labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors required in each FedEx facility/vehicle, the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to government officials), and procedures for handling packages found to be leaking radiation to minimize adverse consequences to public health.
  - b) Were all of these regulations and requirements followed for the shipment of radioactive iridium? Please describe which requirements were met and when, and provide copies of all documentation.
  - c) Please fully describe the measures taken by FedEx to ensure that packages not labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors in each FedEx facility/vehicle, the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to government officials), and procedures for handling unlabeled packages found to be leaking radiation to minimize adverse consequences to public health.
  - d) Is every package entering the U.S. required to be screened using a radiation detector? If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 3) The New York Times article reported that FedEx said that the shipment passed through its system because the shipper and the recipient were known to FedEx, and that had terrorists tried to ship radioactive material the shipment would have been subject to additional security precautions.

- a) Isn't it possible that terrorists, knowing that the FedEx policy is to opt not to do radiation screening of packages when the shipper and recipient are known to FedEx, could simply get jobs at those entities and send their radioactive shipments using packaging from these entities? What security precautions are in place to ensure that radioactive shipments between entities known to FedEx are authorized and legal?
  - b) Do you now plan to conduct radiation screening on all packages (both those labeled as containing radioactive materials and those that are not), now that the public health and security risks associated with not doing so has been made more clear by this incident? If not, why not?
  - c) What additional security precautions do you have in place for shipments sent by shippers or to recipients who are unknown to FedEx? Do you plan to apply these precautions, and/or impose additional security measures, to all shipments of radioactive materials in the future? If not, why not, given the risk to public health and danger of acts of terrorism using radioactive materials?
  - d) What have you done to ensure that all FedEx employees who might have been exposed to radiation from the iridium-192 shipment receive any necessary medical attention? Have any of these individuals experienced any adverse symptoms as a result of this condition?
- 4) The New York Times article stated that some FedEx employees had radiation detection badges, while others did not. Do you plan on increasing the number and location of devices that can measure levels of radiation in light of this incident, and if not, why not?

Thank you very much for your consideration of this important matter. Please provide your responses no later than close of business on Thursday January 31. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff or Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,

  
Edward J. Markey  
Member of Congress

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January 16, 2002

The Honorable Robert C. Bonner  
Commissioner  
U.S. Customs Service  
1300 Pennsylvania Ave., N.W.  
Washington, D.C. 20229

Dear Mr. Commissioner:

I am writing to request information regarding the regulations and requirements used by the U.S. Customs Service to ensure that radioactive materials are not improperly or illegally shipped to the U.S. from abroad. Based on recent press reports concerning a FedEx shipment that was emitting high levels of radiation but was not detected until after it was delivered, I am concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist or are not being enforced.

A January 10, 2002 article in the New York Times reported that FedEx shipped a 300 pound package containing 9400 curies of radioactive iridium-192 from Paris to the Source Production and Equipment Company in St. Rose, Louisiana. The package was reportedly emitting so much radiation by the time it was delivered that an individual exposed to it could have developed symptoms of radiation poisoning within several hours. For some reason, the radiation leak went undetected by officials at both U.S. Customs and FedEx.

This event raises numerous concerns. In addition to the fact that this matter may have endangered the health of the individuals who handled (or came close to) the package, the incident may be indicative of a more systemic problem with the manner in which these shipments are processed, and incidents such as this one could be occurring on a regular basis. Moreover, many reports have detailed the attempts of members of Al Qaeda to obtain radioactive materials in order to create and detonate dirty bombs or improvised nuclear bombs that could kill many people and radioactively contaminate entire communities.

The apparent inability to detect radioactive shipments as they enter the U.S. raises the possibility that terrorists could be using our postal and consignment carriers such as FedEx and UPS to send radioactive materials to the U.S. for use in future attacks, just as the hijackers used our flight schools and our airplanes to commit the attacks of September 11. Consequently, I ask for your prompt attention in answering the following questions:

- 1) Are exporters of radioactive materials seeking to make a shipment to the U.S. required to ensure that the recipient is licensed by the NRC to possess the material being requested? If so, please fully describe how this requirement is met and who at the U.S. Customs and/or the NRC ensures that it is being done consistently and accurately. If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 2) Please describe the process by which packages entering the U.S. are screened for radioactive materials.
  - a) Please fully describe the regulations and requirements for ensuring that packages labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors required at each port of entry to the U.S., the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to the country of origin and/or the shipper of the material), procedures for handling packages found to be leaking radiation to minimize adverse consequences to public health, and the role played by U.S. Customs personnel to ensure that these regulations are being followed.
  - b) Were all of these regulations and requirements followed for the shipment of radioactive iridium? Please describe which requirements were met and when, and provide copies of all documentation. Please also describe which requirements, if any, were not met, and what penalties will be imposed for failing to meet them.
  - c) Please fully describe the regulations and requirements for ensuring that packages not labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors required at each port of entry to the U.S., the paperwork and other reporting requirements for cases where a package is found to be leaking, procedures for handling unlabeled packages found to be leaking radiation to minimize adverse consequences to public health, and the role played by U.S. Customs personnel to ensure that the regulations are being followed.
  - d) Is every package entering the U.S. required to be screened using a radiation detector? If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?

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Sincerely,

*Ed Markey*  
Edward J. Markey  
Member of Congress

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January 16, 2002

The Honorable Richard A. Meserve  
Chairman  
Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Chairman:

I am writing to request information regarding the regulations and requirements used by the Nuclear Regulatory Commission (NRC) to ensure that radioactive materials are not improperly or illegally shipped to the U.S. from abroad. Based on recent press reports concerning a FedEx shipment that was emitting high levels of radiation but was not detected until after it was delivered, I am concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist or are not being enforced.

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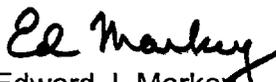
- 1) Are exporters of radioactive materials seeking to make a shipment to the U.S. required to ensure that the recipient is licensed by the NRC to possess the material being requested? If so, please fully describe how this requirement is met and who at the NRC and/or U.S. Customs ensures that it is being done consistently and accurately. If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 2) Please describe the process by which packages entering the U.S. are screened for radioactive materials.
  - a) Please fully describe the regulations and requirements for ensuring that packages labeled as containing radioactive materials are not leaking radiation, including i) the numbers of radiation detectors required at each port of entry to the U.S., ii) the paperwork and other reporting requirements for cases where a package is found to be leaking (including reporting the incident to the country of origin and/or the shipper of the material. Please include requirements contained in NRC regulation, NRC management directives, or cooperative arrangements with foreign countries.), iii) procedures for handling packages found to be leaking radiation to minimize adverse consequences to public health, and iv) the role played by NRC personnel to ensure that these regulations are being followed.
  - b) Please describe how and when the authorities in Sweden and France (through which the iridium container was transshipped) were notified of this incident by the U.S., what the roles of the NRC Office of International Programs and Department of Transportation was in such notification. Additionally, how, when and by whom was the International Atomic Energy Agency informed notified?
  - c) Were all regulations and requirements for ensuring that packages labeled as containing radioactive materials are not leaking radiation followed for the shipment of radioactive iridium? Please describe which requirements were met and when, and provide copies of all documentation. Please also describe which requirements, if any, were not met, and what penalties will be imposed for failing to meet them.
  - d) Please fully describe the regulations and requirements for ensuring that packages not labeled as containing radioactive materials are not leaking radiation, including the numbers of radiation detectors required at each port of entry to the U.S., the paperwork and other reporting requirements for cases where a package is found to be leaking, procedures for handling

unlabeled packages found to be leaking radiation to minimize adverse consequences to public health, and the role played by NRC personnel to ensure that the regulations are being followed.

- e) Is every package entering the U.S. required to be screened using a radiation detector? If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?
- 3) Please describe how and when the NRC, both in headquarters and in Region IV, learned of the incident, with a specific description of the role of the NRC's Incident Response Center and the U.S. Government's National Response Center in such notification.
- 4) It is my understanding that the IAEA designated this incident a Level 3 on the IAEA's International Nuclear Event Scale (INES), which is the most serious nuclear incident classification. What was the basis for making this determination? How many other Level 3 incidents have there been in the U.S.? For each such incident, please fully describe the circumstances.
- 5) How much radiation exposure was potentially received by personnel along the shipping route and what steps are being taken to determine actual exposure and treatment of exposed individuals?
- 6) Please describe how the package in question is being handled and processed, including a description of the role of the NRC, foreign entities, and the Source Production and Equipment Company, the receiver of the package.

Thank you very much for your consideration of this important matter. Please provide your responses no later than close of business on Thursday January 31. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff or Mr. Jeff Duncan of my staff at 202-225-2836.

Sincerely,

  
Edward J. Markey  
Member of Congress



# U.S. Customs Service

1300 Pennsylvania Avenue, N.W. Washington, D.C. 20229  
202-927-2001 Fax 202-927-1380

*Commissioner of Customs*

April 29, 2002

The Honorable Edward J. Markey  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Congressman Markey:

Thank you for your letter of January 16, 2002, regarding the regulations and requirements used by the U.S. Customs Service to ensure that radioactive materials are not improperly or illegally shipped to the United States from abroad. The Customs Service shares the concerns that are raised in your letter and we continue to search for new ways and methods to protect our Nation from the improper importation of radiological materials. We are providing answers to the following questions that were raised in your letter.

- 1. Are exporters of radioactive materials, seeking to make a shipment to the U.S., required to ensure that the recipient is licensed by the Nuclear Regulatory Commission (NRC) to possess the material being requested? If so, please fully describe how this requirement is met and who at the U.S. Customs and/or the NRC ensures that it is being done consistently and accurately. If not, then how do you know that Al Qaeda members, other terrorist organizations, or citizens of hostile foreign nations have not already imported radioactive materials from abroad for use in future terrorist attacks in the U.S.?**

While the NRC requires importers of radioactive material to be licensed, current regulations do not require Customs to verify these licenses. Customs is currently working with the NRC in order to facilitate such a requirement. Customs has importation records of all legitimate shipments of radioactive materials that include the shipper, consignee, classification (tariff number), description, and total value of the items. The U.S. Customs Service Office of Investigations in conjunction with the Office of Field Operations is continually researching to determine whether or not Al-Qaeda members have imported radioactive materials from abroad.

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**2. Please describe the process by which packages entering the U.S. are screened for radioactive materials.**

a). Customs initiated a Radiation Detection Program in 1997. The type of radiation detection and identification equipment in use at each port varies but one or more of the following types of equipment is being utilized: Personal Radiation Detectors (PRDs); upgraded X-ray units; portal detectors; or isotope identifiers. Customs policy states that any package emitting radiation must be isolated and investigated for the safety of human life and until the legitimacy of the shipment is determined. Environmental, human, and public safety is maintained at all times. In cases where there is an immediate threat to public safety, designated authorities will immediately contact the local radiological incident responders. Radioactive materials that are determined to be inadmissible will be held in Customs custody until another Federal agency (NRC, Department of Energy, or Environmental Protection Agency) can respond and take possession of the materials.

Customs has determined that an additional 4,300 PRDs are needed in order to provide a PRD to each of our inspectors, canine enforcement officers, mail specialists, and seized property specialists. In December 2001, a PRD acquisition plan was devised to procure these additional detectors using \$7.3 million from various funding sources. It is anticipated that the balance of these detectors will be in place by January 2003.

b). All regulations and requirements were followed for the shipment of radioactive iridium from Sweden that passed through the FedEx facility in Memphis, Tennessee. This shipment was not selected for examination because it was a properly licensed, low-risk, legitimate shipment. Customs inspectors with PRDs were in the designated area when this shipment was staged for transport to New Orleans. The PRDs are highly sensitive, but did not alert when in close proximity to this shipment. This suggests that damage to the packaging occurred during the transport to New Orleans, and that this damage caused radiation leakage.

c). Neither Customs nor the NRC has regulations that are specifically designed to ensure that packages not labeled as containing radioactive material are not leaking radiation. As noted above, however, the Customs Service does have procedures in place to detect radiation leaks. If a package were found to be leaking, the port would employ Customs Radiation Detection Program, Standard Operating Procedure, as described in the response to question 2a.

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d). Not all packages entering the United States are subject to radiation screening. While there is a need for additional radiological detection equipment, Customs does screen and target shipments for heightened scrutiny based on anomalies in the entry data, prior compliance violations, lookouts in our computer systems, and other indicators of suspicion.

I appreciate your interest in the Customs Service. If we may offer further assistance, please contact me or have a member of your staff contact Mr. Richard F. Quinn, Deputy Assistant Commissioner, Office of Congressional Affairs, at (202) 927-1760.

Yours truly,

A handwritten signature in black ink, appearing to read "Robert C. Bonner". The signature is written in a cursive, flowing style.

Robert C. Bonner  
Commissioner

EDWARD J. MARKEY  
7TH DISTRICT, MASSACHUSETTS  
www.house.gov/markey

ENERGY AND COMMERCE COMMITTEE  
RANKING MEMBER  
SUBCOMMITTEE ON  
TELECOMMUNICATIONS AND  
THE INTERNET  
RESOURCES COMMITTEE

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-2107**

2108 RAYBURN BUILDING  
WASHINGTON, DC 20515-2107  
(202) 225-2836

DISTRICT OFFICES:  
5 HIGH STREET, SUITE 101  
MEDFORD, MA 02155  
(781) 396-2900  
188 CONCORD STREET, SUITE 102  
FRAMINGHAM, MA 01702  
(508) 875-2900

May 17, 2002

The Honorable Robert C. Bonner  
Commissioner  
U.S. Customs Service  
1300 Pennsylvania Ave., N.W.  
Washington, D.C. 20229

Dear Mr. Commissioner:

I am writing to request additional information regarding the regulations and requirements used by the U.S. Customs Service to ensure that radioactive materials are not improperly or illegally shipped to the U.S. from abroad. As you know, a recent Fedex shipment from Europe that was emitting high levels of radiation was not detected until after it was delivered to Louisiana, and I am concerned that controls adequate to prevent the improper or illegal importation of dangerous radioactive materials either do not exist, do not work, or are not being enforced.

A January 10, 2002 article in the New York Times reported that FedEx shipped a 300 pound package containing 9400 curies of radioactive iridium-192 from Paris to the Source Production and Equipment Company in St. Rose, Louisiana. The package was reportedly emitting so much radiation by the time it was delivered that an individual exposed to it could have developed symptoms of radiation poisoning within several hours. For some reason, the radiation leak went undetected by officials at both U.S. Customs and FedEx.

On January 16, 2002, I wrote you and asked for some information regarding this incident. On April 29, 2002, you responded to my letter, stating that: 1) U.S. Customs had determined that an additional 4,300 Personal Radiation Detectors (PRDs) are needed for inspectors and other Customs officials, 2) that Customs inspectors with these "highly sensitive" PRDs who were located in the vicinity of the leaking Fedex package were not alerted by the PRDs to the presence of any radiation and therefore 3) "this suggests that damage to the packaging occurred during the transport to New Orleans [i.e. after it had already passed through U.S. Customs], and that this damage caused radiation leakage."

However, a May 2, 2002 press release issued by the French Nuclear Safety Agency (see [http://www.asn.gouv.fr/data/information/17\\_2002\\_cdp.asp](http://www.asn.gouv.fr/data/information/17_2002_cdp.asp)) indicates that medical examinations of FedEx agents in France showed that the package was already leaking when it was sent to Roissy airport, and that these individuals had been exposed to about 15 millisieverts of radiation. According to the release, the maximum allowable dose for a member of the public is 1 millisievert per year, and the maximum allowable dose for a nuclear industry worker is 20 millisieverts per year. The release went on to say that some of the stoppers of the tubes containing the radioactive sources had been unscrewed, and the sources fell out of the tubes, which was why the package was leaking.

The finding that the package was leaking before it left France appears to be in direct conflict with your April 29, 2002 response to my January 16, 2002 letter. Consequently, I ask that you provide me with prompt responses to the following questions:

- 1) When did you become aware of the French report that concluded the package was leaking prior to its departure from France? Do you have any reason to doubt the accuracy of that report? Please provide copies of all correspondence related to the French investigation of this incident.
- 2) Do you believe that it is possible that the PRDs used by the Customs inspectors who were in the vicinity of the leaking package malfunctioned? If so, what are you doing to ensure that the PRDs used by these and other Customs officials are working? If not, why didn't the PRDs alert the inspectors to the high levels of radiation being emitted from the package?
- 3) Have you performed medical examinations of the Customs inspectors who were in the vicinity of the leaking package? If so, what were the results? If not, why not?
- 4) Are you certain that the PRDs Customs is currently using (as well as those it intends to purchase in the future) can adequately perform the function for which they are intended?
- 5) The French report stated that when the package was opened in the presence of American officials in Louisiana, it was found that the tops of some of the tubes containing the radioactive sources were unscrewed. Is that true? If so, when did you find out that this was the case? Was a U.S. Customs official onsite when the package was opened? Please provide all documentation.
- 6) If U.S. Customs observed the package being opened, or was informed before April 29, 2002, that the tops of the tubes inside the package were unscrewed, why did you inform me that the evidence suggested that the damage occurred after the package arrived in the U.S.? Wouldn't this conclusion have meant that someone would have had to open the package, unscrew the tops of the tubes, and then reseal the package?
- 7) My understanding is that your decision to purchase 4,300 additional PRDs means that every Customs inspector should (if the PRDs work properly) be alerted if they are in the vicinity of radiation. However, this does not necessarily ensure that every package entering the U.S. will be screened for radiation. Is it your policy to take steps to ensure that all packages entering the U.S., whether they are labeled radioactive or not, will be screened for radiation? If so, please describe how and when this will be accomplished. If not, why not?

Thank you for your attention to this important matter. Please provide your response no later than May 31, 2002. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff of my staff at 202-225-2836.

Sincerely,

  
Edward J. Markey



## U.S. Customs Service

1300 Pennsylvania Avenue, N.W. | Washington, D.C. 20229  
202-927-2001 | Fax 202-927-1380

July 3, 2002

*Commissioner of Customs*

The Honorable Edward J. Markey  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Congressmen Markey:

Thank you for your letter of May 17, 2002, regarding a FedEx shipment of radioactive iridium-192 from Paris, France, to St. Rose, Louisiana. In your correspondence, you expressed concerns over whether the package may have been leaking before it left France and subsequently went undetected by the U.S. Customs Service and FedEx. We have recently completed our review of this matter. Please allow me to outline our findings.

First, let me apologize for the delay in this response. I assure you that Customs shares the concerns that you raised in your letter and we continue to search for new ways and methods to protect our Nation's borders. We are providing answers to the following questions raised in your letter:

1. When did you become aware of the French report that concluded the package was leaking prior to its departure from France? Do you have any reason to doubt the accuracy of that report? Please provide copies of all correspondence related to the French investigation of this incident.

Customs became aware of the French press release that concluded the package was leaking prior to its departure from France in mid-May. Because we have not received the final Nuclear Regulatory Commission (NRC) or Department of Transportation (DOT) findings regarding this situation, we cannot elaborate on the validity of this information. The NRC has advised us that it may not be possible to determine the exact point at which the container first became compromised and the rate of exposure/emissions that occurred as the container was transported from Sweden to New Orleans via France.

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2. Do you believe that it is possible that the PRDs used by the Customs inspectors who were in the vicinity of the leaking package malfunctioned? If so, what are you doing to ensure that the PRDs used by these and other Customs officials are working? If not, why didn't the PRDs alert the inspectors to the high levels of radiation being emitted from the package?

It is very unlikely that the PRDs worn by the inspectors malfunctioned. Customs conducted a validity test of its PRDs in mid-March and April of this year. The tests revealed that of the 101 PRDs tested, 99 were functioning normally. Of the remaining two, one actually failed, while the other only required a battery change.

In order to ensure that the PRDs are working properly, We have performed tests to validate the new PRD check sources that we are fielding. We have now fielded 300 PRD check sources and anticipate fielding 600 more as the inventory of PRDs in the field continues to increase.

We do not know how close to the vicinity of the shipment that the inspectors were working, or if there was any object that could have shielded the PRD from detecting the radiation. Additionally, we do not know the exact position of this shipment in the FedEx facility. In the case of this shipment of iridium-192, the radiation emission could have been directional and the inspectors' PRDs would have to have been positioned in line with the radiation emissions to sense these levels.

3. Have you performed medical examinations of the Customs inspectors who were in the vicinity of the leaking package? If so, what were the results? If not, why not?

No medical examinations were performed. Medical examinations were not required as the NRC informed the U.S. Customs Radiation Safety Officer (RSO) that no Customs personnel were exposed.

4. Are you certain that the PRDs Customs is currently using (as well as those it intends to purchase in the future) can adequately perform the function for which they are intended?

The PRDs were developed and adopted by the U.S. Department of Energy. In tests conducted in June of this year, our Office of Information Technology/Applied Technology Division and our RSO have determined that the PRDs have the quickest alert among civilian

and military detectors and have significant accuracy for displayed readings. Until there is another evolution in micro electronics, the PRDs now issued by Customs are reliable, accurate, and durable for Customs use.

5. The French report stated that when the package was opened in the presence of American officials in Louisiana, it was found that the tops of some of the tubes containing the radioactive sources were unscrewed. Is that true? If so, when did you find out that this was the case? Was a U.S. Customs official onsite when the package was opened? Please provide all documentation.

No U.S. Customs officials were present when the shipment was opened in Louisiana. Customs has not received the final report on this incident from the NRC or the DOT.

6. If U.S. Customs observed the package being opened, or was informed before April 29, 2002, that the tops of the tubes inside the package were unscrewed, why did you inform me that the evidence suggested that the damage occurred after the package arrived in the U.S.? Wouldn't this conclusion have meant that someone would have had to open the package, unscrew the tops of the tubes, and then reseal the package?

Again, no U.S. Customs officials were present when the shipment was opened. We informed you that the evidence suggested that the leak occurred in the transportation between Memphis and Louisiana based on the most current information available to us. At that time, we were unaware of the French press release that suggested that the package was emitting radiation in France prior to its departure for the United States.

7. My understanding is that your decision to purchase 4,300 additional PRDs means that every Customs inspector should be alerted if they are in the vicinity of radiation. However, this does not necessarily ensure that every package entering the U.S. will be screened for radiation. Is it your policy to take steps to ensure that all packages entering the U.S., whether they are labeled radioactive or not, will be screened for radiation. If so, please describe how and when this will be accomplished. If not, why not?

Customs is striving to expand its current layered approach to screen all packages with nonintrusive inspection technology. In addition to the PRDs, Customs is taking steps to procure additional radiological detection devices such as portal monitors, isotope identifiers, and VACIS to screen items entering the United States.

I appreciate your interest in the Customs Service. If we may offer further assistance, please contact me or have a member of your staff contact Mr. Richard F. Quinn, Deputy Assistant Commissioner, Office of Congressional Affairs, at (202) 927-1760.

Yours truly,

A handwritten signature in black ink, appearing to read "R. C. Bonner", with a long horizontal flourish extending to the right.

Robert C. Bonner  
Commissioner