



May 6<sup>th</sup>, 2015

Licensing Assistance Team  
Division of Nuclear Materials Safety  
US Nuclear Regulatory Commission, Region I  
2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406-2713

References: License #18-19750-02E

Subject: Renewal Addendum

The purpose of this letter is to add an addendum to our previous request for the renewal of license number 18-19750-02E dated 4/30/15. Based on correspondence with Richard Struckmeyer on 5/4/15 (see attached) it appears that further information or clarification might be required to properly process our amendment request. Two copies of this addendum are provided within this mailing to be included for your review of this renewal package.

NRC Form 313 Supplemental Information:

5. **RADIOACTIVE MATERIAL and**  
6. **PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL USED:** Provide the following information; element and mass number for each, chemical and/or physical form, and maximum amount of possession at any one time.

Radioisotope	Form or Manufacturer /Model No.	Maximum Quantity	Purpose of Use
AM-241	Nuclear Radiation Dev Corp (NRD) Foil# A-001	No single source over 1.0 uCi $\pm$ 10%  Total not to exceed 15,000 uCi	Ion smoke detectors

Regulation Review:

**§ 32.14 Certain items containing byproduct material; requirements for license to apply or initially transfer**

- (a) UTC satisfies the general requirements specified in § 30.33 as evidenced by their Radiation Safety Program and long term experience with the manufacturing of ion smoke detectors.
- (b) (1) See NRC form 313 Section 5 and 6 supplemental information above.
  - (2) No changes or additions to detector chamber designs since previous renewal. Please refer to Renewal Application, Dated Dec 23, 2005.
  - (3) No changes or additions to detector chamber designs since previous renewal. Please refer to Renewal Application, Dated Dec 23, 2005.
  - (4) UTC ion smoke detectors meet requirements for exception.
  - (5) Not require for ion smoke detectors.
  - (6) No changes in process since previous renewal. Please refer to Renewal Application, Dated Dec 23, 2005.

(7) UTC ion smoke detectors do not exceed 1.0 microcuries per design of the product and ion specification.

(8) Upon request.

(c) UTC ion smoke detectors do not exceed 1.0 microcuries per design of the product and ion specification.

(d) Upon request.

**§ 32.15 Same: Quality assurance, prohibition of transfer, and labeling.**

(a) Not required for ion smoke detectors;

(b) UTC certifies compliance to these restrictions;

(d)(2) UTC ion smoke detectors are labeled in compliance with this section as follows:

- (i) Each detector has a durable, legible, readily visible label or marking on the external surface of the detector containing:
  - (A) The following statement: "CONTAINS RADIOACTIVE MATERIAL";
  - (B) The name of the radionuclide ("americium-241" or "Am-241") and the quantity of activity; and
  - (C) An identification of the person licensed under § 32.14 to transfer the detector for use under § 30.15(a)(7) of this chapter or equivalent regulations of an Agreement State.
- (ii) The labeling or marking specified in paragraph (d)(2)(i) of this section is located where it will be readily visible when the detector is removed from its mounting.
- (iii) The external surface of the point-of-sale package has a legible, readily visible label or marking containing:
  - (A) The name of the radionuclide and quantity of activity;
  - (B) An identification of the person licensed under § 32.14 to transfer the detector for use under § 30.15(a)(7) or equivalent regulations of an Agreement State; and
  - (C) The following or a substantially similar statement: "THIS DETECTOR CONTAINS RADIOACTIVE MATERIAL. THE PURCHASER IS EXEMPT FROM ANY REGULATORY REQUIREMENTS."
- (iv) Upon request

**§ 32.16 Certain items containing byproduct material: Records and reports of transfer.**

(a) UTC has filed its annual report consistent to this requirement and will continue to do so, meeting the following requirements:

- (1) The report must clearly identify the specific licensee submitting the report and include the license number of the specific licensee.
- (2) The report must indicate that the products are transferred for use under § 30.15 of this chapter, giving the specific paragraph designation, or equivalent regulations of an Agreement State.

(b) UTC has and will continue to meet the additional report requirements listed:

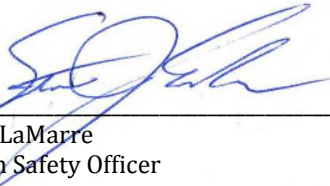
- (1) A description or identification of the type of each product and the model number(s), if applicable;

- (2) For each radionuclide in each type of product and each model number, if applicable, the total quantity of the radionuclide; and
  - (3) The number of units of each type of product transferred during the reporting period by model number, if applicable.
- (c)(1) UTC will file the report by January 1<sup>st</sup> each year for the previous year as it has done in the past.
- (2) UTC will file a report within 30 days for the current calendar years after ceasing distribution.
- (d) If no transfers of byproduct material have been made under § 32.14 during the reporting period, UTC will indicate on its annual report.
- (e) UTC shall maintain the record of a transfer for one year after the transfer is included in a report to the Commission.

Questions regarding this license amendment request should be directed to the Radiation Safety Officer:

Steven J. LaMarre  
Radiation Safety Officer  
Telephone: 207-217-0672  
E-mail: steven.lamarre@utc.com

Sincerely,



\_\_\_\_\_  
Steven J. LaMarre  
Radiation Safety Officer

5-06-15

\_\_\_\_\_  
Date