

United States Nuclear Regulatory Commission  
Nuclear Materials Safety Branch  
475 Allendale Road  
King of Prussia, PA 19406

March 4, 2005



Attn: **Licensing Section**

Re: Renewal of USNRC License #37-15157-02

03033748

Dear Sir/ Madam,

RECEIVED  
LICENSING SECTION 1  
MAR 11 10 21 33 AM '05

World Kitchen, Inc. requests that the United States Nuclear Regulatory Commission (USNRC) grant the renewal of Specific License Number 37-15157-02. Requested changes include the following:

- Revisions to the Radiation Safety Program to include minimizing specific commitments based upon NUREG1556, Volume 4 Guidance

Included in this request please find the following:

- USNRC Form 313
- Appendix B from NUREG 1556, Volume 4 (7 pages)
- Dosimetry Evaluation (1 page)
- Non-routine Maintenance Procedure (2 pages)

The following source and device information is provided as an addendum to Appendix B:

| A. Element and Mass Number | B. Source and <b>Device</b> Models  | C. Requested Possession Limit  |
|----------------------------|---|--|
| Cesium-137                 | AEA Technology Model<br>CDC.711M<br><b>Ronan Engineering</b><br><b>Model SA-1Level Gauges</b> | No single source or device to exceed the maximum activity authorized by Sealed Source and Device Registration. |

This correspondence represents the World Kitchen, Inc. Radiation Safety Program in its entirety. It is hereby requested that references to previous correspondence be removed from License Condition #25.

If there are any questions please contact Ellen Kurtz at (724)-489-2202.

Best regards,

*David P. Dietz*  
David Dietz  
Plant Manager  
World Kitchen, Inc.

**NRC FORM 313**  
(4-2004)  
10 CFR 30, 32, 33,  
34, 35, 36, 39, and 40

**U.S. NUCLEAR REGULATORY COMMISSION**

**APPROVED BY OMB: NO. 3150-0120**

**EXPIRES: 10/31/2005**

Estimated burden per response to comply with this mandatory collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

**APPLICATION FOR MATERIAL LICENSE**

**INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.**

**APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:**

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

**ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:**

**IF YOU ARE LOCATED IN:**

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM  
DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

**IF YOU ARE LOCATED IN:**

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-4005

03033748

**PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.**

**1. THIS IS AN APPLICATION FOR (Check appropriate item)**

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER
- C. RENEWAL OF LICENSE NUMBER 37-15157-02

**2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)**

World Kitchen, Inc.  
100 8th Street  
Charleroi, PA 15022

**3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED**

SAME

**4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

Ellen Kurtz

TELEPHONE NUMBER

(724) 489-2202

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

**5. RADIOACTIVE MATERIAL**

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

**6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED**

**7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.**

**8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS**

**9. FACILITIES AND EQUIPMENT.**

**10. RADIATION SAFETY PROGRAM.**

**11. WASTE MANAGEMENT.**

**12. LICENSE FEES (See 10 CFR 170 and Section 170.31)**

FEE CATEGORY AMOUNT ENCLOSED \$

**13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.**

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

**CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE**

David Dietz, Plant Manager

**SIGNATURE**

**DATE**

3/9/05

**FOR NRC USE ONLY**

TYPE OF FEE FEE LOG FEE CATEGORY AMOUNT RECEIVED CHECK NUMBER COMMENTS

\$

APPROVED BY

DATE

136589

**NMSS/RGNI MATERIALS-002**

# **APPENDIX B**

**Suggested Format for Providing Information Requested in Items 5 Through 11 of NRC Form 313**

**Table B.1 Items 5 & 6: Materials To Be Possessed and Proposed Uses**

| Yes | No | Radioisotope | Manufacturer or Distributor Model No.   | Quantity  | Use As Listed on SSD Certificate   | Specify Other Uses Not Listed on SSD Certificate   |
|-----|----|--------------|---|---|--|--|
|     | X  | Cobalt-60    | Sealed source manufacturer or distributor and model number:<br>_____<br>Device manufacturer or distributor and model number:<br>_____ | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes <input type="checkbox"/> Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____<br>_____ | <input type="checkbox"/> Not applicable<br><input type="checkbox"/> Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |
|     | X  | Krypton-85   | Sealed source manufacturer or distributor and model number:<br>_____<br>Device manufacturer or distributor and model number:<br>_____ | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes <input type="checkbox"/> Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____<br>_____ | <input type="checkbox"/> Not applicable<br><input type="checkbox"/> Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |
|     | X  | Strontium-90 | Sealed source manufacturer or distributor and model number:<br>_____<br>Device manufacturer or distributor and model number:<br>_____ | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes <input type="checkbox"/> Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____<br>_____ | <input type="checkbox"/> Not applicable<br><input type="checkbox"/> Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |
| X   |    | Cesium-137   | Sealed source manufacturer or distributor and model number:<br>_____<br>Device manufacturer or distributor and model number:<br>_____ | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes <input type="checkbox"/> Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____<br>_____ | <input type="checkbox"/> Not applicable<br><input type="checkbox"/> Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |

APPENDIX B

| Yes | No | Radioisotope   | Manufacturer or Distributor Model No.   | Quantity  | Use As Listed on SSD Certificate  | Specify Other Uses Not Listed on SSD Certificate   |
|-----|----|--|---|---|---|--|
|     | X  | Americium-241  | Sealed source manufacturer or distributor and model number:<br><br>Device manufacturer or distributor and model number: | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes [ ]<br>Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____ | [ ] Not applicable<br>[ ] Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |
|     | X  | Other Isotope (Specify):   | Sealed source manufacturer or distributor and model number:<br><br>Device manufacturer or distributor and model number: | Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate | Yes [ ]<br>Specific description of the gauge use:<br>_____<br>_____<br>_____<br>_____ | [ ] Not applicable<br>[ ] Uses are:<br>_____<br>(Submit safety analysis supporting safe use) |
|     | X  | <i>Financial Assurance Required and Evidence of Financial Assurance Provided</i> |   |   |   |  |

**Table B.2 Items 7 Through 11: Training and Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal**

| Item No. and Title  | Suggested Response   | Yes                                    | Alternative Procedures Attached |
|---|--|--|---------------------------------|
| <p>7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience</p> <p>7.1 Radiation Safety Officer</p> <p>Name: <u>Ellen</u><br/>Kurtz</p>  | <p>Before obtaining licensed materials, the proposed RSO will have successfully completed the training described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998.</p> <p style="text-align: center;"><b>AND</b></p> <p>Before being named as the RSO, future RSOs will have successfully completed the training described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998. Within 30 days of naming a new RSO, we will submit the new RSO's name to NRC to include in our license.</p> | <input checked="" type="checkbox"/>    | [ ]                             |
| <p>7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience</p> <p>7.2 Authorized Users</p>  | <p><b>PROPOSED AUTHORIZED USERS:</b></p> <p>Before using licensed materials, authorized users will have successfully completed the training described in Criteria in the section entitled, "Authorized Users" in NUREG-1556, Vol. 4, dated October 1998.</p>   | <input checked="" type="checkbox"/>    | [ ]                             |
| <p>8. Training for Individuals Who in the Course of Employment are Likely to Receive Occupational Doses of Radiation in Excess of 1 mSv (100 mrem) in a Year (Occupationally Exposed Workers) and Ancillary Personnel</p> | <p>The applicant is <i>not</i> required to, and should not, submit is training program, for individuals who in the course of employment are likely to receive occupational doses of radiation in excess of 1 mSv (100 mrem) in a year (occupationally exposed workers) and ancillary personnel, to the NRC for review during the licensing phase.</p>  | Need Not Be Submitted with Application |                                 |

APPENDIX B

| Item No. and Title   | Suggested Response  | Yes                                    | Alternative Procedures Attached |
|--|---|--|---------------------------------|
| 9. Facilities and Equipment  | We will ensure that the location of each fixed gauge meets the Criteria in the section entitled "Facilities and Equipment" in NUREG-1556, Vol. 4, dated October 1998.   | <input checked="" type="checkbox"/>    | []                              |
| 10. Radiation Safety Program - Audit Program                       | The applicant is <i>not</i> required to, and should not, submit its audit program to the NRC for review during the licensing phase.   | Need Not Be Submitted with Application |                                 |
| 10. Radiation Safety Program - Survey Instruments                  | <p>Surveys pursuant to 10 CFR 20.1501 will be performed by a person specifically authorized by the NRC or an Agreement State to perform these surveys.</p> <p style="text-align: center;"><b>OR</b></p> <p>We will use instruments that meet the Criteria in the section entitled "Radiation Safety Program - Instruments," in NUREG-1556, Vol. 4, dated August 1998, and <i>one</i> of the following:</p> <p style="padding-left: 40px;">Each survey meter will be calibrated by the manufacturer or other person authorized by the NRC or an Agreement State to perform survey meter calibrations.</p> <p style="text-align: center;"><b>OR</b></p> <p>We will implement the model survey instrument calibration program in Appendix I to NUREG-1556, Vol. 4, dated October 1998.</p> | <input checked="" type="checkbox"/>    | []                              |
| 10. Radiation Safety Program - Material Receipt and Accountability | Physical inventories will be conducted at intervals not to exceed 6 months or at other intervals approved by the NRC, to account for all sealed sources and devices received and possessed under the license.   | <input checked="" type="checkbox"/>    | []                              |
| 10. Radiation Safety Program - Occupational Dosimetry              | We will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry that meets the Criteria in the section entitled "Radiation Safety Program - Occupational Dosimetry," in NUREG-1556, Vol. 4, dated October 1998.  | <input checked="" type="checkbox"/>    | []                              |

| Item No. and Title  | Suggested Response  | Yes  | Alternative Procedures Attached |
|---|---|--|---------------------------------|
| 10. Radiation Safety Program - Public Dose                      | The applicant is not required to submit a response to the public dose section during the licensing phase. However, during NRC inspections, licensees must be able to provide documentation demonstrating, by measurement or calculation, that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation does not exceed the annual limit for individual members of the public.   | Need Not Be Submitted with Application   |                                 |
| 10. Radiation Safety Program - Operating & Emergency Procedures | <p>If the gauge meets one or more of the safety conditions specified in "Discussion," in the section entitled "Radiation Safety Program-Operating Emergency Procedures," in NUREG 1556, Vol. 4, dated August 1998 state the following:</p> <p>Operating and emergency procedures will be developed, implemented, maintained, and distributed, and will meet the Criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures," in NUREG-1556, Vol. 4, dated August 1998.</p> <p>For each gauge requested that does not meet one or more of the safety conditions specified in "Discussion," in the section entitled "Radiation Safety Program-Operating Emergency Procedures," in NUREG 1556, Vol. 4, dated August 1998 provide your operating, emergency and lock-out (if applicable) procedures to NRC for review.</p> | <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/> Procedures Attached</p> | <p><input type="checkbox"/></p> |
| 10. Radiation Safety Program - Leak Test                        | <p>Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device Registration Certificate. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions.</p> <p style="text-align: center;"><b>OR</b></p> <p>We will implement the model leak test program published in Appendix M to NUREG-1556, Vol. 4, dated October 1998.</p>  | <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p>                     | <p><input type="checkbox"/></p> |



APPENDIX B

| Item No. and Title  | Suggested Response  | Yes                                    | Alternative Procedures Attached  |
|---|---|--|--|
| 10. Radiation Safety Program - Maintenance                              | <p><u>ROUTINE MAINTENANCE</u><br/>We will implement and maintain procedures for routine maintenance of our fixed gauges according to each manufacturer's or distributor's written recommendations and instructions.</p> <p><u>NON-ROUTINE MAINTENANCE OPERATIONS</u><br/>The gauge manufacturer, distributor or other person authorized by NRC or an Agreement State will perform non-routine operations such as installation, initial radiation survey, repair, and maintenance of components related to the radiological safety of the gauge, gauge relocation, replacement, and disposal of sealed sources, alignment, or removal of a gauge from service.</p> | <p>[ ]</p>                             | <p>[ ]</p> <p>[X] The information listed in Appendix N supporting a request to perform non-routing operations in-house is attached</p> |
| 10. Radiation Safety Program - Transportation                           | The applicant is <i>not</i> required to submit its response to transportation during the licensing process; this issue will be reviewed during inspection. However, the licensee should develop, implement, and maintain transportation procedures according to NRC and DOT regulations.  | Need Not Be Submitted with Application |  |
| 10. Radiation Safety Program - Fixed Gauges Used at Temporary Job Sites | <p>This is not applicable to our program. We will not use fixed gauges at temporary job sites.</p> <p style="text-align: center;"><b>OR</b></p> <p>We will develop, implement, maintain and distribute procedures that meet the Criteria in the section entitled "Radiation Safety Program - Fixed Gauges Used at Temporary Job Sites" in NUREG-1556, Vol. 4, dated October 1998.</p>   | <p>[X] Not Applicable</p> <p>[ ]</p>   | <p>[ ]</p>   |
| 10. Radiation Safety Program - Minimization of Contamination            | The applicant is not required to submit a response to minimization of contamination if the applicant's responses meet the criteria for the following sections: Radioactive Material - Sealed Sources and Devices, Facilities and Equipment, Radiation Safety Program - Operating and Emergency Procedures, Radiation Safety Program - Leak Testing, and Waste Management - Gauge Transfer and Disposal.   | Need Not Be Submitted with Application |  |

APPENDIX B

| Item No. and Title                                     | Suggested Response   | Yes                                    | Alternative Procedures Attached |
|--|--|--|---------------------------------|
| 11. Waste Management<br>- Gauge Disposal &<br>Transfer | The applicant is not required to submit a response to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program. | Need Not Be Submitted with Application |                                 |

**NON-ROUTINE  
MAINTENANCE  
PROCEDURE**

# UNBOLTING AND BOLTING OF NUCLEAR GAUGING DEVICES

## Purpose

This procedure provides instruction for the removal from service and the installation of nuclear gauging devices.

## Scope

This procedure is applicable only to removal of nuclear gauging devices from service for the following reasons:

- Placement of device(s) in storage.
- Shipment of device(s) for disposal, transfer and/or return to manufacturer.

## Limitations

The World Kitchen Radiation Officer shall assure that:

- Non-routine maintenance activities are conducted by Authorized Users as identified on the specific license.
- Each non-routine maintenance activity must be authorized on the World Kitchen USNRC license.
- All non-routine maintenance activities must be conducted as to the approved procedure

## Prerequisites

1. Individuals supervising the removal and installation of nuclear gauging devices must possess the following training qualifications and demonstrate proficiency in the assigned tasks:
  - Successful completion of a training course commensurate with the topics outlined in NUREG 1556, Volume 4, Appendix G and N
  - A minimum of one year experience in performing radiation safety surveillance and radioactive materials handling duties.
2. Prior to removal of a nuclear gauging device, a specified location must be identified to securely store the device. The storage location will meet the following requirements:
  - The storage room will be located in an area of the facility with low traffic patterns.
  - Access will be restricted to authorized personnel through the use of locked doors. Only the Radiation Safety Officer or designee will maintain the key(s).

- Access doors or cabinets should be labeled “Caution, Radioactive Materials” with contact phone numbers for the Radiation Safety Officer or designee.

## Precautions and Limitations

All work will be performed by or under the supervision of an Authorized User. The licensee will not perform maintenance on any device other than lubrication, electronic repair and calibration, shutter operational checks, leak tests and radiation exposure surveys. ALARA practices shall be strictly enforced during all non-routine maintenance activities.

Nuclear gauging devices will be removed from service under the following conditions:

- Devices with an operable shutter whereby the shutter mechanism may be placed in a closed position and secured prior to removal from its mounting.
- Devices have been operational with a valid leak test performed prior to removal.

Nuclear gauging devices will be removed from storage and reinstalled under the following conditions:

- Devices that are operational and possess a valid leak test.
- Devices that have an operable shutter whereby the shutter mechanism has been secured in a closed position.

## Equipment

The Authorized User shall utilize a calibrated survey instrument capable of detecting the type and strength of radiation emitted.

## Removal Instructions

1. Perform radiological monitoring and inspection of device, including valid leak test results.
2. Lock-out/Tag-out of shutter mechanism.
3. Remove nuclear gauge from service and transfer gauge to specified storage location in a timely manner.
4. Perform radiological monitoring, posting and inspection of storage area.

## Installation Instructions

1. Perform radiological monitoring and inspection of device.
2. Verify Lock-out/Tag-out of shutter mechanism and valid leak test results.
3. Transfer nuclear gauge to specified location and install.
4. Verify proper operation of the shutter mechanism if any prior to authorizing device operation.
5. Perform and document radiological monitoring, including survey results in all accessible areas with shutter in the open position.

# **DOSIMETRY EVALUATION**

## **DOSIMETRY EVALUATION**

According to the World Kitchen, Inc. procedure and in accordance with proper ALARA practices for performing routine and non-routine maintenance, all physical handling of licensed devices shall be done with the shutter secured in the closed position. All non-essential personnel shall be removed from the area in which non-routine maintenance is to be performed.

The current inventory of licensed devices includes the following:

- Ronan Model SA-1 Level Gauges containing not more than 2000 mCi of Cs-137

World Kitchen, Inc. utilized the following references for personnel exposure determinations and the need for monitoring:

- 10CFR20.1502
- Sealed Source Device Registration KY-576-D-101-B
- World Kitchen Radiation Survey Data

Maximum radiation survey results for the Cs-137 gauges as documented on the device registration identified the following for devices containing 2500 mCi:

9.5 mR/hour at 5 cm  
3.2 mR/hour at 30 cm  
0.35 mR/hour at 100 cm

Through previous experiences with licensed vendors, World Kitchen, Inc. estimates that the routine and non-routine maintenance procedures would not exceed .5 hours per task. Historical needs for licensed device non-routine maintenance indicate that no more than 4 moves would be made per year. This would include removal, relocation, alignment, component replacement and installation. Due to the low radiation levels identified, estimates were not calculated for extremity exposure. Routine maintenance would occur at no more than 6 times per year.

Whole body exposure of 10 mR per hour (based upon a conservative estimate at the 5 cm distance with shutter closed multiplied by 0.5 hours = 5.0 mR/move. If the same individual performed this task 10 times per calendar year the total whole body exposure would be 50 millirem. This is well below the requirement for personal monitoring.

Based upon this information World Kitchen, Inc. requests that personal monitoring not be required. In the event that the scope of work would change including a potential for exposures in excess of the monitoring requirement, World Kitchen, Inc. would arrange for badges to be supplied by a qualified vendor.

This is to acknowledge the receipt of your letter/application dated

3/4/2005, and to inform you that the initial processing which includes an administrative review has been performed.

Renew 37-15157-02 There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 136589.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.



: (FOR LFMS USE)  
 : INFORMATION FROM LTS  
 : -----  
 :  
 BETWEEN: :  
 :  
 License Fee Management Branch, ARM : Program Code: 03120  
 and : Status Code: 2  
 Regional Licensing Sections : Fee Category: 3P  
 : Exp. Date: 20050331  
 : Fee Comments: \_\_\_\_\_  
 : Decom Fin Assur Req'd: N  
 : ::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED  
 Applicant/Licensee: WORLD KITCHEN, INC.  
 Received Date: 20050311  
 Docket No: 3033748  
 Control No.: 136589  
 License No.: 37-15157-02  
 Action Type: Renewal

2. FEE ATTACHED  
 Amount:             
 Check No.:           

3. COMMENTS

Signed *Patricia J. Ford*  
 Date 3/11/05

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_\_/)

1. Fee Category and Amount: \_\_\_\_\_  
 2. Correct Fee Paid. Application may be processed for:  
 Amendment \_\_\_\_\_  
 Renewal \_\_\_\_\_  
 License \_\_\_\_\_  
 3. OTHER \_\_\_\_\_  
 \_\_\_\_\_

Signed \_\_\_\_\_  
 Date \_\_\_\_\_