

DL-012695-03

January 26, 1995

Scan Technologies, Inc.
ATTN: Delbert W. Devins
Vice-President and
General Manager
147 11th Avenue
Charleston, West Virginia 25303

Gentlemen:

SUBJECT: TRANSMITTAL AND EXPLANATION OF A MATERIALS LICENSE
(REFERENCE: CONTROL NO. 118827; DOCKET NO. 030-33222)

Enclosed is Amendment No. 2 to License No. 47-30052-01, issued in response to your renewal application dated May 14, 1991. Please review this document carefully and be sure you understand all of its provisions.

Even though your license reads very similar to your expiring license, new regulatory requirements added to 10 CFR 20 will impact how you conduct licensed activities authorized by this license. We forwarded a copy of 10 CFR 20 to you in our June 6, 1994, letter. We specifically call your attention to 10 CFR 20.1101 and 20.2102 (record keeping requirements). These sections deal with how you are to manage your radiation safety program to maintain exposures as low as reasonably achievable (ALARA) and require that you:

1. Implement a radiation protection program commensurate with your licensed activities.
2. Use to the extent practicable, procedures and engineering controls based on sound radiation protection principles to maintain occupational doses and doses to members of the public as low as reasonably achievable (ALARA).
3. At least annually conduct a review of your radiation safety program content and implementation.

Enclosures 2 and 3 are provided for your use in developing and implementing your radiation safety program and audit procedures.

If you have questions, please call me at 404/331-0344.

Sincerely,

Jay L. Henson
Materials License Reviewer
Nuclear Materials Licensing Section

- Enclosures: (1) License Amendment No. 2
(2) Duties and responsibilities of RSO
(3) Annual Audit of Radiation Safety Program

SEND TO PUBLIC DOCUMENT ROOM?		YES		NO	
OFFICE	PH:DRSS	PH:DRSS			
SIGNATURE	<i>J. Henson</i>	<i>J. Potter</i>			
NAME	J. Henson	J. Potter			
DATE	1/26/95	1/ /95	1/ /95	1/ /95	1/ /95
COPY?	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSS\MMLB\118827\JLH

MATERIALS LICENSE

Amendment No. 2

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, 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 person 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 application dated May 14, 1991
1. Scan Technologies, Inc.		3. License number 47-30052-01
2. 147 11th Avenue Charleston, West Virginia 24303		is amended in its entirety to read as follows:
	4. Expiration date	January 31, 2000
	5. Docket or Reference No	030-33222
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. Cesium 137	A. Sealed source (Amersham Corp. Model CDC.806)	A. No single source to exceed 740 MBq (20 millicuries) per source
B. Americium 241	B. Sealed source (Amersham Corp. Model AMC.17)	B. No single source to exceed 111 GBq (300 millicuries) per source
C. Cesium 137	C. Sealed source (Amersham Corp. Model CDC.800 Series)	C. No single source to exceed 3.7 GBq (100 millicuries) per source; Total possession not to exceed 29.6 GBq (800 millicuries)
D. Californium 252	D. Sealed source (Amersham Corp. Model CVN.CYN Series)	D. No single source to exceed 2.48 GBq (67 millicuries or 125 micrograms) per source
E. Cesium 137	E. Sealed sources (Amersham Corp. Model CDC.800 Series)	E. No single source to exceed 13.9 GBq (375 millicuries); Total possession not to exceed 37 GBq (1000 millicuries)
F. Cadmium 109	F. Sealed source (Amersham Corp. Model CUC.A1)	F. No single source to exceed 1.48 GBq (40 millicuries); Total possession not to exceed 6 GBq (160 millicuries)

UNITED STATES NUCLEAR REGULATORY COMMISSION

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

47-30052-01

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Amendment No. 2

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
G. Californium 252	G. Sealed source (Amersham Corp. Model CVN.CYN Series)	G. No single source to exceed 200 MBq (5.4 millicuries or 10 micrograms); Total possession not to exceed 600 MBq (16.2 millicuries or 30 micrograms)
H. Cesium 137	H. Sealed source (Amersham Corp. Model CDC.707)	H. 1.11 GBq (30 millicuries)

9. Authorized Use:

A. through D. For use and/or possession of Scan Technologies, Inc. Model 2500 and 3500 Coal Fines Analyzers, Model 8600 Digital Density Gauges, and Model 9000 Sulfur, Ash, and Moisture Analyzers, Model TBM101 Microwave Moisture Monitors, and Model 9500 Elemental Analyzers in accordance with the provisions of the certificate of registration issued for each gauge/device pursuant to 10 CFR 32.210. The authorized use and/or possession of the sources and devices includes activities incident to:

- (1) Research, development, manufacture and testing of devices.
- (2) Source installation into and removal from devices.
- (3) Installation, relocation, repair and servicing of devices, including leak testing of sealed sources and radiation surveys of the devices.
- (4) Distribution of authorized devices to persons authorized to receive the licensed material pursuant to terms and conditions of specific licenses issued by the Nuclear Regulatory Commission or an Agreement State.
- (5) Picking up, storing and transferring devices received from customers for disposal.
- (6) Instruction and training of individuals in use of the devices.

E. through G. Research and development as defined in Section 30.4 of 10 CFR Part 30.

H. Calibration of survey meters.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 147 11th Avenue, Charleston, West Virginia and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The Radiation Safety Officer for this license is Delbert W. Devins.

**MATERIALS LICENSE
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(continued)

CONDITIONS

12. Licensed material shall be used by, or under the supervision of, Delbert W. Devins, Edward M. Stopper, Philip Dunwoody, and Gary Smith or other individuals who have received the training described in the letter dated August 9, 1994 and have been approved in writing by the Radiation Safety Officer.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- C. Sealed sources need not be leak tested if they contain only a radioactive gas; or not more than 100 microcuries of beta and/or gamma emitting material or, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Inspection Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323-0199. The report shall specify the source involved, the test results, and corrective action taken.
- E. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Sealed sources containing licensed material shall not be opened by the licensee.
15. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR 31 or to persons exempt from licensing pursuant to 10 CFR 30.18.
16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
17. The licensee shall maintain records of information important to safe and effective decommissioning at its facility located at 147 11th Avenue, Charleston, West Virginia, pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
18. In addition to the possession limits in item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
19. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material".

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number	47-30052-01
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(cont.)

CONDITIONS

20. 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 May 14, 1991

B. Letters dated:

- June 7, 1993 (change of address and add authorized user)
- June 14, 1993 (response to Region I request for additional information)
- August 9, 1994 (response to Region II request for additional information)
- December 2, 1994 (amended pages to Radiation Safety Manual)
- January 6, 1995 (facsimile of information on alpha counting system)
- January 18, 1995 (facsimile of commitment to use alpha counting system for Cf-252 leak tests)
- January 25, 1995 (add Model 9500 Elemental Analyzer)

C. Radiation Safety Manual dated August, 1994 (forwarded and received in Region II on October 12, 1994, as stated in licensee's August 9, 1994, letter)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JAY L. HENSON

Date JAN 25 1995

By Jay L. Henson
 Region II, Nuclear Materials Licensing Section
 101 Marietta Street, Suite 2900
 Atlanta, GA 30323