NRC FORM 313
(1-84)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 5-31-87

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.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

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

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

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 JURISDICTION.

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

- [X] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER _____
- [ ] C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include Zip Code)*

CONTAINER CORPORATION OF AMERICA
450 E. NORTH AVENUE
CAROL STREAM, IL 60188

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

1) CCA, 450 E. North Avenue, Carol Stream, IL 60188 - storage of source and device

2) Temporary job sites in states subject to NRC regulatory authority.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Mr. Frank Grant-Acquah (Mr. Al Osis)

TELEPHONE NUMBER: (312) 260-3595

SUBMIT ITEMS 5 THROUGH 11 ON 8½ 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 AND EXPERIENCE.

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

9. FACILITIES AND EQUIPME

8701300552 870113
REG3 LIC30
PDR

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
CATEGORY 3P
AMOUNT ENCLOSED $ 230.00

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, 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.

SIGNATURE - CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE
	J. E. Chavoen	Corporate Manager Research & Development	09/17/86

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

- [ ] < $250K
- [ ] $250K - 500K
- [ ] $500K - 750K
- [ ] $750K - 1M
- [ ] $1M - 3.5M
- [ ] $3.5M - 7M
- [ ] $7M - 10M
- [ ] > $10M

b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(Dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial--proprietary--information furnished to the agency in confidence)*

- [ ] YES
- [ ] NO

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
appl	Special	3P	RECEIVED	CP
AMOUNT RECEIVED	CHECK NUMBER		CONTROL NO. 82129 SEP 19 1986	DATE
$230	021077			9/22/86

PRIVACY ACT STATEMENT ON THE REVERSE

SEP 19 1986 REGION III

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

5. Radioactiv Material.

   a. Americum 241 (Am-241)
   b. Amersham AMCP1, solid sealed source, special form
   c. 150 mCi
   d. NDC Systems Model 103RL

6. Purposes for which licensed material will be used.

   Portable gamma backscatter mass gauge manufactured under state of California Specific License 1451-70 and sold under a state of California General License GL. 1933-70.

   Used to measure added weight of applied chemicals to paperboard.

7. Individuals responsible for Radiation Safety Program.

   a. Mr. Frank Grant-Acquah and Mr. Al Osis

   b. Both of the above named are college graduates trained in scientific pursuits, which include courses in chemistry and physics. Mr. Osis has received additional formal training in Safety and Health. The above and others who could become involved in the use of this equipment received training in radiation safety by completing the device manufacturers training program "The Safe Use of Radiation Guaging Instrumentation." This was given by Mr. Edward Amberg, Jr. of Promac, Inc. (P.O. Box 419, Michigan City, IN 46360) at this facility (CCA 450 E. North Ave., Carol Stream, IL 60188) on Tuesday, September 9, 1986. The course included, among other topics, a basic introduction to types and sources of radiation, radiation intensity, emergency procedures, hazards and effects, proper handling and safety, regulatory requirements and safety testing. Appropriate literature regarding this training is on file and in the hands of those trained.

8. Training for Individuals Working in or Frequenting Restricted Areas.

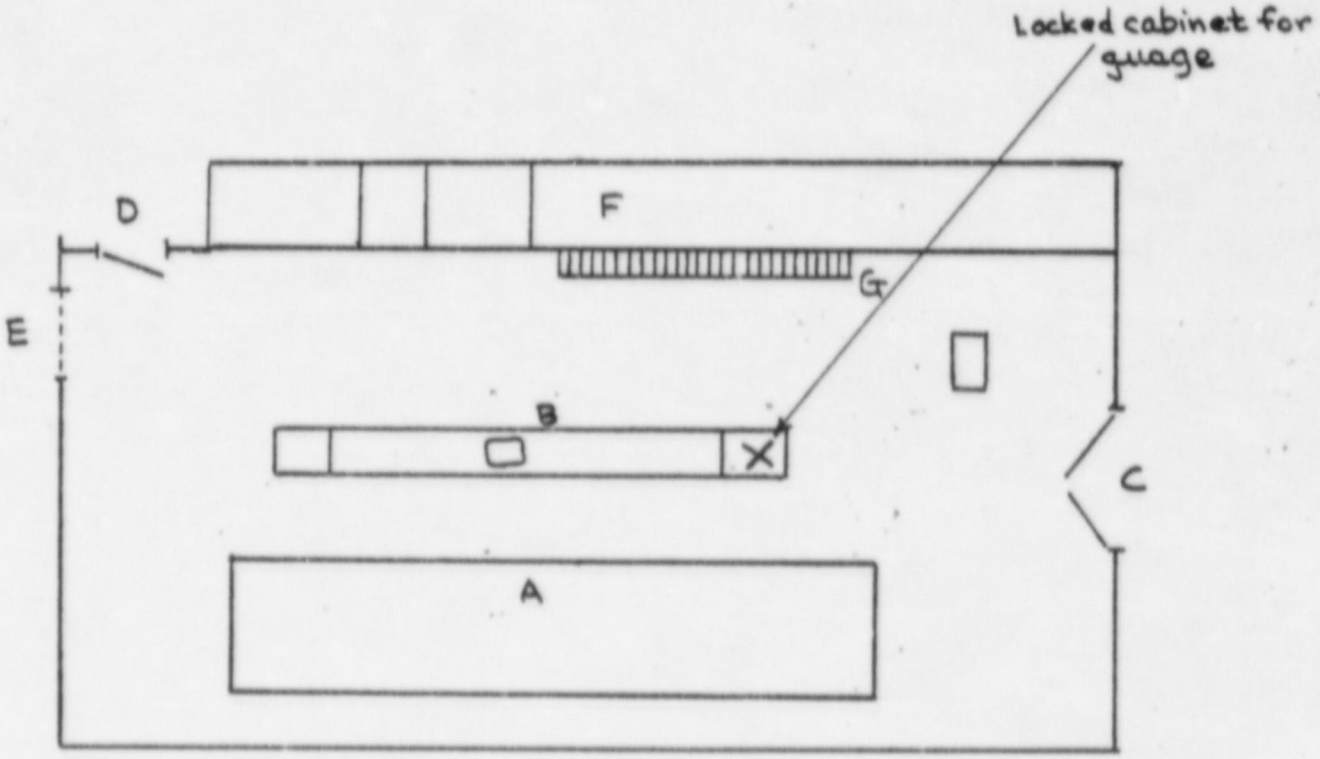
   Employees who will be using this device in this facility and other places were included in the above described training.

9. Facilities and Equipment.

   Security and Storage
   a. Testing room - limited authorized access

SEE ATTACHED DRAWING

GUAGE USE & STORAGE AREA



A. Test machinery on which guage is used
B. Work bench and cabinets
C. Limited access door
D. Limited access door
E. Freight door
F. Storage area
G. Stairs to process equipment
X. Cabinet where guage is locked

10a. Radiation Safety Program

The following procedures will be followed in the use of the Model 103RL.

1) The Radiation Safety Officer (RSO) will have overall responsibility for the gauge. The gauge, when not in use, shall be in the RSO's possession and stored in a secured area. The RSO will be one of two people having a key to this area; the other person is a trained operator.

2) Requests for surveys or demonstrations using the gauge will be recorded by the RSO who will assign dates and engineering personnel for each field trip.

3) The RSO will make all necessary arrangements for the transportation. During transportation by car, the radiation device, in its locked case, shall be securely locked into the car trunk. All applicable State and Federal transportation regulations regarding securing of the unit and identification shall be observed.

4) The RSO will send necessary notification to Agreement States and NRC offices at least three days prior to performing field work in those states, giving estimated dates that the gauge will be at that particular plant.

5) The field engineer performing the survey is not to leave the gauge unattended in unsecure areas. If it is necessary to leave the plant survey area, the radiation device shall be repacked in its case, the case should be locked, and then stored in a location where it can be either kept under lock and key or be under the constant control of a senior plant employee.

6) Prior to assigning the gauge to a field engineer, the RSO shall check the gauge for proper operation, and make sure that the shutter is working properly. The RSO will check that detailed operating instructions for use of the gauge are packed in a prominent location with the gauge.

7) When the gauge is returned, the above shall be repeated.

8) The RSO will be responsible for ensuring that the six-month leak tests and shutter tests are performed, and that all records be kept on file.

9) At no time will company personnel attempt to perform maintenance or repairs on the radiation device. In case of damage to the radiation device, the following procedures shall be followed:

10b. Procedures in Case of Suspected Damage.

This procedure is designed to prevent the possible spread of radioactive material. In case of actual or suspected damage to the source, the following procedure will be followed:

1) If possible, rope off the area involved until such time as the proper authorities have arrived to investigate.

2) All personnel involved should thoroughly wash their hands.

3) Notify the RSO and the nearest State Department of Public Health or the nearest NRC office. This information will be given to the field engineer at the time of his receiving the gauge.

4) Call NDC Systems collect during normal (west coast) working hours at (818) 358-1871.

5) Call (818) 357-9636 on weekends or after normal working hours and leave a message.

10c. Loss of Gauge.

In the event that the gauge is lost, the following procedure will be followed:

1) If lost by a common carrier, the RSO will be notified. It will be emphasized to the common carrier personnel that the lost article is a radioactive device.

2) If the gauge is not traced within 24 hours, we will notify the responsible State of NRC Radiological Health office.

3) If stolen from car or if car is stolen with unit in the trunk, we will notify RSO and all relevant State Police, Sheriff, and/or Highway Patrol offices. If not recovered within 24 hours, notify the responsible State or NRC Radiological Health office.

10d. Maintenance.

1) Leak tests and shutter tests will be performed at six-month intervals by NDC Systems or by persons specifically licensed to do so.

2) The radioactive device will be returned to NDC Systems for all repairs. No maintenance (other than wipe tests) will be required.

3) The RSO will make all necessary arrangements for transportation of the gauge. All applicable State and Federal transportation regulations shall be observed.

4) Operating and emergency procedures as described above will be provided to each field engineer using the device.

11. Waste Management.

No waste is generated. Device to be returned to NDC Systems in the event of cessation of use.