

SEP 17 1998

03032498

VOID SHEET

TO: License Fee Management Branch
FROM: Anthony S. Kirkwood
SUBJECT: VOIDED APPLICATION

Control Number: 021878
Applicant: Kidde-Fenwal, Inc.
Date Voided: 09/17/98
Reason for Void: After several

attempts, we were unable to obtain
sufficient information regarding the
QA/QC control program to complete
this action. (SSD 96-104 and 98-32).
LC 10 corrected to agree with old registry,
(Error found during review).

Anthony S. Kirkwood 9/17/98
Signature Date

Attachment:
Official Record Copy of
Voided Action

FOR LFMB USE ONLY

Final Review of VOID Completed:

- ☐ Refund Authorized and processed
☒ No Refund Due
☐ Fee Exempt or Fee Not Required

Comments: Aft. Review

Log completed ☐
Processed by: SK

9809230325 980917
PDR RC # PDR
SSD

230003

SEP 17 1998

Kidde-Fenwal, Inc.
ATTN: Bill Sawyer
Radiation Safety Officer
400 Main Street
Ashland, Massachusetts 01721

Dear Mr. Sawyer:

This refers to a request in a letter dated October 6, 1996, from Robert MacNutt, to amend device Registration Certificate No. NR-668-D-101-E, requesting to add Kidde-Fenwal (KF) as a manufacturer of the Model CPD-705X smoke detector, in addition to Nohmi-Bosai (NB), in Japan.

After several attempts, we were unable to obtain sufficient information regarding the quality assurance/quality control program to complete this action (enclosure 1 identifies specific issues of concern). As a result, we are stopping our review of this item and will take no further action. This is without prejudice to the submission of a new application. If you choose to submit a new application, please ensure that your application fully and clearly addresses all items in Appendix C of Regulatory Guide 6.9 (RG 6.9), Establishing Quality Assurance Programs For The Manufacture And Distribution Of Sealed Sources And Devices Containing Byproduct Material, dated February 1995 (enclosure 2), and also ensure that the issues in enclosure 1 are specifically addressed.

During our review, we noticed that the maximum quantity per device for Model CPD-705X was listed as 1.6 micorcuries on the your exempt distribution license, and listed as 1.5 microcuries on the registration certificate. To correct this, please find enclosed a corrected copy of Amendment No. 02 of NRC License No. 20-15285-03E, listing the maximum quantity per device for Model CPD-705X as 1.5 microcuries (enclosure 3). Please note that the expiration date has been changed to reflect the one-time extension of license described in our letter to you dated June 4, 1996.

Please note that you must continue to abide by all current requirements in your registry certificate and exempt license.

If you have any questions, please call me at (301) 415-7273.

Sincerely,

LSJ

Mr. Steven Baggett, Deputy Branch Chief
Materials Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

Enclosures: as stated

Distribution: IMNS r/f

NE01

NR 668-D-101-E

98-32

MBurgess, MSB

DOCUMENT NAME: H:\EXEMPT\32.26\VOID\KIDDEFEN.ML1

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure
"E" = Copy with attachment/enclosure "N" = No copy

OFFICE	IMNS	<input checked="" type="checkbox"/> IMNS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	ASKirkwood:ask <i>ask</i>	SLBaggett				
DATE	09/17/98	09/17/98				

OFFICIAL RECORD COPY

SPECIFIC ISSUES OF CONCERN - QUALITY ASSURANCE
(Information from new binder sent on 6/3/98)

Below are listed specific comments pertaining to the documents that were submitted in support of the request to add Kidde-Fenwal (KF) as a manufacturer of the Model CPD-705X smoke detector. If Kidde-Fenwal chooses to submit a new application, the application must fully and clearly address all items in Appendix C of Regulatory Guide 6.9 (RG 6.9), Establishing Quality Assurance Programs For The Manufacture And Distribution Of Sealed Sources And Devices Containing Byproduct Material, dated February 1995 (Enclosure 2), and specifically address the issues listed below.

KF manufactured and distributed detector

1. Although the LTPD 5% leak test in RG 6.9 was committed to for multiple units on one wipe sample, the threshold is still 0.005 microcurie per wipe (not per device). Dividing total surface area wiped on multiple units with a single wipe as you discussed is not consistent with our longstanding position (see RG 6.9)(see # 5 also).
2. Although the RG 6.9 LTPD 5% sample for design conformity and labels on the point of sale package were committed to, KF also needs to add the labels on the detector to this sample (see # 6 also).

NB manufactures and distributes to KB

3. Please note that if KF is relying on NB QA/QC to satisfy the distributor requirements in Appendix C of RG 6.9, then KF must commit to auditing NB. Audits can be performed by KF, or by an independent third-party contracted by KF. Your application should describe what the auditing will check for, and frequency of audits. Otherwise, KF must perform the checks in the U.S., prior to distribution.
4. Conflicting information is found in the submittal. For example, the letter dated 11/27/91 refers to: (1) LTPD 5% sample rates for the label checks in Appendix M (9.1, c.) which conflicts with 100% label checks listed in the letter text (see Appendices L, Item 2. & O, Item 3); (2) LTPD 5% sample rates for leak checks in Appendix M (9.1, b) conflict with a step-down 5/2 1/2/1% (straight percentage) leak check plan in the letter text which refers to Appendix P, Item C. (also note that depending on the lot size, the straight percentage plan listed may not be consistent with RG 6.9 LTPD 5% sampling numbers); (3) Appendix H, Item A. and Appendix P, Item B. first article design conformity checks conflict with RG 6.9 LTPD 5% design conformity checks. Your application should describe the sampling plans that will be used, and should not contain conflicts between sections of the application and/or RG 6.9.
5. For multiple units on one wipe sample, the threshold is still 0.005 microcurie per wipe (not per device). Dividing total surface area wiped on multiple units with a single wipe as you discussed in Appendix M is not consistent with the requirements in RG 6.9.
6. Design conformity checks were not submitted in Appendix O for NB outgoing quality

procedure nor adequately covered in Appendices H, L and R to fully ensure that the design meets all drawings submitted in support of the application, e.g., only gross checks of dimensions of outside cover/base and insect screen were provided. NB needs to commit to check dimensions and materials critical to remainder of ion chamber design, such as: 1) materials and dimensions of ion chamber components and circuit board dimensions and 2) ion chamber and smoke detector assembly.

KF QC on NB manufactured product arriving in the U.S.

7. Appendix P sampling plan does not satisfy minimum sampling rates in RG 6.9 Appendix C table on wipe testing (see # 4).
8. In Appendix P, the information listed in the second paragraph of Paragraph C. through all of Paragraph D. is not sufficient to meet RG 6.9 table on design conformity required of the distributor. Note that an alternate approach to meeting these requirements would be for NB to perform the design conformity checks at the RG 6.9 table on design conformity sample size, then KF to perform audits of NB (see #3).
9. Paragraph E. of Appendix P needs to clarify that 100% of the lot will be re-examined if one reject is detected in the sample.

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 02

MATERIALS LICENSE

CORRECTED COPY

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.

Licensee	In accordance with dated
1. Kidde-Fenwal, Inc.	August 14, 1992,
2. 400 Main Street	3. License number 20-15285-03E is amended in
Ashland, Massachusetts 01721	its entirety to read as follows:
	4. Expiration date October 31, 2001
	5. Docket No. 030-32498
	Reference No. 20-15285-02E

6. Byproduct, source, and/or special nuclear material

7. Chemical and/or physical form

8. Maximum amount that licensee may possess at any one time under this license

A. Americium-241

A. Foil sources (Nuclear Radiation Development Model A-001, Amersham Corp. Models AMM-1001, AMM-1001H or AMM-1001D)

A. Not Applicable (See Condition 10)

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 ModelMaximum Quantity per Device

CPD-702X

1.5 microcuries

CPD-704X

1.5 microcuries

CPD-705X

1.5 microcuries

ML 00

SEND COPY TO
REGION I

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

20-15285-03E

Docket or Reference Number

030-32498

Amendment No. 02

CORRECTED COPY

CONDITIONS

(Continued)

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.
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. Application letter dated August 14, 1992.
 - B. Letter dated November 27, 1991;
 - C. Letter dated December 9, 1991;
 - D. Letter dated May 27, 1992;
 - E. Letter dated August 14, 1992;
 - F. Letter dated August 24, 1992;
 - G. Letter dated October 6, 1996;
 - H. Letter dated February 28, 1997, with enclosure;
 - I. Facsimile dated April 8, 1997; and
 - J. Facsimile dated July 29, 1997.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

DATE: SEP 17 1998ORIGINAL SIGNED BY
BY: _____

ask
9/17/98

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

From: "W E Sawyer" <W.E.Sawyer@kidde-fenwal.com>
To: "ask@nrc.gov" <ask@nrc.gov>
Date: 6/16/98 13:21
Subject: Licsence renewal

Tony,

To answer your question regarding the inspection of devices that are built in-house.

If you look at the radiation safety manual, page 29, there is a sentence that says "Completed order of above units must be wipe tested as follows before delivery to shipping". This would indicate that the units are completely assembled, prior to packaging, and ready for shipment. If this is not sufficient please notify me.

Thanks, Bill



Facsimile Cover Sheet

To: Tony Kirkwood

Company: N.R.C.

Phone: 301-415-6140

Fax: 301-415-5369

From: Bill Sawyer

Company: Kidde-Fenwal

Phone: 508-881-2000 x2746

Fax: 508-881-6729

Date: 06/17/98

**Pages including this
cover page: 2**

Comments:

Tony,
Enclosed is the explanation of the original letter dated November 27, 1991. Hopefully this answers your concerns that we discussed yesterday.

Please call me if this is not adequate, or if you have any further questions. My phone number is listed above or you can reach me via e-mail to: W E Sawyer@Kidde-Fenwal.com

Thank you,
Bill Sawyer



KIDDE-FENWAL INC.
400 MAIN STREET
ASHLAND, MA 01721
TEL: (508) 881-2000
FAX: (508) 881-8728

Tony Kirkwood
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Dear Tony,

This letter is a modification of the original license amendment request dated November 27, 1991. As per our telephone conversation on June 16, 1998, section 3.3.5 titled Quality Control, part B. Kidde-Fenwal, Inc. Quality Control Program and Procedures, the portion that refers to the standards for incoming inspection means that all units containing radioactive material shall be in accordance with specifications set forth in "Product Performance Specifications Revision 008" (appendix r), and that Mil-Std-105E has been updated to ANSI/ASQC Z1.4-1993 Sampling Procedures.

If there is any other questions please contact me.

Bill Sawyer
Radiation Safety Officer



**KIDDE
FENWAL, INC.**

400 Main Street, Ashland, MA 01721
Tele: (508) 881-2000 FAX: (508) 881-6729

Facsimile Cover Sheet

To: Tony Kurtwood
Company: N.R.C.
Phone: 301-415-6140
Fax: 301-415-5369

From: Bill Sawyer
Company: Kidde-Fenwal
Phone: 508-881-2000 x2746
Fax: 508-881-6729

Date: 06/03/98

**Pages including this
cover page: 1**

Comments:

You should see the revised binder coming in via Federal Express soon. Sorry about the delay. The questions that you had regarding receiving inspection are addressed. Appendix p. contains a copy of Kidde-Fenwal's document that is used for incoming inspection of Nohmi detectors.

Other changes that have been made include;

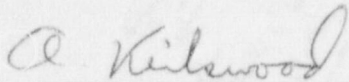
- The addition of K-F's Quality System Manual, (this addresses the question on ISO 9001.
- Appendix d. ; includes copies of the labels for packaging.
- Appendix k. ; has been updated from document number MS3-13 to MS3-13a.
- Appendix l. ; has been updated
- Appendix m. ; has been revised to reflect current procedures as outlined in our radiation safety policy (RS-1).
- Appendix O. ; validity has been verified.
- Appendix p. ; modified to reflect current procedures and documentation.
- Appendix q. ; updated from mil standard 105E to ANSI/ASQC Z1.4-1993.
- Appendix r. ; verified most current revision.

Also note that the newly revised edition of our radiation safety policy (RS-1) has been enclosed.

If there is any other questions please call.

JUN 05 1998

RCO by ask

TELEPHONE CONVERSATION RECORD	Date: April 28, 1998	Time: 16:18
Mail Control No.: 021878	License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: David Palardy, Facilities Mgr./Bill Sawyer, RSO	Organization: Kidde-Fenwal	Telephone Number: 508-881-2000
Person Calling: Anthony S. Kirkwood		
Subject: Amendment request of 10/6/96		
<p>Summary: Left a message for Mr. Palardy on 4/27/98, that the info. he sent us on 4/23/98, in response to Mr. Baggett's questions of 4/15/98, we already had. Mr. Bill Sawyer, the new RSO, returned my call today and I relayed to him Mr. Baggett's questions and my own. Mr. Baggett's were:</p> <ol style="list-style-type: none"> 1) An explanation of what KF does to ensure units from Japan meet the design specs sent to NRC. I told him I believed this was already answered, at least in part, by their letter to us dated 11/27/91, with appendices. 2) KF's QA/QC program needs an expanded outline of its ISO 9000 program including inspection of units and frequency, leak testing and design review, final inspection and contamination tests on pkg. before it goes out the door. <p>My questions were:</p> <ol style="list-style-type: none"> 1) In the 11/27/91 letter, 3.3.5, B.1. refers to the QC standards as being for "incoming" inspections. Asked him to delete incoming so it would apply to all. Mr. Sawyer said newer version probably has this (RS-1). 2) Asked Mr. Sawyer to be more specific about the exact time leak tests are performed prior to final packaging in IR-101. Where it now refers to leak testing before delivery to shipping he stated it is in fact after assembly and before packaging. He will specify this. <p>Mr. Sawyer will respond in two weeks or less.</p>		
Action Required/Taken: Refer to SLB, MXM1 and copy to file.		
Signature: 	Date: APR 28 1998	



**KIDDE
FENWAL, INC.**

400 Main Street, Ashland, MA 01721
Tele: (508) 881-2000 FAX: (508) 881-6729

Facsimile Cover Sheet

To: Steve Baggit

Company: NRC

Phone: 301-415-7273

Fax: 301-415-5369

From: Dave Palardy

Company: Kidde-Fenwal

Phone: 508-881-2000

Fax: 501-881-8834

Date: 04/23/98

**Pages including this
cover page: 6**

Comments:

Steve,

I have attached pages from our RS-1 policy which governs the way in which we handle ionization sources at incoming inspection. If you would like a complete copy of RS-1, I can send it via mail. In terms of design review, the smoke detector itself could not be changed without a formal engineering change order review. All pertinent documentation is under our configuration control system.

Please call if you have further questions. I'll try to reach you later today.

Thanks,

djp

Policy RS-1

Section No.	8	Rev. No.	C
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9. **Wipe Test Procedures for Kidde-Fenwal, Inc.**
(Incoming shipments from Nohmi Bosai, Ltd.)

Kidde-Fenwal will perform the following incoming tests at Receiving Inspection:

- 9.1 a. Determine sample size required from NRC 10 CFR Sub Part C - Quality Control Sampling Procedure #32.110. "Table 6 lot tolerance percent defective 5.0 percent. (Except in lot size 2001 to 100,000, the acceptance number is 0. See enclosed copy).

Example: A lot size of 50,000 detectors are received for incoming inspection from Nohmi. Nohmi's test results must be included. The procedure is as follows:

- b. Select sample size from table 6 lot tolerance percent defective 5.0 percent.

Sample size - 75 pieces with an acceptance number of 0.

- c. Check all 75 pieces from proper labels and markings. If there is one failure, missing label or incorrect markings, the lot must be screened 100%.

- d. Proceed to Step 9.2.

- 9.2 Wipe the entire surface area of 75 detectors using the same filter paper (Whatman #40 or equivalent filter paper) (4.25CM diameter) or wipe three separate lots of 25 detectors each using a separate filter paper for each lot.

- 9.3 Determine the background count using the Ludlum Model 2000 scaler or equivalent.

Policy RS-1

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- 9.4 Using the Ludlum Model 2000 scaler or equivalent, determine the count of the filter paper (75 detectors) from step 9.1, or using the same equipment, determine the count of each individual filter paper per 25 units for a total of 3 filter papers (75 units total) if second option from step 9.2 is employed.
- 9.5 Subtract the background count from the sample wipe count. This is the wipe's actual count.
- 9.6 Calculate the total disintegrations/minute (DPM) by dividing the actual count by 0.14, the efficiency factor for Americium 241.
- 9.7 Calculate disintegrations/sq. CM by dividing total disintegrations/minute by the total surface area of the detector (for Model 7051, surface area is 200 sq. CM). For 75 units, the reading is 15,000 sq. CM. For 25 units, the reading is 5,000 sq. CM.
- 9.8 Any wipe greater than 50 DPM/CM² shall be brought to the attention of the Facilities Manager for Corrective Action.

NOTE: The Nohmi 7051 can be considered to be a cylindrical object.
Diameter 3.75", Height 0.75".

$$A = (2)\pi (R)^2 + \pi (D)(H) = 30.9 \text{ sq."} = 200 \text{ sq. CM}$$

1. Your immediate action in the event of failures.
Example:
 - a. Reject shipment and notify Nohmi. Place lot in hold area.
2. Corrective Action Plan from Nohmi is required, including the following:
 - a. Identification of cause for non-conformance.
 - b. Plan to eliminate cause for non-conformance.
 - c. Time table for completion of Corrective Action Plan.

Policy RS-1

Section No.	<u>8</u>	Rev. No.	<u>C</u>
Issue Date	<u>6-6-97</u>	Approved	<u>W.E.S.</u>
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NOTE: The actual Wipe Test results from Nohmi must be included with each shipment. **Failure to supply data will result in the rejection of the lot.**

Test results from Nohmi and Kidde-Fenwal must be retained by Kidde Fenwal for inspection by the Agency on their audits of our Quality System.

10. Final Product Wipe Test Procedure for Nohmi Bosai, Ltd.

Manufacturer of the CPD-705X Smoke Detector.

The following sample shall be taken at Final Inspection by Nohmi prior to shipping the product to Kidde-Fenwal, Inc.

- 10.1 a. Determine sample size required from NRC 10 CFR Sub Part C - Quality Control Sampling Procedure #32.110. "Table 6 lot tolerance percent defective 5.0 percent. (Except in lot size 2001 to 100,000, the acceptance number is 0. See enclosed copy).

Example: A lot size of 50,000 detectors are ready for shipment to Kidde-Fenwal, the procedure is as follows:

- b. Select sample size from table 6 lot tolerance percent defective 5.0 percent.
- Sample size - 75 pieces with an acceptance number of 0.
- c. Check all 75 pieces from proper labels and markings. If there is one failure, missing label or incorrect markings, the lot must be screened 100%.
- d. Proceed to step 10.2.

Policy RS-1

Section No.	<u>8</u>	Rev. No.	<u>C</u>
Issue Date	<u>6-6-97</u>	Approved	<u>W.E.S.</u>
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- 10.2 Wipe the entire surface area of 75 detectors using the same filter paper (Whatman #40 or equivalent filter paper) (4.25CM diameter) or wipe three separate lots of 25 detectors each using a separate filter paper for each lot.
- 10.3 Determine the background count using the Ludlum Model 2000 scaler or equivalent.
- 10.4 Using the Ludlum Model 2000 scaler or equivalent, determine the count of the filter paper (75 detectors) from step 10.1, or using the same equipment, determine the count of each individual filter paper per 25 units for a total of 3 filter papers (75 units total) if second option from step 10.2 is employed.
- 10.5 Subtract the background count from the sample wipe count. This is the wipe's actual count.
- 10.6 Calculate the total disintegrations/minute (DPM) by dividing the actual count by 0.14, the efficiency factor for Americium 241.
- 10.7 Calculate disintegrations/sq. CM by dividing total disintegrations/minute by the total surface area of the detector (for Model 7051, surface area is 200 sq. CM). For 75 units, the reading is 15,000 sq. CM. For 25 units, the reading is 5,000 sq. CM.
- 10.8 Any wipe greater than 50 DPM/CM² shall be brought to the attention of the Facilities Manager for Corrective Action.

NOTE: The Nohmi 7051 can be considered to be a cylindrical object.
Diameter 3.75", Height 0.75".

$$A = (2)\pi (R)^2 + \pi (D)(H) = 30.9 \text{ sq."} = 200 \text{ sq. CM}$$

1. Your immediate action in the event of failures.

Example:

- a. Stop shipment and screen the lot 100%.
- b. Check stock (determine in Correction Action Step if stock requires screening).

Policy RS-1

Section No.	<u>8</u>	Rev. No.	<u>C</u>
Issue Date	<u>6-6-97</u>	Approved	<u>W.E.S.</u>
Page	<u>34</u>	of	<u>62</u>

2. Corrective Action Plan, including the following:
- a. Identification of cause for non-conformance.
 - b. Plan to eliminate cause for non-conformance.
 - c. Time table for completion of Corrective Action Plan.

NOTE: The actual results must be included with each shipment.
Failure to supply data will result in the rejection of the lot.

Kidde-Fenwal must also perform the same test upon receiving.

Test results from Nohmi and Kidde-Fenwal must be retained by Kidde Fenwal for inspection by the NRC or the agency on their audits of our Quality System.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

*TELEPHONE CONVERSATION RECORD		Date: August 21, 1997	Time: 13:07
Mail Control No.: 021878	License No.: 20-15285-03E	Docket No.: 030-32498	
Person Called: Bob MacNutt/Bob Harris	Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733	
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
Summary: Mr. MacNutt again told that as per registry review (Michelle Burgess), need to have KF let us know when, what, where and how Kidde-Fenwal checks for design conformity of its product Model 705X, such as measurements. Not conformity checks of the foil source. Mr. MacNutt said he'd take another stab at it and agreed to provide the information as soon as possible.			
Action Required/Taken: Await reply and refer to MLB for status check and MXM1 for MS 15, deficiency telephone call.			
Signature: <i>A. Kirkwood</i>		Date: <i>8/21/97</i>	



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

* TELEPHONE CONVERSATION RECORD		Date: August 8, 1997	Time: 11:42
Mail Control No.: 021878	License No.: 20-15285-03E	Docket No.: 030-32498	
Person Called: Bob MacNutt/Bob Harris	Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733	
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
<p>Summary: Mr. MacNutt told that as per registry review (Michelle Burgess), need to have KF commit to having certificates of leak test of every incoming source holder and certificates of design conformity. Also need to know when and how Kidde-Fenwal checks for design conformity. Finally need to know when the last leak test is done.</p> <p>On 8/7/97, Mr. MacNutt again told, after his response to the above, that we still need to know the when, how and where of the design conformity checks, such as measurements, of his Model 705X. Not conformity checks of the foil source. Mr. MacNutt seem to understand and agreed to provide the information as soon as possible.</p>			
Action Required/Taken: Await reply and refer to MLB for status check and MXM1 for MS 15, deficiency telephone call.			
Signature: <i>A. Kirkwood</i>		Date: 8/8/97	

TELEPHONE CONVERSATION RECORD		Date: October 22, 1997	Time: 13:59
Mail Control No.: 021878		License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: Bob MacNutt/Bob Harris		Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
<p>Summary: Mr. MacNutt stated that the only difference between IR-101 and RS-1 is some state required info. for radium storage. We can use the IR-101 as the current policy. Let him know if any parts we need are not included in our copy. Informed him I need to take another look at the info. he submitted and respond to the senior reviewers questions. This might include additional questions for him. He said feel free to call him if any additonal info. needed.</p>			
Action Required/Taken: Refer to MLB			
Signature: <i>ask</i>		Date: 10/22/97	



KIDDE-FENWAL, INC.
400 MAIN STREET
ASHLAND, MA 01721 USA
TEL: (508) 881-2000
FAX: (508) 881-6729

October 21, 1997

U.S. Nuclear Regulatory Commission
Attn: Ms. Susan Greene
Div. of Industrial & Medical Nuclear Safety
Washington, DC 20555-0001

Dear Ms. Greene:

Mr. Robert A. MacNutt, Kidde-Fenwal's contact person with your agency, is retiring at the end of October 1997. He will be replaced by Mr. David J. Palardy, Facilities Manager. Please change your records to reflect this transfer of personnel in our organization.

Our NRC license for distribution of smoke detectors is No. 20-15285-03E.

Sincerely,

KIDDE-FENWAL, INC.

A handwritten signature in dark ink, appearing to read "Robert A. Harris".

Robert A. Harris
Radiation Safety Officer

cc: T. Holcomb, V.P., Operations
D. Palardy, Facilities Manager

**KIDDE
FENWAL, INC.**

400 Main Street, Ashland, MA 01721
Tele: (508) 881-2000 FAX: (508) 881-
1255

Facsimile Cover Sheet

To: Tony Kurtwood
Company: N.R.C.
Phone: 91-301-415-6140
Fax: 91 301-415 5369

From: Robert A. MacNutt
Company: Kidde-Fenwal, Inc.
Phone: (508) 881 2000 ext. 2733
Fax: (508) 881 1255

Date: 08/28/97

**Pages including this
cover page:** 4

Comments: Tony, enclosed is a draft for your comments.

Don't need any more

DRAFT

KIDDE-FENWAL, Inc.
400 Main Street,
Ashland, Massachusetts
01721-2150

August 28, 1997

U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville M.D. 20852-2738
Mail TWFN, Mail Stop T8F5

Subject: Request for additional information on Kidde-Fenwal's controls on our manufacturing process of our model CPD 705X, Ionization smoke detectors devices.

Dear, Mr. Tony Kurtwood, Michelle Burgers

Kidde-Fenwal's "Quality System" is certified under ISO 9001-1994, ANSI/ASQC Q9001-1994 by two ISO Registrars, AGA Quality and The Loss Prevention Certification Board. Every six months we receive an assessment by one of the Registrars for conformance to meeting the ISO 9001-1994 requirements.

In addition to this control of our quality system Kidde Fenwal conducts monthly internal audits of our quality system.

Our Ionization Radiation program is controlled under Kidde-Fenwal's Policy RS-1. The purpose of this program is to define the requirements for the use, handling, processing, application, transfer, storage and removal of all sources, materials, instruments, machine, devices and equipment which produce, generate or emit ionizing radiation as defined by the applicable cited Massachusetts and Federal regulations. Enclosed is a copy of the "Index" from the Policy RS-1.

The enclosed "Index" defines the areas of control including safe guards and tests performed. The "Bill of Material and our Operation Sheets" for the product part number defines the part numbers (includes revision levels) and the operation sequence to manufacture and assemble the Ionization detector. Included on the operation sheet are the tests required and the engineering or manufacturing engineering specifications to assure that the product is tested properly. Operators must record that the operations are performed and in some areas must record their results. During manufacturing and assembly of the detectors the inprocess and final inspection of the devices are QCA stamped off as the product meets specifications.

DRAFT

Leak checks and conformity checks are performed at various steps in the process. Receiving inspection personnel shall check incoming lots of sources, mounted in holders, to assure that a "Certificate of Conformance" for leak testing and conformity has been enclosed. Receiving inspection on incoming lots shall include wipe tests per our Policy RS-1. Conformity checks are performed on 100 % of the units during the calibration process.

Typical sequence of the assembly of Ion Detectors (10 steps):

1. Attach source assy to PCB assembly.
2. Attach intermediate electrode to support plate and attach outer chamber to PCB. Align Electrode and complete the assembly.
3. Solder Fet/Connector assy and clean solder joints.
4. Complete assembly.
5. Input current test per MES-1577.
6. Smoke test MES-1860 (this is the calibration and test procedure, performed on 100% of the units. The Conformity check of each source is checked).
7. Correlation Smoke Test- Sample test to determine response time per specification.
8. Attach label and pack.
9. Wipe test per IR 101 policy (final pkg. test), also wipe of area.
10. Ship.

During this sequence operators must sign off on each sequence. Inprocess inspection require QCA stamp off for conformity of calibration, written numerical date codes and serial numbers, conformity to specification and blue print and general workmanship, all functional tests and final conformance on packaging including wipe tests. Final acceptance is also QCA stamped off to ship the product.

Bob MacNulty

Policy RS-1

Section No.	<u>Index</u>	Rev. No.	<u>BA</u>
Issue Date	<u>6-6-97</u>	Approved	<u> </u>

KIDDE-FENWAL, INC.
INDEX

SECTION NO.	TITLE
i.	Index
ii.	Introduction and Signature Page
iii.	Forward
iv.	Organizational Responsibility
1.	Definitions
2.	Employee Qualifications and Health Provisions
3.	Safety, Administration Of
4.	Safety Precautions, Personal Hygiene
5.	Survey Instruments and Controls
6.	Film Badge - Radiation Monitoring
7.	New or Revisions to Manufacturing/Test Areas
8.	Radiation Survey Procedures - Manufacturing Areas
9.	Wipe Test
10.	Maximum Permissible Exposure
11.	Manufacturing Plan
12.	Manufacturing Layout - Restricted Area
13.	Training Program
14.	Procurement
15.	Receiving - Inspection of Incoming Sources
16.	Sealed Sources
17.	Storage of Radioactive Material
18.	Waste Disposal
19.	Repairs to Equipment and Work Areas
20.	X-Ray Laboratory
21.	Notification of Accidents, Material Accountability
22.	Record Retention
23.	Radiation Safety Officer - Job Description
24.	Receiving and Opening Packages containing Radioactive Material
25.	Procedure for: Return and Inventory Control of Radium Smoke Detectors
26.	Disassembly of Radium Smoke Detectors



**KIDDE
FENWAL, INC.**

400 Main Street, Ashland, MA 01721
Tele: (508) 881-2000 FAX: (508) 881-1255

Facsimile Cover Sheet

To: Tony Kurtwood
Company: N.R.C.
Phone:
Fax: 91 301-415 5369

From: Robert A. MacNutt
Company: Kidde-Fenwal, Inc.
Phone: (508) 881 2000 ext. 2733
Fax: (508) 881 1255

Date: 07/29/97

**Pages including this
cover page: 4**

cc: Tom Holcomb, Jack Ronayne

Comments:

NRC - Tony Kurtwood's questions on Kidde-Fenwal's request for an amendment to our licence:

1. When sources are received at Kidde-Fenwal, does the lot come in with a "Certificate of Conformance" containing checks for "Leak Testing" and "Conformity"? Lots must not be accepted without this document.

Answer: The sources for the 705x model will be purchased from NRD Corporation. Kidde-Fenwal's drawing (06-117926-001) will be revised to include the requirement "**A Certificate of Conformance**" is required from the supplier(NRD) to certify that leak checks and conformity checks meet specification". Lots received without this document are subject to return. Lots without this "Certificate" will not be accepted.

2. When and how does Kidde-Fenwal check for "Conformity" and how do you check? In addition where is this information/requirement stated?

Answer: Kidde-Fenwal will revise our Policy number IR-101 " Ionizing Radiation" to add a section on Receiving Inspection Procedure for receiving foils mounted in holders.

This procedure will instruct receiving inspection to perform wipe tests per the IR 101 Policy(Receiving inspectors have been trained) and forward the wipes to our Radiation Safety Officer. (Kidde-Fenwal's engineering department is revising our foil/holder print to add the requirement that our supplier (NRD) include a Certificate of Conformance for leak checks and conformance checks with each shipment).

Receiving Inspection will not accept the lot without the Certificate of Conformance for leak checks and conformance.

In addition each foil is checked 100% for Conformance" during assembly per the following Ion Source Conformance check:

Below is a description of what is presently being done to confirm **Ion source** levels are consistent with our requirements:

At the time of assembly, each detector undergoes a calibration process and functional test. As part of this process, analog data is read by the microprocessor and communicated as a digital count value to the PC in the test station. For the ion detector, this process verifies the analog voltage level produced from the source chamber. Three readings are taken both in clear air, and at a 1.5%/ft smoke level. The calibration software compares these readings against set limits which are used to reject faulty detectors. The acceptance limits allow for expected variance due to the source, supply voltage, component tolerances, smoke levels, etc. Thus, an ion source which has a radiation level significantly above or below our specified values would produce a high or low reading and be rejected by this test.

Acceptance Criterion:

The following limits are implemented in the Calibration software to identify detectors that are responding outside their expected design limits:

<u>Data Item</u>	<u>A/D Counts</u>
Clear Air Minimum Counts	110
Clear Air Maximum Counts	155
Maximum Deviation in Clear Air Readings	8
1.5%/ft smoke level Minimum Counts	153
1.5%/ft smoke level Maximum Counts	203
Maximum Deviation in 1.5%/ft Readings	12
Minimum Span between Clear Air and 1.5%/ft smoke Counts	38
Maximum Span between Clear Air and 1.5%/ft smoke Counts	63

3. When is the last "LeakTest " perform at Kidde-Fenwal ?

Answer: The final packaging operation on our Route Sheet per our Ionizing Radiation Policy IR-101 section 9B. See enclosed copy.

We will forward a revised copy of our Radiation Policy IR-101 when completed.

Policy IR - 101

Section No.	9B	Rev. No.	BA
Issue Date	3-24-97	Approved	<i>JR</i>

**B. WIPE TEST PROCEDURE FOR KIDDE-FENWAL, INC. FINAL PRODUCT
(KIDDE-FENWAL MANUFACTURED UNITS #CPD-702X ,CPD-704X and CPD-705X)**

Completed order of above units must be wipe tested as follows before delivery to Shipping:

1. Determine sample size based on number of units in order, using Table #6 of NRC 10 CFR sub part C, Quality Control Sampling Procedure #32.110 (LTPD of 5.0%).
2. Wipe the total surface area of the number of detectors determined from step 1 above, using a Whatman #40 or equivalent filter paper (4.25CM diameter).
3. Determine the background count using the Ludlum Model #2000 Scaler or equivalent.
4. Similarly count the wipe in questions per step 3 above.
5. Subtract the background count (step 3) from the wipe's count (step 4), this is the wipe's actual count.
6. Calculate the total disintegrations/min. DPM by dividing the actual count by the efficiency factor, for Americium 241. The efficiency factor is 0.14.
7. Calculate DPM/sq. cm by dividing the DPM from Step 6 by the total surface area wiped (this is the surface area of one detector, determined by std. mathematical techniques multiplied by the sample size from step 1 above).
8. Any wipe greater than 50DPM/CM² shall be brought to the attention of the QA Manager for corrective action.
9. Wipe test results are to be recorded on Form D-185 per work order route sheet.

TELEPHONE CONVERSATION RECORD		Date: July 22, 1997	Time: 9:44
Mail Control No.: 021878		License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: Bob MacNutt/Bob Harris		Organization: Kide-Fenwal	Telephone Number: 508-881-2000 x2733
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
Summary: Mr. MacNutt told that as per registry review (Michelle Burgess), need to have KF commit to having certificates of leak test of every incoming source holder and certificates of design conformity. Also need to know when and how Kide-Fenwal checks for design conformity. Finally need to know when the last leak test is done.			
Action Required/Taken: Await reply and refer to MLB for status check and MXM1 for MS 15, deficiency telephone call.			
Signature: <i>A. Kirkwood</i>		Date: <i>7/22/97</i>	

TELEPHONE CONVERSATION RECORD		Date: July 11, 1997	Time: 10:17
Mail Control No.: 021878		License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: Bob MacNutt/Bob Harris		Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
Summary: Mr. MacNutt has retired and is only in the office on Tues-Thurs. Bob Harris is on extended leave for 6 weeks. George Vachon, engineer (x2479) not at desk - left message at voice mail. As per Michelle Burgess, need to have KF commit to leak test of every incoming source holder.			
Action Required/Taken: Await reply and/or refer to SC for review.			
Signature: <i>A. Kirkwood</i>		Date: <i>7/11/97</i>	



**KIDDE
FENWAL, INC.**

400 Main Street, Ashland, MA 01721
Tele: (508) 881-2000 FAX: (508) 881-1255

Facsimile Cover Sheet

To: Tony Kirkwood

Company: United States Nuclear Regulatory
Commission

Phone: (301) 415-6140

Fax: (301) 415-5369

From: Bob MacNutt, Quality Manager

Company: Kidde-Fenwal, Inc.

Phone: (508) 881-2000 Ex2733

Fax: (508) 881-1255

Date: 04/08/97

**Pages including this
cover page:**

Comments:

Sorry about the delay in answering your fax. Enclosed are answers to your questions:

NRC Questions: (Kidde-Fenwal, Inc. Deficiency Questions):(reference KF's Policy IR-101).

1. In what form will Kidde receive sources: Foils in buttons or holders.
2. If not foil only, prior to final packaging:
 - 1) LTPD 5% sampling for Removable Contamination on Button or Ion Chamber.
 - 2) LTPD 5% Sampling for Design Conformity.
3. LTPD sample is 5% for labels on POS pkg(point of sale package).
4. Application dated. 8/14/92. QC separates Nohmi and Kidde-Fenwal QA program. Where or how will they be combined ?

Kidde-Fenwal's QA program will not combine the two programs into one system. Please refer to Kidde-Fenwal's Ionizing Radiation program IR-101, "Rules and Regulations for the Protection of the Health and Safety of Personnel". In this policy we provide for both programs, first the Nohmi Bosai's shipments of completed product into Kidde-Fenwal, that includes the tests required by Nohmi and the tests required by Kidde-Fenwal on receiving final product. Second, the IR-101 Policy includes the quality program for Kidde-Fenwal's smoke detectors, manufactured at Kidde-Fenwal, both our Models CPD-702x, CPD-704x and the manufacturer of the Nohmi product, CPD-705x at the Kidde-Fenwal's site.

TELEPHONE CONVERSATION RECORD		Date: April 4, 1997	Time: 10:33
Mail Control No.: 021878		License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: Bob MacNutt		Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733
Person Calling: Anthony S. Kirkwood			
Subject: Amendment request of 10/6/96			
<p>Summary: On 4/2/97, Mr. MacNutt was asked:</p> <ol style="list-style-type: none"> 1. In what form will you receive sources: foils only, foils in buttons, or foils in completed ion chambers? 2. If not foil only, prior to final packaging: <ol style="list-style-type: none"> a. LTPD sample 5% for contamination? b. LTPD sample 5% for design conformity? 3. LTPD sample 5% for labels on POS pkg? 4. Application dtd. 8/14/92, QC, separates Nohmi and Kidde QA programs. Where or how will they be combined? 			
Action Required/Taken: Await reply and/or refer to SSSS for QA review.			
Signature: <i>A. Kirkwood</i>		Date: <i>4/4/97</i>	



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

4/2/97
1410

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY

FAX TRANSMITTAL

TO

LOCATION

1. Bob MacNitt Kidde-Fenwal
FAX # (508) 881-1255 VERIFICATION ()
2. _____
FAX # () VERIFICATION ()
3. _____
FAX # () VERIFICATION ()
4. _____
FAX # () VERIFICATION ()

COMMENTS.

COVER SHEET PLUS 3 PAGES

FROM: Tony Kirkwood

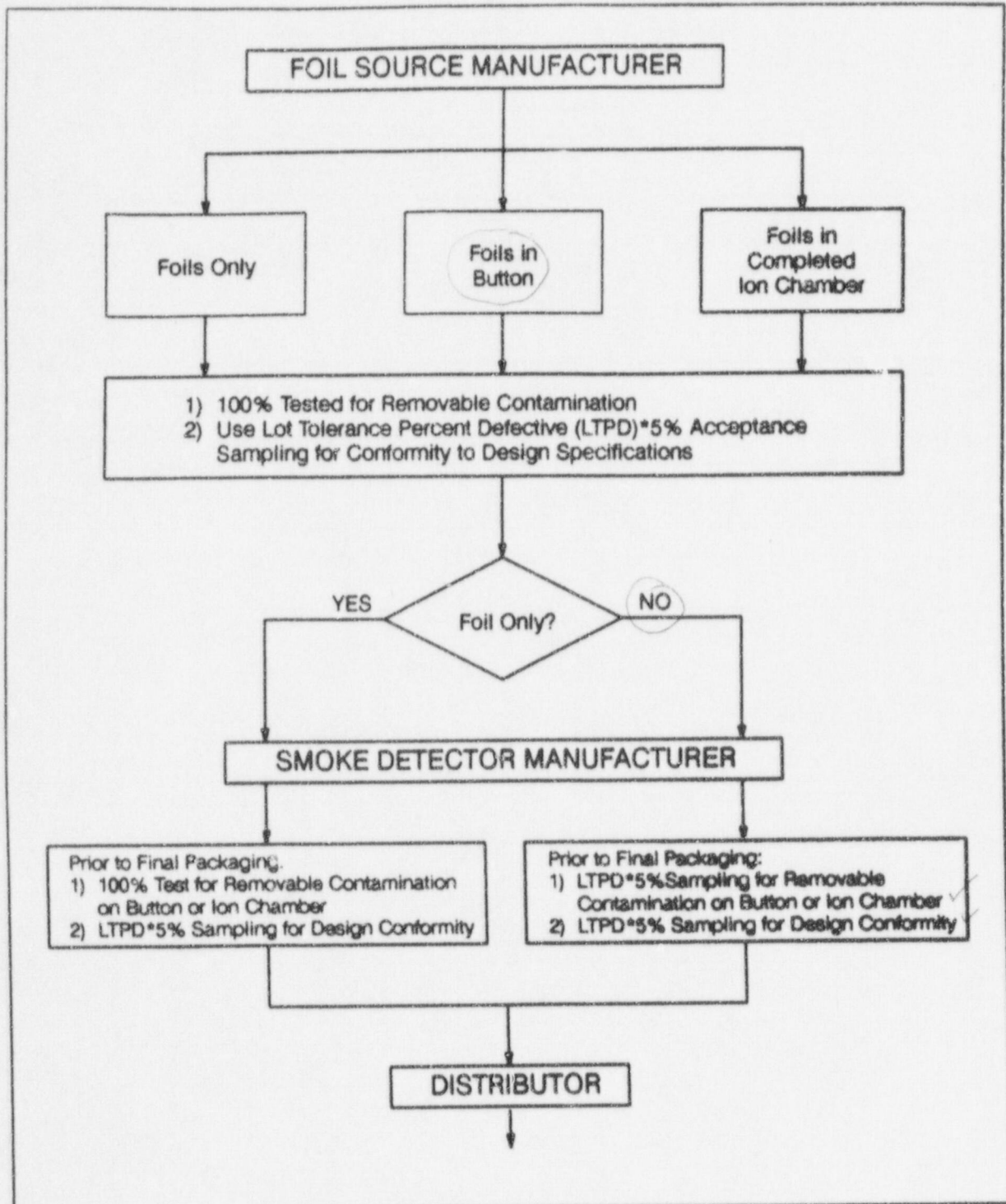
PHONE: (301) 415-6140

FAX: (301) 415-5369

Kidde-Fenwal Deficiency Questions:

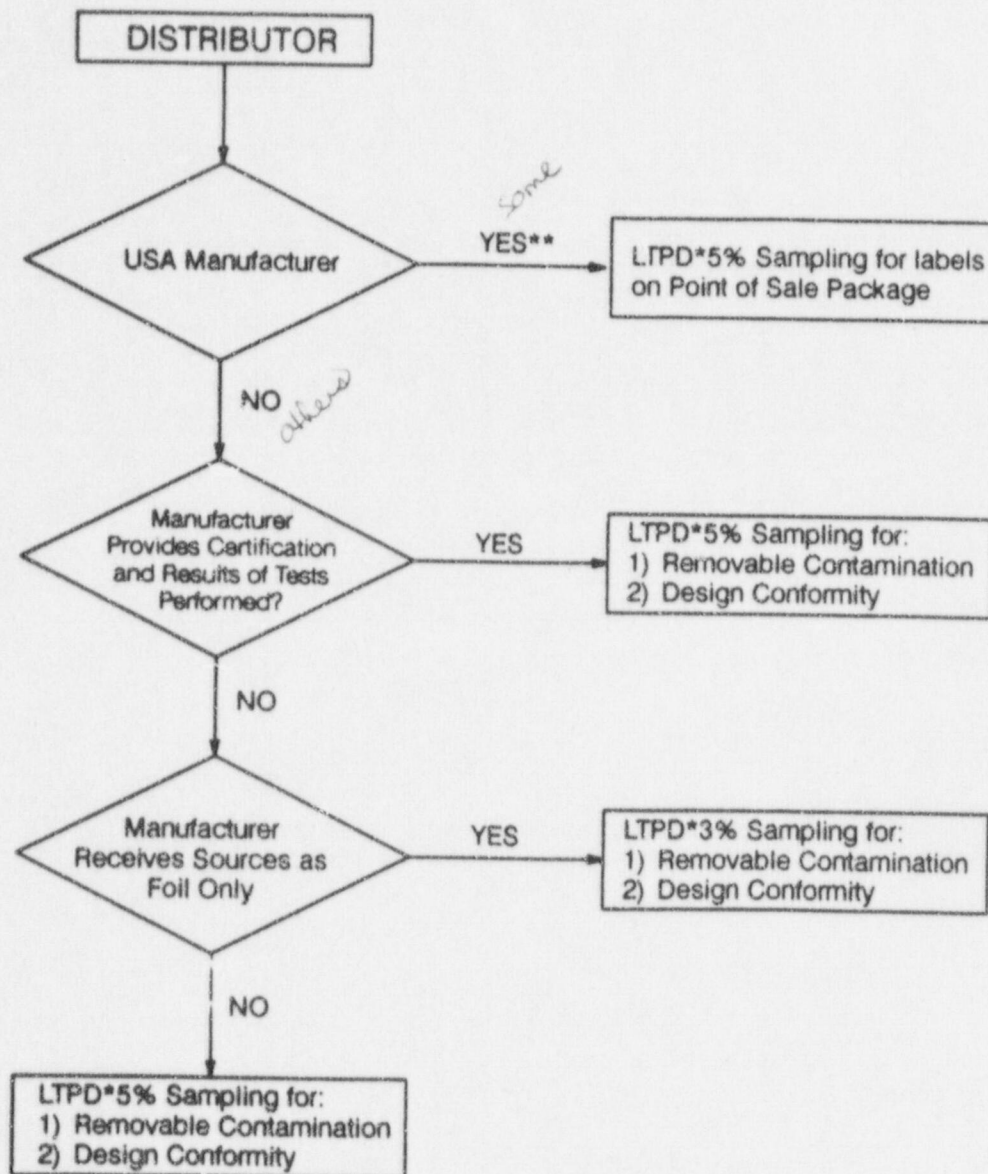
1. In what form will you receive sources: foils only, foils in buttons, or foils in completed ion chambers?
2. If not foil only, prior to final packaging:
 - a. LTPD sample 5% for contamination?
 - b. LTPD sample 5% for design conformity?
3. LTPD sample 5% for labels on POS pkg?
4. Application dtd. 8/14/92. QC. separates Nohmi and Kidde QA programs. Where or how will they be combined?

QC Program Specifications for the
Manufacture and Distribution of Smoke Detectors
(Cont'd)



*LTPD acceptance sampling is based on the attached charts.

QC Program Specifications for the
Manufacture and Distribution of Smoke Detectors
(Cont'd)



* LTPD acceptance sampling is based on the attached charts.

** Based on reliability/inspectability of USA fabrication records and facilities.

From: Anthony Kirkwood
To: CJB
Date: 3/4/97 11:59
Subject: Kidde-Fenwall

CJB,

Deficiency telephone call to Bob Harris on 2/20. Need the background material for the 4/27/92 registry sheet before making changes to it and license. Is mailing today.

C # 021878

Thanks, Tony

CC: KBR



KIDDE-FENWAL, INC.
400 MAIN STREET
ASHLAND, MA 01721 USA
TEL: (508) 881-2000
FAX: (508) 881-6729

February 28, 1997

Dear Mr. Curtwood,

Please find enclosed:

One three ring binder which is the supporting documentation for letter dated November 27, 1991

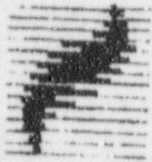
One three ring binder for Kidde-Fenwal's radiation safety program IR-101. This is the policy now in place and is currently undergoing review and will be updated to reflect latest N.R.C. changes. As an I.S.O. approved facility, it is also intended at this time to tie as many aspects as possible into our standard operating procedures manual. If I can be of any further help please contact me.

Respectfully,

A handwritten signature in black ink, appearing to read "Robert A. Harris".

Robert A. Harris
Radiation Safety Officer

TELEPHONE CONVERSATION RECORD	Date: February 13, 1997	Time: 13:21
Mail Control No.: 021878	License No.: 20-15285-03E	Docket No.: 030-32498
Person Called: Bob MacNutt	Organization: Kidde-Fenwal	Telephone Number: 508-881-2000 x2733
Person Calling: Anthony S. Kirkwood		
Subject: Amendment request of 10/6/96		
<p>Summary: Mr MacNutt informed that his action would have to be referred to SSSS for review of the QA program in order to change the sentence in the registry sheet which says the Model CPD-705X is manufactured completely in Japan. He thought that this had been already done and would look for info and send tomorrow if found. In the mean time I told him I would refer the action to SSSS.</p> <p>He had no problem with making the license max amt agree with the registry - 1.5 uCi.</p>		
Action Required/Taken: Await reply and/or refer to SSSS for QA review.		
Signature: <i>A. Kirkwood</i>	Date: 2/13/97	

**KIDDE-FENWAL, INC.**400 Main Street
Ashland, MA 01721Tel: (508) 881-2000
Fax: (508) 881-8920**FAX COVER SHEET**

DATE: FEBRUARY 5, 1997

COMPANY: U.S. NUCLEAR REGULATORY COMMISSION

ATTENTION: TONY CURTWOOD
TOM O'BRIEN

FAX #: (301) 415-5369

FROM: BOB HARRIS
RADIATION SAFETY OFFICER

SUBJECT: TELEPHONE CONVERSATION

TOTAL # OF PAGES: 4

In response to your telephone conversation with Bob Macnutt on February 3, 1997 I am faxing two requested documents.

1. Letter dated December 13, 1991 (one page complete)
2. Letter dated November 27, 1991 (two pages no enclosures)

As part of this letter there is a nine page application supported by an index appendix listing for twenty supporting documents which fill a 1 1/2 tabbed 3-ring binder.

If you need the documents supporting item 2, Please fax K-F Inc. and supply a mailing address. A copy will then be made and mailed



KIDDE-FENWAL, INC.
 100 MAIN STREET
 ANDOVER, MA 01721
 TEL 603/881-2000
 FAX 603/881-6729

TELEFAX COVER LETTER

DATE: 12-13-91

Rev. A

TO: Mr. Sterling Bell COMPANY: U.S. Nuclear Regulatory Commission

LOCATION: Maryland FAX NO.: 301-492-0260

FROM: R.A. MACNUTT, QUALITY MANAGER

SUBJECT: Changes to our registration certificate to better clarify
 the models that we use under our distribution license.

WE ARE SUBMITTING A TOTAL OF 1 PAGE, INCLUDING THIS COVER LETTER.

IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CONTACT US AS SOON AS
 POSSIBLE.

Dear Mr. Bell:

In our telephone conversation on December 13, 1991, we discussed the
 models listed in my November 27, 1991 letter.

The following change is requested to our registration certificate to
 better clarify the Models that we use under our distribution license!

We have two series, the Kidde-Fenwal, Inc. manufactured series CPD
 702X-4X and the Nohmi's manufactured series 705X.

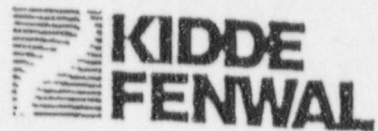
Kidde-Fenwal, Inc. Series CPD 702X-4X consisting of models 7021, 7023,
 7040 and 7044 at the present time. These four models denote minor
 variations of the same model, such as electronic circuit changes (with
 UL approval), sensitivity range changes (with UL approval). In all
 cases, the source and ion chamber design will not be changed.

The second series CPD 705X will be manufactured by Nohmi Bosai, Ltd. in
 Japan and distributed by Kidde-Fenwal, Inc.

If you have any questions please contact me.

Sincerely,

Robert Q. MacNutt



KIDDE FENWAL, INC.
400 MAIN STREET
ASHLAND, MA 01721
TEL (508) 951-2000
FAX (508) 881-6729

November 27, 1991

Sterling W. Bell
Sealed Source Safety System
Medical, Academic and
Commercial Use Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Bell:

This is to request amendment of Fenwal's Registration Certificate No. NR-668-D-101-E to change our name from "Walter Kidde & Company, Inc., Fenwal Division" to "Kidde-Fenwal, Inc." and to provide for the Kidde-Fenwal Model CPD705X smoke detector.

Detailed information on radiation safety features of the CPD705X, and also information on its ability to perform as a product of combustion detector, are contained in our enclosed application. It may be noted that the CPD705X uses the Amersham AMM 1001 foil which Fenwal and other manufacturers have extensively used in detectors. Also, although the detector is designed for commercial and industrial use, it requires only a single 0.7 microcurie AM-241 source.

Labels on the detector and point-of-sale package will comply with the requirements of Section 32.29(b).

The CPD705X will be manufactured by Nohmi Bosai, Ltd. in Japan and distributed in the U.S. by Kidde-Fenwal, Inc. The quality control program at Nohmi Bosai and the quality control program at Kidde-Fenwal combine to ensure our distribution of a high quality product. The respective programs of Nohmi Bosai and Kidde-Fenwal are detailed in our application for amendment.

(Nov. 27, 1991/S. Bell)

Page 2 of 2

Recently, you suggested that at a convenient time, I should inform you about which of the detector models now listed in NR-668-D-101-E are no longer distributed by Kidde-Fenwal. Of the six models now listed in the registration certificate, we only distribute the CPD-7021.

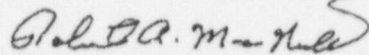
We would like to create three series of detectors. The first series CPD-702X Series consisting of models CPD-7021 and CPD-7023, and the second series CPD-704X Series, consisting of models CPD-7040 and CPD-7044. These four models (CPD-7021, CPD-7023, CPD-7040 and CPD-7044) denote minor variations of the same model (CPD-7021), such as electronic circuit changes (with UL approval) and sensitivity range change (with UL approval). In all cases, the source and the ion chamber design will not be changed.

The requested amendment to add the third series of smoke detectors is the Nohmi's manufactured series CPD-705X that will be distributed in the United States by Kidde-Fenwal, Inc.

As required by 10CFR170.31.9A, enclosed with our application for amendment of NR-668-D-101-E is our check for \$1200.

If any questions arise in your consideration of our application, please call me, I am available to meet.

Sincerely,



Robert A. MacNutt
Quality Manager

- Encl:
- (1) Application of Nohmi
Ion Chamber Registration
 - (2) Amendment fee check for \$1200

TELEPHONE CONVERSATION RECORD	Date: 15 Jan 97	Time: ~3 pm
Mail Control No.: 021878	License No.: 20-15285-03E	Docket No.: 03032498
Person Called: Robert MacNutt	Organization: Kidde-Fenwal	Telephone Number: 508- 881-2000 x2733
Person Calling: Anthony S. Kirkwood, Thomas J. O'Brien		
Subject: Amendment request of 6 Oct 96		
<p>Summary: Mr. MacNutt was asked what maximum activity was being requested for the CPD-705x. He stated 1.6 uCi so as to allow for a safety margin should the 1.5 uCi activity normally expected be exceeded. He added the reason for the amendment request was to ensure that the Amersham sources could be used. Mr. Kirkwood stated that license conditions 6, 7, and 8 (for both the distribution and possession/use licenses) already apply to specific Amersham sources and if these were the sources required then no amendment was necessary. Mr. MacNutt responded that they weren't sure if the amendment was necessary but submitted it to be on the "safe side".</p> <p>We recommended that the QC plan for the CPD-705x be integrated with the QC plan for the CPD-702x and 704x rather than being a separate part of the amendment supplement. Mr. MacNutt agreed.</p> <p>Mr. O'Brien suggested that specifying an alpha scintillation probe rather than any type of alpha detector (e.g. thin window GM) for the CPD-705x receipt procedure in the QC plan may be too limiting. He also added that although a source check is recommended before a receipt survey, a calibration is generally an annual requirement and not necessary prior to each receipt survey. Mr. O'Brien stated the Regulatory Guide 6.9 would be sent for further information on this subject.</p>		
<p>Action Required/Taken:</p> <ol style="list-style-type: none"> 1. Inquire about difference in maximum activity listing (1.5 uCi versus 1.6 uCi) between SSDR sheet and the distribution license. 2. Send Regulatory Guide 6.9 		
Signature: <i>A. Kirkwood</i>	Date: 1/17/97	

October 31, 1996

ASSIGNMENT NUMBER: 96-104

Mr. Robert MacNutt
Kidde Fenwal, Inc.
400 Main Street
Ashland, MA 01721

SUBJECT: ACKNOWLEDGEMENT OF REQUEST FOR SAFETY EVALUATION

Dear Mr. MacNutt:

This letter acknowledges the receipt of your October 6, 1996, application that requested a safety evaluation and registration of the Model CPD 705X Smoke Detective. We have performed a cursory review of your application and determined that enough information has been provided to allow a technical reviewer to initiate the evaluation process. Applications are assigned to technical reviewers on a first-in basis. Therefore, your application will be assigned in turn. Please note that the technical reviewer may contact you to request information that was omitted from your application or to obtain clarification of technical issues concerning your application. If you have any questions concerning the status of your application, please contact me at (301) 415-7857. Please reference the assignment number listed above in your questions or correspondence.

Please be aware that your request may be subject to the NRC's application fees in accordance with 10 CFR Part 170. Therefore, a copy of your application has been forwarded to the License Fee and Debt Collection Branch for approval of the fee category and amount. If you have any questions concerning the fees associated with your application, please contact the License Fee and Debt Collection Branch at (301) 415-7554.

Sincerely,

131
KimBerly Randall, Registration Assistant
Sealed Source Safety Section
Medical, Academic, and Commercial
Use Safety Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards

Distribution:

SSSS r/f

SSD-96-104

SBaggett

NE01 H

DOCUMENT NAME: P:96-104.wpd

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

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NAME	KRandall								
DATE	10/31/96								

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LICENSING TRACKING SYSTEM

DATE: 961023

PAGE: 1

LTS WORKSHEET

DOCKET NO : 03032498 LICENSE NO : 20-15285-03E STATUS: 0
MAIL CONTROL: 021878 RECEIPT DATE : 961023 ACTION TYPE: 4
DUE DATE : 970121
FED. GOVT : C INST. CODE : 15285 LICENSE REGION: 0
ISSUE DATE: ~~961102~~ ^{sher} ORIGINAL DATE: 910920 EXPIRATION DATE: 20011031
NAME : KIDDE-FENWAL, INC. DECOM FIN ASSUR REQD: N
SUBM: -
DEPT/BUREAU: _____ CONT PLAN REQD: N APPRV: -
BUILDING : _____
STREET : 400 MAIN STREET
CITY : ASHLAND STATE: MA ZIP: 01721
CONTACT PERSON: ~~ROBERT A. MACNUTT~~ ^{Bill Sawyer} QUALITY MGR PHONE: 508-881-2000
PRIMARY PGM CODE : 03255 SECONDARY PGM CODES: _____
INSPECTION REGION: 1 PRIORITY CODE: 5 INSPECTION CATEGORY: E
RADIATION SAFETY OFFICER: Bill Sawyer
STATES WHERE USE IS AUTHORIZED: 1 0 - ALL LISTED STATES
1 - SAME AS STATE IN ADDRESS
2 - ALL STATES
3 - NON-AGREEMENT STATES
AUTHORIZED STATES: _____ (USE ONLY IF ABOVE IS ZERO)
REPORTING IDENTIFICATION SYMBOL: _____
APPROVAL FOR: REDISTRIBUTION: N STORAGE ONLY: N
TEMPORARY JOB SITES: N INCINERATION: N
BURIAL: N
EXEMPTIONS: (1) _____ (2) _____

SLB,
pls assign.

ASK

Maureen
MS 23-Void
Thanks, Tony

and #03

October 6, 1996



KIDDE-FENWAL, INC.
400 MAIN STREET
ASHLAND, MA 01721 USA
TEL (508) 881-2000
FAX (508) 881-6729

Division of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Ms. Greene:

Pursuant to 10 CFR part 170.31 Category 9A, Kidde-Fenwal asks that license N.R. 668-D-101-E be amended and enclosed is the \$1200 amendment fee.

Kidde-Fenwal Inc. would like to amend the N.R.668-D-101-E registration as it applies to the series CPD 705X smoke detectors.

Nohmi Bosai Ltd., Japan is inaccurately listed as the sole manufacturer of CPD 705X smoke detectors. Kidde-Fenwal Inc. also manufactures some lines of the CPD 705X series at its 400 Main Street, Ashland, MA plant as authorized by its N.R.C. license #20-15285-01. Additionally, Kidde-Fenwal currently purchases the ion source assemblies from Nohmi Bosai Ltd., but also intends to purchase the ion source assemblies directly from either Amersham or N.R.D. Inc.

The requested amendment is believed to be strictly a language change addition due to the following:

1. Amersham and NRD Inc. are the source assembly suppliers listed on Kidde-Fenwal Inc. licenses.
2. All supporting documentation submitted in the past indicate Amersham and NRD Inc. as the Americum 241 source suppliers for the CPD 705X Smoke Detectors and this will not change.
3. The Americum 241 radioactive material sources listed on current Kidde-Fenwal, Inc. licenses and their supporting documentation remains the same as previously authorized by N.R.C.
5. The design and construction of the housing does not change.
6. The end product remains the same.

SUMMARY:

Amersham or N.R.D. Inc. are the Americum 241 foil source manufacturers of record. They are the NRC approved suppliers of sealed sources listed on Kidde-Fenwal Inc.'s N.R.C. licenses.

20-15285-03E

021878

Ms. Susan L. Greene
October 2, 1996
Page 2 of 2

All supporting documentation submitted in the past remains the same. Kidde-Fenwal Inc. wants to expand the license language to include Kidde-Fenwal Inc. as one of the CPD 705X series manufacturing facilities with the authority to purchase the ion source assemblies directly from either Amersham, N.R.D. Inc. or Nohmi and as such will use the identical radioactive sources currently authorized for the assembly of the CPD 705X products. Again it is emphasized that there will be no changes made to the source assembly or to the end product as it relates to ion source assemblies and Americum 241.

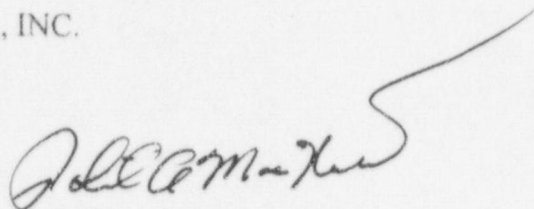
Kidde-Fenwal Inc. continues to maintain and conduct all its NRC approved/mandated Radiation Safety Programs and Procedures in support of its smoke detector manufacturing processes. Robert Harris is the current Radiation Safety Officer. N.R.C. was notified of R.S.O. change July 3, 1996 and Kidde-Fenwal Inc. awaits the amendment change naming Mr. Harris as the R.S.O.

If you have any questions, please contact Robert MacNutt, Q.A. Manager at Kidde-Fenwal, Inc. (508) 881-2000, extension 2733.

Sincerely,

KIDDE-FENWAL, INC.

Robert MacNutt



RH/es

Attachment: Memo 5-1-95, Page 1
N.R.C - change of R.S.O. Amendment
N.C.R. Safety Inspection
Amendment Fee



KIDDE-FENWAL, INC.

400 Main Street
Ashland, MA 01721

Tel: (508) 881-2000

Fax: (508) 881-6729

INTEROFFICE MEMORANDUM

DATE: 5-1-95

FROM: Bob MacNutt

TO: Doug Reardon

SUBJECT: NRC & LPC Status

REFERENCE Your memo dated 4-30-95 NRC & LPC status request

NRC Status - New Analog Detector

Kidde-Fenwal submitted on December 12, 1994 to the United States Nuclear Regulatory Commission a "Request for Amendment" to our License No. 20-15285-01. We enclosed the amendment fee of \$600 to cover the fee.

The NRC, Ms Penny Nessen, contacted KF (telephone call) on January 4, 1995 informing us that after reviewing our license and our letters of December 12, and 28, 1994 that there is no requirement for an amendment to our license. Our license 20-15285-01 amendment number 17, allows KF to assemble the Nohmi Bosai, CPD-705X devices at our Ashland, MA site. The NRC has returned our \$600 fee.

Two restrictions cover this agreement --

1. The new analog detectors must use the Nohmi Bosai device number CPD-705X.
2. The source must be purchased from Amersham mounted into the holder. Kidde-Fenwal can not receive the source at our site by itself.

Last Thursday, April 27, 1995, I contacted Ms. Penny Nessen, NRC, requesting that the NRC submit in writing that our license allows KF to assemble Nohmi Bosai at our Ashland, MA site. I explained the need to document in writing this fact in order to satisfy UL in our approval process of the new CPD 705X devices. Ms. Nessen stated no, that the NRC does not put such information into a letter. We have our license, if UL would like to contact her at the NRC, she would be willing to discuss our license.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

SEP 26 1996

Robert A. MacNutt
Quality Manager
Kidde-Fenwal, Inc.
400 Main Street
Ashland MA 01721

Dear Mr. MacNutt:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that as part of this amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. Your new expiration date is stated in Item 4 of the license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Sheri A. Arredondo

Sheri A. Arredondo
Division of Nuclear Materials Safety

License No. 20-15285-01
Docket No. 030-08864
Control No. 123417

Enclosure:
Amendment No. 18

MATERIALS LICENSE

Amendment No. 18

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.

Licensee		In accordance with the letter dated July 3, 1996, 3. License Number 20-15285-01 is amended in its entirety to read as follows:	
1. Kidde-Fenwal, Incorporated		4. Expiration Date August 31, 2004	
2. 400 Main Street Ashland, Massachusetts 01721		5. Docket or Reference No. 030-08864	
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License	
A. Americium 241	A. Sealed sources (Amersham Corporation Model AMM-1001H and Model AMM-1001D or Nuclear Radiation Development Model A-001)	A. Not to exceed 6 microcuries per source and 1.8 millicuries total	
B. Americium 241	B. Sealed sources (Amersham Corporation Model AMM-1001, Model AMM-1001H and Model AMM-1001D or Nuclear Radiation Development Model A-001)	B. Not to exceed 2.5 microcuries per source and 800 millicuries total	

9. Authorized use

- A. Research and development as defined in 10 CFR 30.4.
B. Fabrication of smoke detectors

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at 400 Main Street, Ashland, Massachusetts.
11. Licensed material shall be used by, or under the supervision of Robert Harris.
12. The Radiation Safety Officer for this license is Robert Harris.
13. Licensed material shall not be used in or on human beings.
14. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

20-15285-01

Docket or Reference Number

030-08864

Amendment No. 17

15. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR Part 31 or equivalent regulations of any Agreement State or to persons exempt from licensing pursuant to 10 CFR 30.18.
16. Except as specifically provided otherwise in 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. Application dated November 23, 1993
B. Letter dated July 26, 1994

Date

SEP 26 1996

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

Sheri Ann Arredondo

Nuclear Materials Safety Branch
Region I
King of Prussia, Pennsylvania 19406

SAFETY INSPECTION

Page 1 of

1. LICENSEE

Kidde - Fenwal, Inc
400 MAIN Street
Ashland, Massachusetts 01721

2. REGIONAL OFFICE

REGION I
U.S. NUCLEAR REGULATORY COMMISSION
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

3. DOCKET NUMBER(S)

030-08864
030-32498

4. LICENSE NUMBER(S)

20-15285-01
20-15285-03E

5. DATE OF INSPECTION

June 8, 1995

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The findings as a result of this inspection are as follows:

☒ 1. Within the scope of this inspection, no violations were observed.

☐ 2. The inspector also verified the steps you have taken to correct the violations identified during the last inspection. We have no further questions on those actions at this time.

☐ 3. During this inspection certain of your activities, as described below or attached, were in violation of NRC requirements. This form is a **NOTICE OF VIOLATION**, which is required to be posted in accordance with 10 CFR 19.11.

☐ A. _____ was not properly posted to indicate the presence of a _____ 10 CFR 20.203(b), (c), (d), (e) or 34.42.

☐ B. _____ of sealed sources were not performed at the proper frequencies. 10 CFR _____ or License Condition Number _____

☐ C. Records of _____ were not properly maintained. 10 CFR _____ or License Condition Number _____

☐ D. Documents were not properly posted or otherwise made available. 10 CFR 19.11.

☐ E. Reports or notification of _____ were not made in accordance with 10 CFR _____ or License Condition Number _____

☐ F. _____

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified in the items checked above. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201. No further response will be submitted unless required by the NRC.

SIGNATURE -- LICENSEE

DATE

SIGNATURE -- NRC INSPECTOR

DATE

Geresa Hall Kaskela

June 8, 1995

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 03255
Status Code: 0
Fee Category: 3H
Exp. Date: 20011031
Fee Comments:
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION Hqs

1. APPLICATION ATTACHED

Applicant/Licensee: KIDDE-FENWAL, INC.
Received Date: 961023
Docket No: 3032498
Control No.: 021878
License No.: 20-15265-03E
Action Type: Amendment

2. FEE ATTACHED

Amount: \$1200.00
Check No.: 033291

applied to 96-104, SS+D

3. COMMENTS

copy provided to SSSS

Signed
Date

Boyle 10/24/96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered ☒)

1. Fee Category and Amount: 3H

2. Correct Fee Paid. Application may be processed for:

Amendment
Renewal
License

3. OTHER

Log	<u>Feb 1 1997</u>
Remitter	<u>See 96-104</u>
Check No.	<u>38371</u>
Amount	<u>1,200</u>
Fee Category	<u>3H</u>
Type of Fee	<u>AmD</u>
Dts Check Rec'd	<u>2/20/97</u>
Date Completed	<u>2/20/97</u>
By	<u>SK</u>

Signed
Date

①
10/29/96

Hold til we hear from
Hqs if this will be
an amend or not.

②
10/30/96

might result in an amend

③
2/3/97 - Yes, amend per
T. Kirkwood.

See 96-104 SS+D.

1996 OCT 24 PM 3:28

October 6, 1996



KIDDE-FENWAL, INC.
400 MAIN STREET
ASHLAND, MA 01721 USA
TEL. (508) 881-2000
FAX. (508) 881-6729

Division of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Ms. Greene:

Pursuant to 10 CFR part 170.31 Category 9A, Kidde-Fenwal asks that license N.R. 668-D-101-E be amended and enclosed is the \$1200 amendment fee.

Kidde-Fenwal Inc. would like to amend the N.R.668-D-101-E registration as it applies to the series CPD 705X smoke detectors.

Nohmi Bosai Ltd., Japan is inaccurately listed as the sole manufacturer of CPD 705X smoke detectors. Kidde-Fenwal Inc. also manufactures some lines of the CPD 705X series at its 400 Main Street, Ashland, MA plant as authorized by its N.R.C. license #20-15285-01. Additionally, Kidde-Fenwal currently purchases the ion source assemblies from Nohmi Bosai Ltd., but also intends to purchase the ion source assemblies directly from either Amersham or N.R.D. Inc.

The requested amendment is believed to be strictly a language change addition due to the following:

1. Amersham and NRD Inc. are the source assembly suppliers listed on Kidde-Fenwal Inc. licenses.
2. All supporting documentation submitted in the past indicate Amersham and NRD Inc. as the Americum 241 source suppliers for the CPD 705X Smoke Detectors and this will not change.
3. The Americum 241 radioactive material sources listed on current Kidde-Fenwal, Inc. licenses and their supporting documentation remains the same as previously authorized by N.R.C.
5. The design and construction of the housing does not change.
6. The end product remains the same.

SUMMARY:

Amersham or N.R.D. Inc. are the Americum 241 foil source manufacturers of record. They are the NRC approved suppliers of sealed sources listed on Kidde-Fenwal Inc.'s N.R.C. licenses.

20-15285-03E

021878

Ms. Susan L. Greene
October 2, 1996
Page 2 of 2

All supporting documentation submitted in the past remains the same. Kidde-Fenwal Inc. wants to expand the license language to include Kidde-Fenwal Inc. as one of the CPD 705X series manufacturing facilities with the authority to purchase the ion source assemblies directly from either Amersham, N.R.D. Inc. or Nohmi and as such will use the identical radioactive sources currently authorized for the assembly of the CPD 705X products. Again it is emphasized that there will be no changes made to the source assembly or to the end product as it relates to ion source assemblies and Americum 241.

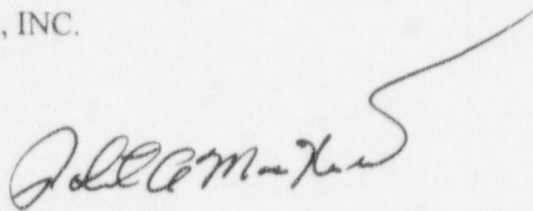
Kidde-Fenwal Inc. continues to maintain and conduct all its NRC approved/mandated Radiation Safety Programs and Procedures in support of its smoke detector manufacturing processes. Robert Harris is the current Radiation Safety Officer. N.R.C. was notified of R.S.O. change July 3, 1996 and Kidde-Fenwal Inc. awaits the amendment change naming Mr. Harris as the R.S.O.

If you have any questions, please contact Robert MacNutt, Q.A. Manager at Kidde-Fenwal, Inc. (508) 881-2000, extension 2733.

Sincerely,

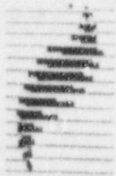
KIDDE-FENWAL, INC.

Robert MacNutt



RH/es

Attachment: Memo 5-1-95, Page 1
N.R.C - change of R.S.O. Amendment
N.C.R. Safety Inspection
Amendment Fee



KIDDE-FENWAL, INC.

400 Main Street

Ashland, MA 01721

Tel: (508) 881-2000

Fax: (508) 881-6729

INTEROFFICE MEMORANDUM

DATE: 5-1-95

FROM: Bob MacNutt

TO: Doug Reardon

SUBJECT: NRC & LPC Status

REFERENCE: Your memo dated 4-30-95 NRC & LPC status request

NRC Status - New Analog Detector

Kidde-Fenwal submitted on December 12, 1994 to the United States Nuclear Regulatory Commission a "Request for Amendment" to our License No. 20-15285-01. We enclosed the amendment fee of \$600 to cover the fee.

The NRC, Ms Penny Nessen, contacted KF (telephone call) on January 4, 1995 informing us that after reviewing our license and our letters of December 12, and 28, 1994 that there is no requirement for an amendment to our license. Our license 20-15285-01 amendment number 17, allows KF to assemble the Nohmi Bosai, CPD-705X devices at our Ashland, MA site. The NRC has returned our \$600 fee.

Two restrictions cover this agreement --

1. The new analog detectors must use the Nohmi Bosai device number CPD-705X.
2. The source must be purchased from Amersham mounted into the holder. Kidde-Fenwal can not receive the source at our site by itself.

Last Thursday, April 27, 1995, I contacted Ms. Penny Nessen, NRC, requesting that the NRC submit in writing that our license allows KF to assemble Nohmi Bosai at our Ashland, MA site. I explained the need to document in writing this fact in order to satisfy UL in our approval process of the new CPD 705X devices. Ms. Nessen stated no, that the NRC does not put such information into a letter. We have our license, if UL would like to contact her at the NRC, she would be willing to discuss our license.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406 1415

SEP 26 1996

Robert A. MacNutt
Quality Manager
Kidde-Fenwal, Inc.
400 Main Street
Ashland, MA 01721

Dear Mr. MacNutt:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that as part of this amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. Your new expiration date is stated in Item 4 of the license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Sheri A. Arredondo

Sheri A. Arredondo
Division of Nuclear Materials Safety

License No. 20-15285-01
Docket No. 030-08864
Control No. 123417

Enclosure:
Amendment No. 18

MATERIALS LICENSE

Amendment No. 18

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.

Licensee

1. Kidde-Fenwal, Incorporated
2. 400 Main Street
Ashland, Massachusetts 01721

In accordance with the letter dated
July 3, 1996,
3. License Number 20-15285-01 is amended in
its entirety to read as follows:

4. Expiration Date August 31, 2004

5. Docket or
Reference No. 030-08864

6. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This License

A. Americium 241

A. Sealed sources
(Amersham Corporation
Model AMM-1001H and
Model AMM-1001D or
Nuclear Radiation
Development Model A-001)

A. Not to exceed 6
microcuries per source
and 1.8 millicuries total

B. Americium 241

B. Sealed sources
(Amersham Corporation
Model AMM-1001, Model
AMM-1001H and Model
AMM-1001D or Nuclear
Radiation Development
Model A-001)

B. Not to exceed 2.5
microcuries per source
and 800 millicuries total

9. Authorized use

- A. Research and development as defined in 10 CFR 30.4.
- B. Fabrication of smoke detectors

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at 400 Main Street, Ashland, Massachusetts.
11. Licensed material shall be used by, or under the supervision of Robert Harris.
12. The Radiation Safety Officer for this license is Robert Harris.
13. Licensed material shall not be used in or on human beings.
14. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

20-15285-01

Docket or Reference Number

030-08864

Amendment No. 17

15. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR Part 31 or equivalent regulations of any Agreement State or to persons exempt from licensing pursuant to 10 CFR 30.18.
16. Except as specifically provided otherwise in 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. Application dated November 23, 1993
 - B. Letter dated July 26, 1994

Date

SEP 26 1996

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

Sheri Ann Arredondo

Nuclear Materials Safety Branch
Region I

King of Prussia, Pennsylvania 19406

SAFETY INSPECTION

Page 1 of

1. LICENSEE

Kidd - Fenwal, Inc
400 MAIN Street
Ashland, Massachusetts 01721

2. REGIONAL OFFICE

REGION I
U.S. NUCLEAR REGULATORY COMMISSION
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

3. DOCKET NUMBER(S)

030-08864
030-32498

4. LICENSE NUMBER(S)

20-15285-01
20-15285-03E

5. DATE OF INSPECTION

June 8, 1995

LICENSEE

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The findings as a result of this inspection are as follows:



1. Within the scope of this inspection, no violations were observed.



2. The inspector also verified the steps you have taken to correct the violations identified during the last inspection. We have no further questions on those actions at this time.



3. During this inspection certain of your activities, as described below or attached, were in violation of NRC requirements. This form is a NOTICE OF VIOLATION, which is required to be posted in accordance with 10 CFR 19.11.



A. _____ was not properly posted to indicate the presence of a _____ 10 CFR 20.203(b), (c), (d), (e) or 34.42.



B. _____ of sealed sources were not performed at the proper frequencies. 10 CFR _____ or License Condition Number _____



C. Records of _____ were not properly maintained. 10 CFR _____ or License Condition Number _____



D. Documents were not properly posted or otherwise made available. 10 CFR 19.11.



E. Reports or notification of _____ were not made in accordance with 10 CFR _____ or License Condition Number _____



F. _____

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified in the items checked above. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201. No further response will be submitted unless required by the NRC.

SIGNATURE - LICENSEE

DATE

SIGNATURE - NRC INSPECTOR

DATE

Teressa Hill-Karsten

June 8, 1995

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001KIDDE-FENWAL, INC.
ATTN: Mr. Robert MacNutt
QA Manager
400 Main Street
Ashland, MA 01721

TYPE OF ACTION

- ☐ NEW LICENSE
- ☐ RENEWAL OF LICENSE
- ☒ AMENDMENT TO LICENSE

REQUESTED DATE

10-6-96

LICENSE NUMBER

20-15285-03E

CONTROL NUMBER

021878

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
3H	\$ 1,000.00	\$	\$
9A	\$ 1,200.00	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	2,200.00
PAYMENT RECEIVED	\$	1,200.00
AMOUNT DUE	\$	1,000.00

☒ Your request was received without the prescribed application fee.

☐ We received your Check No. _____ in the amount of \$ _____. Payment of the additional fee noted above is required.

☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

II. FEE NOT REQUIRED

☐ Enclosed is Check No. _____ which accompanied your request. The fee is not required because:

☐ We received your Check No. _____ in payment of the fee.

☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated _____, Control No. _____.

☐ Your request was combined, prior to review, with your request, Control No. _____.

III. CHECK RETURNED

☐ Enclosed is Check No. _____ which was returned to us by the bank for:

- ☐ INSUFFICIENT FUNDS
- ☐ ACCOUNT CLOSED
- ☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

☐ License No. _____, Amendment No. _____, issued on _____.

_____ was issued without the required fee being collected. The fee required is noted in Section I of this form.

☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

SIGNATURE -- LICENSE FEE ANALYST

Sandra Kimberley

LFDCB

sk

2/3/97

LFDCB

Distribution:

LFARS (L43.2.2)
OC/DAF

cc: S. Greene, HEP

DATE

2/3/97

LICENSE FEE REQUIREMENTS

1997 FEB 20 AM 9:57

ATTN: Sandra Kimberley T-9E10
LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

301 415 6096

KIDDE-FENWAL, INC.
ATTN: Mr. Robert MacNutt
QA Manager
400 Main Street
Ashland, MA 01721

TYPE OF ACTION

- ☐ NEW LICENSE
☐ RENEWAL OF LICENSE
☒ AMENDMENT TO LICENSE

REQUESTED DATE

10-6-96

LICENSE NUMBER

20-15285-03E

CONTROL NUMBER

021878

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
3H	\$ 1,000.00	\$	\$
9A	\$ 1,200.00	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	2,200.00
PAYMENT RECEIVED	\$	1,200.00
AMOUNT DUE	\$	1,000.00

- ☒ Your request was received without the prescribed application fee.
- ☐ We received your Check No. _____ in the amount of \$ _____. Payment of the additional fee noted above is required.
- ☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

II. FEE NOT REQUIRED

- ☐ Enclosed is Check No. _____ which accompanied your request. The fee is not required because:
- ☐ We received your Check No. _____ in payment of the fee.
- ☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated _____, Control No. _____.
- ☐ Your request was combined, prior to review, with your request, Control No. _____.

III. CHECK RETURNED

- ☐ Enclosed is Check No. _____ which was returned to us by the bank for:
- ☐ INSUFFICIENT FUNDS
- ☐ ACCOUNT CLOSED
- ☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

- ☐ License No. _____, Amendment No. _____, issued on _____, was issued without the required fee being collected. The fee required is noted in Section I of this form.
- ☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

SIGNATURE -- LICENSE FEE ANALYST

Sandra Kimberley

(LEAVE BLANK)

DATE

2/3/97



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

October 31, 1996

ASSIGNMENT NUMBER: 96-104

Mr. Robert MacNutt
Kidde Fenwal, Inc.
400 Main Street
Ashland, MA 01721

SUBJECT: ACKNOWLEDGEMENT OF REQUEST FOR SAFETY EVALUATION

Dear Mr. MacNutt:

This letter acknowledges the receipt of your October 6, 1996, application that requested a safety evaluation and registration of the Model CPD 705X Smoke Detective. We have performed a cursory review of your application and determined that enough information has been provided to allow a technical reviewer to initiate the evaluation process. Applications are assigned to technical reviewers on a first-in basis. Therefore, your application will be assigned in turn. Please note that the technical reviewer may contact you to request information that was omitted from your application or to obtain clarification of technical issues concerning your application. If you have any questions concerning the status of your application, please contact me at (301) 415-7857. Please reference the assignment number listed above in your questions or correspondence.

Please be aware that your request may be subject to the NRC's application fees in accordance with 10 CFR Part 170. Therefore, a copy of your application has been forwarded to the License Fee and Debt Collection Branch for approval of the fee category and amount. If you have any questions concerning the fees associated with your application, please contact the License Fee and Debt Collection Branch at (301) 415-7554.

Sincerely,

A handwritten signature in cursive script, reading "KimBerly Randall", is positioned above the typed name and title.

KimBerly Randall, Registration Assistant
Sealed Source Safety Section
Medical, Academic, and Commercial
Use Safety Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards