

National Oceanic and Atmospheric Administration,  
Host Agency serving:  
Bureau of the Census  
Economic Development Administration  
International Trade Administration  
Minority Business Development Agency  
National Bureau of Standards  
National Telecommunications and Information Administration  
Office of the Inspector General



U.S. DEPARTMENT OF COMMERCE  
Mountain Administrative Support Center  
325 Broadway  
Boulder, Colorado 80303

3 February 1984

RAS/MC4:WWS

U.S. Nuclear Regulatory Commission  
Material Licensing Branch  
Division of Fuel Cycle and Material Safety  
Washington, D.C. 20555

84  
FEB 17 AM 11:11

Dear Sir:

Thank you for reminding us that our NRC By-Product Material License No. 05-03166-05 is about to expire.

The only change to our license (Amendments 11 through 13) is the deletion of item 6A., Cesium-137 source. This source was transferred to the National Bureau of Standards, Gaithersburg Laboratories (NRC By-Product Material License No. 08-00566-05) on August 20, 1982.

Items 6B (Cobalt 60), 6C (Polonium 210), and 6D (Any by-product material with Atomic No. 3 to 83) we continue to have either in an active project or in storage in our Radioactive Materials Storage Vault.

The May 4, 1983 letter contains the only current information. The other correspondence may be discarded if you wish since they apply mostly to the deleted Cesium 137 source.

Wipes taken for leak testing are generally analyzed at the University of Colorado Health Physics Laboratory, where they use a Liquid Scintillation Counter that has a sensitivity of 0.00005 microcurie. Occasionally we use an Eberline Model RM-3A, along with a 0.0048 microcurie Technitium check source for immediate analysis. Wipe paper is provided by Acne Distributors, Kingston, Tenn. A model SH-2 sample holder is used to accurately control distances from the samples.

Instrumentation used in health physics surveys include the Eberline Model RM-3A, Model E-500 B, PAC-4G Alpha Counter with Model AC-21 probe. We also use a Victoreen Model 440 ion chamber instrument and a W.B. Johnson Model GSM-5 geiger counter. Every six months, one instrument from this group is calibrated at the University of Colorado Health Physics Laboratory by the Chief of Health Physics, Mr. Fred Duncan. Their procedures are on file under Colo. 82(1883)-8SF.

Licensee heading should be changed to: U.S. Department of Commerce, National Bureau of Standards Laboratories, Mail Code RAS/MC4, Attn: W. Scott, 325 Broadway, Boulder, CO 80303.

Attached is my updated qualifications to handle licensed material. Also included are the qualifications for two researchers at NBS who should be added to the license: Mr. Earle Pittman and Mr. Patrick Purtscher.

Please renew our current license, with changes as noted above. We will operate in accordance with the applicable NRC Regulations and License conditions.

8408210560 840814  
NMS LIC30  
05-03166-05 PDR

COPY SENT REGIONS IV

FEE EXEMPT

16995



If you have any questions regarding this application for renewal, please call me on FTS 320-3948.

Sincerely,

*Winston W. Scott Jr.*

Winston W. Scott, Jr.  
Radiation Safety Officer

Attachments



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Bureau of Standards**

325 Broadway  
Boulder, Colorado 80303

Reply to the attention of:

August 20, 1982

MEMORANDUM FOR THE RECORD

From: Winston Scott, NBS-BL Radiological Safety Officer  
National Bureau of Standards  
325 Broadway  
Boulder, CO 80303

SUBJECT: Transfer Certificate of Radioactive Materials

This is a certificate of transfer of radioactive material from the National Bureau of Standards, Boulder, CO Laboratories (NRC By-Product Material License 05-03166-05) to the National Bureau of Standards, Gaithersburg, MD Laboratories (NRC By-Product Material License 08-00566-05).

The following by-product material is transferred effective August 20, 1982:

Cesium-137, Sealed Source (Industrial Nucleonics),  
Class S-6, 2.5 curies

I certify that a wipe test of the source showed no contamination.

W.W. Scott, Jr.  
W.W. Scott, Jr.

Transferred from NBS-B

W.W. Scott, Jr.  
W.W. Scott, Jr.

Transferred to NBS-G

L.A. Slaback, Jr.  
L.A. Slaback, Jr.

Winston W. Scott, Jr.  
Radiological Experience and Training  
Summarized: October 1983

### Experience

1958 -----B.S. Electronic Engineering, University of California (Berkeley)  
1961-1963 Vice Chairman of Survival Planning Committee, National Bureau of Standards  
1963-1967 Radiological Defense Officer, Boulder County- City Civil Defense Agency  
1967-1969 Alternate Radiological Safety Officer at National Bureau of Standards, Boulder, CO.  
1969-1983 Radiological Safety Officer at National Bureau of Standards, Boulder, CO  
1958-1977 Electronic Engineer with National Bureau of Standards,  
1977-July 1983 Safety Engineer with National Bureau of Standards  
July 1983 to Present Safety Engineer/Director for DOC Mountain Administrative Support Center, NOAA, Boulder - Radiological Safety Officer for NBS and NOAA, Boulder, CO

### Training

April 1961 Radiological Monitor Training Course, NBS, -- 32 hours  
April 1964 Radiological Defense Officer I, CD Western Training Center, --40 hours  
October 1965 Radiological Monitoring Instructor, University of Colorado Extension -- 8 hours  
October 1967 Basic Radiological Health, PHS Southwestern Radiological Health Laboratory -- 80 hours  
January 1969 Occupational Radiation Protection, PHS Southwestern Radiological Health Laboratory -- 80 hours  
April 1970 Medical X-ray Protection, PHS Southwestern Radiological Health Laboratory - 80 hours  
July 1980 Health Physics Society 25th Annual Meeting, Seattle, WN, 40 hours  
February 1982 Comprehensive Health Physics, Rockwell International, -- 80 hours

### Other

1976 to Present Plenary Member, Health Physics Society  
1971 to Present Member, Central Rocky Mountain Chapter, Health Physics Society  
1983 Applied for and was accepted for examination for Certified Health Physicist. Took Part I Examination this summer.

RESUME

- 10/79 - Present National Bureau of Standards  
National Engineering Laboratory  
Center for Electronics and Electrical Engineering  
Electromagnetic Technology Division  
  
Physical Science Technician GS 9-05
- 11/76 - 10/79 Westinghouse Electric Corp.  
Geophysical Instrumentation Systems  
  
Field Engineer  
I resigned when they closed the Boulder office.
- 2/72 - 6/76 Laboratory for Atmospheric and Space Sciences  
University of Colorado  
  
Senior Electronic Specialist  
I was laid off due to lack of Contracts
- 4/70 - 1/72 Statitrol Corp. (Ionization Smoke Detectors)  
Senior Technician
- 6/69 - 9/69 Federal Aviation Administration  
Air Traffic Control Specialist  
Laid off because I was too old (32)
- 9/66 - 3/69 University of Colorado  
Psychology and Chemistry Instrument Shop  
Instrument Maker  
Resigned to pursue position with FAA
- 5/63 - 9/66 National Center for Atmospheric Research  
Electronic Stores Manager  
Resigned to return to school
- 4/62 - 5/63 Ball Brothers Research Corp.  
Wireman  
Worked on OSO II Satellite until laid off due  
to loss of AOSO contract.

My employment history is strong in precision instrumentation and shows a realization of the importance of precision in my work.

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- 9/81 Radiological Defense Officer Course  
Radiological Defense Instructor Course  
Both given by Colorado Division of  
Disaster Emergency Services  
  
I received a Byproduct Material User's Certificate  
through this course for Cobalt 60 which I have renewed



RESUME (Continued)

- 6/81 Radiological Monitoring Course  
Given by Boulder City-County  
Emergency Preparedness Office
- 4/55 United States Air Force  
Munitions Specialist  
Received training in radiological decontamination
- 8/81 I have been assigned the position of Chief of Monitors  
With the Boulder Civil Defense Office, a position  
with very little involvement due to the current  
anti-Civil Defense sentiment of our community
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I have 6 years of College beginning with Ceramic Engineering at the University of Illinois/Chicago in 1954. At the University of Colorado I have done major work in Physics, Business and Mathematics. I lack one year toward a degree

Patrick T. Purtscher  
Educational Background:

University of Illinois-Urbana  
B.S. Degree in Metallurgical Engrg. Dec. 1975  
one course in nuclear engineering

Colorado School of Mines-Golden  
M.S. Degree in Metallurgical Engrg. Dec. 1982  
Thesis topic: Fracture of High Carbon Steel

Work Experience:

Keystone Steel and Wire  
Bartonville, Illinois  
11 months as arc shop observer from 1/73 to  
11/73

Caterpillar Tractor Co.  
Peoria, Illinois  
5 years as research engineer from 1/76 to  
1/81

Present Position:

Materials research engineer  
Fracture and Deformation Div.  
National Bureau of Standards  
Boulder, Colorado