



July 24, 2003

Ms. Marissa Bailey
M.S. T-5F5
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Amendment to NRC Materials License No. 20-15285-03E

Dear Ms. Bailey,

As I previously discussed with Dr. John Jankovich, we would like to have our NRC Materials License No. 20-15285-03E amended for the distribution of our Model CPD-705X ionization smoke detectors. Due to parts availability issues, we would like to have our license amended to allow us to distribute an alternate construction of these smoke detectors.

This alternate construction assembly is functionally and electrically identical to our existing smoke detector, however; it will use an alternate Americium - 241 source, Model No. AMM-1001H, that has a radioactivity of 0.8 microcuries. This new source is from the same manufacturer, AEA Technology plc, which supplies our current source that has a radioactivity of 0.7 microcuries. Please note that the company name was changed from Amersham Corp. to AEA Technology plc.

Attached are two copies of; a description which identifies the differences between this alternate construction assembly and our current assembly, (per NUREG -1556, Vol.3, Sec. 10 requirements), copies of the new drawings for the alternate assembly and a marked-up copy of the license.

Please review this information and let me know if there is anything else you will need to amend this license. Thank you for your help, if you have any questions concerning this subject, please contact me.

Regards,

Terry Garland
Manager, D&A
Project Development
Phone: 508 881-2000 (Ext. 2364)
Fax: 508 231-2015
e-mail: t.r.garland@kidde-fenwal.com

Enclosures

Cc: Bill Sawyer, K-F RSO

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Kidde Fenwal
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Ashland, MA 01721

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www.kidde-fenwal.com

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U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 04

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Kidde-Fenwal, Inc.</p> <p>2. 400 Main Street Ashland, Massachusetts 01721</p>	<p>In accordance with application dated March 23, 2002,</p> <p>3. License number 20-15285-03E is amended in its entirety to read as follows:</p> <p>4. Expiration date March 31, 2012</p> <p>5. Docket No. 030-32498 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Americium Americium-241</p>	<p>7. Chemical and/or physical form</p> <p>A. Foil sources (Nuclear Radiation Development Model A-001 Amersham Corp. Models AMM-1001 AMM-1001H or AMM-1001D)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not Applicable (See Condition 11)</p> <p>AEA Technology PIC</p>
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9. Authorized use:

Pursuant to Section 32.26, 10 CFR Part 32, the licensee is authorized to distribute smoke detector devices specified in Condition 10 to persons exempt from the requirements for a license pursuant to Section 30.20, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.

CONDITIONS

10. The following smoke detector devices may be distributed pursuant to this license provided the amount of Americium-241 contained in the device does not exceed the amounts specified in the following table:

Device Model	Maximum Quantity per Device
CPD-705X	0.8 0.7 microcuries

11. This license does not authorize possession or use of licensed material.

12. The licensee may distribute only from its facility located at 400 Main Street, Ashland, Massachusetts.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
20-15285-03E

Docket or Reference Number
030-32498

Amendment No. 04

CONDITIONS

(Continued)

13. The licensee shall file periodic reports as specified in Section 32.29(c), 10 CFR Part 32.
14. Except as specifically provided otherwise by this license, the licensee shall conduct its program in accordance with the statements, representations and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations:
- A. Letter dated November 27, 1991;
 - B. Letter dated December 9, 1991;
 - C. Letter dated May 27, 1992;
 - D. Letter and application dated August 14, 1992;
 - E. Letter dated August 24, 1992;
 - F. Letter dated October 6, 1996;
 - G. Letter dated February 28, 1997, with enclosure;
 - H. Facsimile dated April 8, 1997;
 - I. Facsimile dated July 29, 1997;
 - J. Registry No. NR-0668-D-101-E;
 - K. Application dated August 22, 2001;
 - L. Letter dated November 7, 2001;
 - M. Electronic mail dated March 15, 2002; and
 - N. Letter dated March 23, 2002.



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

DATE: July 22, 2002

BY: *Anthony S. Kirkwood*

Anthony S. Kirkwood
Materials Safety and Inspection Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards
Washington, D.C. 20555

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDED IN ITS ENTIRETY)

NO: NR-0668-D-101-E

DATE: July 22, 2002

PAGE 1 OF 3

DEVICE TYPE: Smoke Detector

MODEL: CPD 7051 and 7052

DISTRIBUTOR:

Kidde Fenwal
400 Main Street
Ashland, MA 01721

MANUFACTURERS:

For Model CPD 7051:

Nohmi Bosai, Ltd.

7-3 Kudan Minami, 4-Chome

Chiyoda-bu Tokyo 102, Japan

For Model CPD 7052:

Kidde Fenwal

400 Main Street

Ashland, MA 01721

SEALED SOURCE

MODEL DESIGNATION:

Amersham AMM.1001H

NRD A-001 (Model CPD 7052 only)

ISOTOPE:

Americium-241

MAXIMUM ACTIVITY:

0.7 microcurie (25.9 kBq)

LEAR TEST FREQUENCY:

Not required

PRINCIPAL USE:

(P) Ion Chamber Smoke Detector

CUSTOM DEVICE:

_____ YES _____ X NO

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDED IN ITS ENTIRETY)

NO.: NR-0668-D-101-E

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DEVICE TYPE: **Smoke Detector**

DESCRIPTION:

The Model CPD 7051 is a dual chamber type smoke detector that contains one Amersham AMM.1001H source of 0.7 microcurie (25.4 kBq) per detector. These CPD 7051 Models are manufactured in Japan, and are distributed by Kidde Fenwal.

The Model CPD 7052 is also a dual chamber type smoke detector that contains one NRD A-001 source or Amersham AMM.1001H source of 0.7 microcurie (25.4 kBq) per detector. These CPD 7052 Models are manufactured in Ashland, MA.

The source assembly is the source foil mounted to a 300 Series stainless steel plate and is champed by a 300 Series stainless steel source cover which has three integrally formed tabs which are mechanically folded over the back of the source plate and source cover. A threaded stud which is a part of and located beneath the source plate is then passed through the polycarbonate support plate and the printed circuit board and secured with a washer - lock nut thus forming secondary and tertiary protection above the source assembly.

REFERENCES:

The following supporting documents for the Models CPD 7051 and 7052 smoke detectors are hereby incorporated by reference and are made a part of this registry document.

- This registry sheet was originally compiled from information contained in License No. 20-15285-02E
- Kidde Fenwal, Inc.' letter dated November 27, 1991, with enclosures thereto.
- Kidde Fenwal, Inc.' letter dated December 13, 1991.
- Kidde Fenwal, Inc.' letter dated April 1, 1992, with enclosures thereto.

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDED IN ITS ENTIRETY)

NO.: NR-0668-D-101-E

DATE: July 22, 2002

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DEVICE TYPE: **Smoke Detector**

REFERENCES:

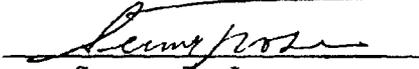
- **Kidde Fenwal, Inc.' letters dated March 23, 2002, and May 13, 2002, with enclosures thereto.**

ISSUING AGENCY:

U.S. Nuclear Regulatory Commission

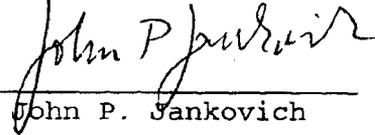
Date: July 22, 2002

Reviewer:


Seung J. Lee

Date: July 22, 2002

Concurrence:


John P. Jankovich