

CAPITAL X-RAY SERVICES, INC.

P. O. BOX 3264
TULSA, OKLAHOMA 74101
TELEPHONE 918 583-5797

Renewal
Applicant: *280189*
Check No. *280189*
Amount: *\$700.30*
Type of Fee: *Application*
Date Check Rec'd: *10/26/84*
Received By: *Brown*

October 24, 1984

10/29/84
Oct 5 IV
Brown

OCT 26 1984

Mr. Jack Whitten
USNRC; Revision IV
NMSS/Materials Licensing
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

RE: USNRC License #35-11114-01; Renewal
RSO - George W. Johnson (918)583-5797

Mr. Whitten:

Capital X-Ray Services, Inc's USNRC License 35-11114-01 bears an expiration date of November 30, 1984.

This letter and the attached documents constitute an application for renewal, including five (5) requests for amendment additions.

Included with the renewal application is the license renewal fee of \$700.00.

Section I references; A. USNRC Amendments to License No. 35-11114-01, exp. date November 30, 1984, and B. Capital X-Ray Services, Inc's Document Submittals for those amendments.

SECTION I

A.

USNRC AMENDMENTS
LICENSE #35-11114-01

B.

CAPITAL X-RAY SERVICES, INC'S
DOCUMENTS SUBMITTALS

1. USNRC Amendment #11
(License Renewal)

October 30, 1979

1. Form 313R: License Renewal Application;
(Completed Application)

June 29, 1979

NOTE: USNRC Amendment #11 (License 35-11114-01; exp. November 30, 1984) was granted without any rewrite or additional information requirements.

2. USNRC Amendment #12

May 4, 1982

2. Form 313R: License Amendment Application:
Parts;

- 1a Name & Address of Applicant
1b Applicant is
3 Location(s) where Sealed Source will
be used and/or stored
8, 9, 10 & 11 Legal Structure of Applicant
April 7, 1982

RECEIVED
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U.S. N.R.C. BRANCH
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35-11114-01 PDR

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NOTE: USNRC Amendment #12 basically reflected CXSI's legal structure change from a Partnership to a Corporation and the CXSI facilities (including Permanent Sealed Source Storage Area) change of address to 2133 South 49th West Avenue; Tulsa, Oklahoma 74107.

3. USNRC Amendment #13

June 24, 1983

3. Form 313R: License Amendment Application:
Parts;

6(a) Description of Permanent Radiographic Facility

6(e) O&E Procedures Supplement (Permanent Radiographic Facility)

April 1, 1983; May 20, 1983 & June 16, 1983

NOTE: USNRC Amendment #13 reflected the addition of a Permanent Radiographic Facility located at CXSI headquarters: 2133 South 49th West Avenue; Tulsa, Oklahoma, an Operating and Emergency Procedures Supplement for the operation of the facility and a Legal Structure Amendment deleting one (1) of the four (4) Stockholders to only three (3) Stockholders.

Additional information, submitted May 20, 1983 and June 13, 1983, was requested by the USNRC for assurance of control of the roof (High Radiation Area) of the Permanent Radiographic Facility

Section II references Capital X-Ray Services, Inc's presently employed programs applicable to License 35-11114-01: USNRC Amendments 11, 12 & 13; expiration date November 30, 1984.

Section II also contains the five (5) amendment additions being requested during this license renewal.

SECTION II

1. LOCATION(S) WHERE SEALED SOURCES WILL BE USED AND/OR STORED: No changes requested

2. SEALED SOURCES TO BE USED IN RADIOGRAPHY: Please amend by the addition of;

A. Cs 137 Model #77302 Technical Operations, Inc. 0.165 CIS (165 millicuries)
(To be employed in Technical Operations, Inc. Model 773, Instrument Calibration Device)

B. Cs 137 Model #CSV Gulf Nuclear, Inc. 1.0 CIS
(To be employed in Gulf Nuclear, Inc. Model IC-51, Instrument Calibration Device)

3. RADIOGRAPHIC EXPOSURE DEVICES: Please amend by the addition of;

A. Instrument Calibration Device: Model 773; Technical Operations, Inc.

B. Instrument Calibration Device: Model IC-51; Gulf Nuclear, Inc.

4. DESCRIPTION OF RADIOGRAPHIC FACILITIES: No changes requested

Capital X-Ray Services, Inc.'s Permanent Radiographic Facility is equipped with both Visible and Audible Alarm Systems located at the personnel access to the High Radiation Area. 34.29(a)(b)(c)

The Visible System (Caution Lamps) is activated by the presence of a radiation level less than 2.0 mr/hr.

The Audible Alarm System (I/R Cells & Alarm Bell) is also activated (the I/R Cells) by the presence of radiation levels less than 2.0 mr/hr and the alarm bell "sounds" when an individual "breaks" I/R Beams and attempts to enter the High Radiation Area.

The Visible and Audible Alarm Systems are tested daily by each Radiographer/work shift and is also tested (Radiation Response) on a minimum three (3) month basis, employing a Management Controls Procedure.

5. DESCRIPTION OF RADIATION DETECTION INSTRUMENTS TO BE USED: No changes requested

6. INSTRUMENT CALIBRATION PROCEDURES: Please amend such as to allow Capital X-Ray Services, Inc. to perform for other Licensee's, both Radiation Survey Instrument Calibrations (\pm 20% exposure rate accuracies) and Pocket Dosimeter "Calibrations" (\pm 30% received dose/time accuracies).

The presently employed Radiation Survey Instruments and Dosimeter Calibration Procedures shall be amended by the addition of inverse square mathematics applicable to Cs 137; Standards Laboratory half life of 30.2 years and the exposure factor of 0.32 Rhm/Ci.

7. PERSONNEL MONITORING EQUIPMENT (FILM BADGES AND DIRECT READING DOSIMETERS): No changes requested

8. OPERATING AND EMERGENCY PROCEDURES: No changes requested

Capital X-Ray Services, Inc.'s Basic Operating and Emergency Procedures and the Operating and Emergency Procedures Supplement for the Shielded Radiographic Facility have been, during the present licensing term, revised to assure compliance with Regulatory Requirements.

Capital X-Ray Services, Inc.'s O & E Procedures presently require Physical Radiation Surveys of the circumference of the Exposure Device and the Source Guide Tube following each exposure to determine if the Sealed Source is in the Fully Shielded Position. 34.43(b)

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The results of the Physical Radiation Surveys performed following the last exposure and prior to securing the Exposure Device for transport from each job site is documented by the Radiographers on each Job Site Radiation Survey Report. 34.43(c)

9. TRAINING PROGRAMS: No changes requested

In addition to the documents and reference materials employed by Capital X-Ray Services, Inc. during the Assistant Radiographer and Radiographer Training Programs, the USNRC Training Manual for Industrial Radiographers "WORKING SAFELY IN GAMMA RADIOGRAPHY" is now included within both training programs.

10. INTERNAL INSPECTION SYSTEM AND OTHER MANAGEMENT CONTROLS: Please amend by the addition of Mr. Wayne F. Conway to act as an Assistant Radiation Safety Officer.

Mr. Conway has been employed by Capital X-Ray Services, Inc. from 11-01-76 to present, acting as a Radiographer and Radiographic Supervisor. He has successfully completed, in addition to Capital X-Ray Services, Inc.'s Radiographer's Training Program, a 40 hour Radiation Safety Specialist Training Program Presented by Howard M. Johnson, Ph.D.; Oklahoma State University; Stillwater, Oklahoma.

Capital X-Ray Services, Inc.'s Internal Inspection System has been, during the present licensing term, up-graded to assure compliance with Regulatory Requirements.

The Internal Inspection Systems and Management Controls Programs includes:

- A. Procurement, receipt, exchange, preparation for shipment and shipment of Radioactive Material Shipping Packages.
- B. Maintenance and quarterly inspection of Radiographic Exposure Devices and Handling Equipment.
- C. Quarterly inventories of Sealed Source, Exposure Devices and Shipping Containers.
- D. Stored Security of Sealed Sources and Exposure Devices.
- E. Incident and Emergency Controls Procedures.
- F. Assistant Radiographer and Radiographer training and supervision.
- G. Deficiencies, variances, violations and corrective action programs.
- H. Radiographer and Assistant Radiographer Job Site Evaluations.
- I. Record keeping

11. OVERALL ORGANIZATIONAL STRUCTURE: No changes requested

Capital X-Ray Services, Inc.'s Overall Organizational Structure was revised at the date of Incorporation and this revision was reflected within USNRC License Amendment #12, May 4, 1982.

12. LEAK TESTING PROCEDURES: Please amend by the addition of an additional Leak Testing Service (Technical Operations, Inc. presently only Leak Testing Service employed).

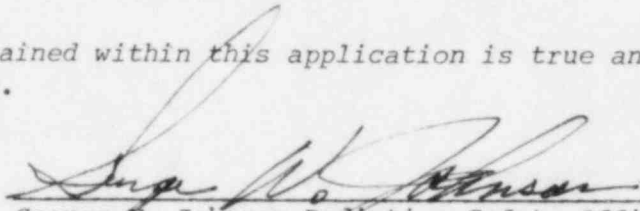
Please Add: David S. Gooden, Ph.D., Radiological Physicist
6161 South Yale Avenue, Tulsa, Oklahoma 74177
USNRC License No. 35-13797-01
Leak Test Kit Model No. 1000

The Programs, Procedures and the requested amendment additions listed within Section II will allow Capital X-Ray Services, Inc. to continue to perform Radiographic Operations employing by-product material within the Regulatory Requirements.

If there are any questions concerning this application or additional information required, please contact Capital X-Ray Services, Inc.: 2133 South 49th West Avenue, Tulsa, Oklahoma 74107; (918) 583-5797; George W. Johnson, Radiation Safety Officer.

ATTEST

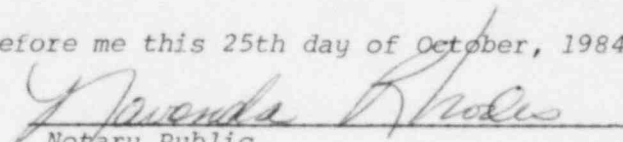
I hereby attest that the information contained within this application is true and accurate within the scope of my knowledge.


George W. Johnson Radiation Safety Officer

State of Oklahoma
County of Tulsa

Subscribed in my presence and sworn to before me this 25th day of October, 1984

My commission expires - 10/04/88.


Notary Public

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