

**Nucletron Corporation** 

8671 Robert Fulton Drive Columbia, MD 21046-2133 Phone 800-336-2249 http://www.nucletron.com

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January 12, 2009

USNRC Region 1 Division of Nuclear Materials Safety 475 Allendale Road King of Prussia, PA 19406-1415

RE: Amendment Request License #19-28772-01 Nucletron Corporation

03032842

Dear Sir/Madam:

Please amend the above referenced license to designate Debra L. Bensen as the corporate Radiation Safety Officer (RSO). Ms. Bensen has a solid background in radiation physics and six years of laboratory experience encompassing many aspects of x-and gamma ray dosimetry functions. In addition, she has completed the 40 hour RSO course presented by Dade Moeller & Associates of Gaithersburg, MD. I believe her education, experience and training are sufficient to assume the duties of RSO; supporting documentation has been enclosed. Ms. Bensen will assume RSO responsibilities beginning January 19, 2009. At that point, Lisa Cole Dimmick, RSO & RA/QA Supervisor will no longer be responsible for the Radiation Safety Program.

Sincerely, Nucletron Corporation

Jeroen Cammeraat President

Enclosures

143223 NMSS/RENI MATERIALS-002

### **DEBRA L. BENSEN**

Debra.bensen@us.nucletron.com 410-913-3162

#### **EDUCATIONAL BACKGROUND**

Georgetown University Washington, DC 20057 Coursework toward MS in Radiation Science/Health Physics

University of Maryland College Park, MD Major: Biochemistry Minor: Chemical Engineering BS: August 1989

#### **PROFESSIONAL EXPERIENCE**

National Institute of Standards and Technology (NIST) Physics Laboratory – Ionizing Radiation Division Gaithersburg, MD 208

#### Research Chemist (February 1990 – February 1996)

Promoted innovation and industrial competitiveness through measurement science, standards and technology. Helped develop and extend the range of dosimetry system standards and establish the use of alanine as a transfer dosimeter. Evaluated materials using electron paramagnetic resonance (EPR) dosimetry. Performed x- and gamma-ray dosimetry functions. Calibrated ionization chambers for secondary and tertiary laboratories using x- and gamma-ray sources. Complied with laboratory and radiation safety guidelines and procedures. Communicated project progress and research results through presentations and published reports. Served as the group's property officer.

### ADDITIONAL PROFESSIONAL QUALIFICATIONS

Coursework completed at Georgetown University Graduate School

- Radiation Science I Radiological Physics
- Radiation Science II Health Physics
- Principles of Biostatistics
- Radiation Biology
- Molecular Basis of Carcinogenesis
- Operational Health Physics
- Radiation Dosimetry

Job Related Training

- DOT & NRC Requirements for Shipping and Receiving RAM: November 12 & 13, 2008
- Radiation Safety Officer 40 hour course. (curriculum attached): Dec 8 12, 2008
- Source and Afterloader Training (attached)

### SOURCE AND AFTERLOADER TRAINING LOG Debra Bensen

Operational and Mechanical Instruction on I-125 Seed Selectron December 2 & 3, 2008 with Don Larsen, Nucletron Certified Trainer

Overview of Nucletron Remote

December 5, 2008 by Chuck Tow, Nucletron Certified Trainer

Source Exchange (Ir-192) and annual PMI on mHDR V2 at Holy Cross Hospital in Silver Spring, MD

December 16, 2008 with Chuck Tow

Source Exchange (Ir-192) and PMI on mHDR Classic at Washington Hospital Center in Washington, D.C.

December 18, 2008 with Chuck Tow

Source Exchange (Ir-192) and PMI on OncoSelect HDR 3 at Greater Baltimore Medical Center in Baltimore, MD

December 19, 2008 with Chuck Tow

Source Exchange (Ir-192) and annual PMI on mHDR V2 at Sibley Memorial Hospital in Washington, D.C.

December 23, 2008 with Chuck Tow

## Certificate of Training

Awarded To

### Debra Bensen

Recognizing completion of 40 hours of specialized instruction in

## **Radiation Safety Officer**

December 12, 2008

Presented By

**Radiation Safety Academy** A Division of Dade Moeller & Associates

438 N. Frederick Avenue, Suite 220, Gaithersburg, MD 20877 www.radiationsafetyacademy.com -- 301-990-6006 AAHP has awarded this course 32 Continuing Education Credits, 2007-00-031 ABIH has awarded this course 4.5 CM Points, CM Approval # 08-262 ARRT and SNMT have awarded 46.75 CEH's, 027194-027227

Ray Johnson

Ray Johnson, MS, PE, FHPS, CHP Vice President, Training Programs

# Certificate of Training

This Certifies That

### Debra Bensen

has been trained, tested and successfully completed specialized instruction in

## DOT & NRC Requirements for Shipping and Receiving Radioactive Materials

### November 13, 2008

Presented By:

Mike Nolan, Instructor *Radiation Safety Academy* A Division of Dade Moeller & Associates 438 N. Frederick Avenue, Suite 220, Gaithersburg, MD 20877 www.radiationsafetyacademy.com -- 301-990-6006

Presented For:

1 For: Nucletron Corporation

Presented At: Gaithersburg, MD

This certifies that the employee named on this certificate has been trained and tested in accordance with the training requirements of 49 CFR 172, Subpact H.

Employer's Signature

This certificate is valid for 24 months for ICAO/IATA and for three years for U.S. Department of Transportation and U.S. Nuclear Regulatory Commission or Agreement State Agencies.





# Radiation Safety Officer December 8 - 12, 2008

Instructors: Ray Johnson, MS, PE, FHPS, CHP, RSO; Alan Fellman, PhD, CHP, RSO; Sean Austin, MS, CHP, RSO; Kelly Austin, MS, CHP, RSO; Michael Jedlicka, BS

This course is intended to provide a minimum of 40 hours of required and elective classes to meet provisions of 10 CFR 33.15. Required classes are already checked. Please select elective classes for a total of 40 or more hours.

Day 1		Monday	December 8, 2008	
Class Selected	Start Time		Class Titles (electives in <i>bold, italics)</i>	Class Hours
ð	8:00	Introduction, Cour	se Overview, Views on Radiation	3.0
ð	11:00	Radiation and Rad	dioactivity, Radioactive Decay	1.0
	12:00	Lunch (provided)		
đ	1:00	Radiation Units, S	ources of Radiation, Interaction With Matter	3.0
đ	4:00	Health Effects		1.5
đ	5:30	Daily Review		0.5
Ø	6:00	Training for the F	Radiation Safety Trainer (optional)	1.5
	7:30	Adjourn for the day	<b>y</b>	

Day 2		Tuesday December 9, 2008	
Class Selected	Start Time	Class Titles (electives in <i>bold, italics)</i>	Class Hours
ð	8:00	Radiation Protection Standards, 10 CFR Part 19 and 20	2.0
đ	10:00	Essential Highlights of 10 CFR Part 2, 30, 31, 33	2.0
	12:00	Lunch (provided)	
Ø	1:00	License Applications and Amendments (optional)	1.0
0	1:00	Medical Radiation Safety (optional)	1.0
đ	2:00	External Radiation Protection and Shielding	1.5
0	3:30	Internal Radiation Protection	2.0
Ø	3:30	Sealed Sources & Industrial Gauges	2.0
ð	5:30	Daily Review	0.5
Ø	6:00	Math Review & Radiation Safety Problem Solving (optional)	1.5
	7:30	Adjourn for the day	

Day 3		Wednesday December 10, 2008	
Class Selected	Start Time	Class Titles (electives in <i>bold, italics)</i>	Class Hours
Ø	8:00	Radiation Survey Instruments	4.0
	12:00	Lunch (provided)	
Ø	12:30	Instruments Lab, Applications & Troubleshooting	2.0
ð	2:30	Emergency Response	1.0
0	3:30	Radiation Safety Surveys	1.5
Ø	3:30	Effective Communications for the Radiation Safety Officer as a Manager and Instructor and Daily Review	1.5
đ	5:00	Daily Review	0.5
0	5:30	Hands On Laboratory Survey and PPE Exercise (optional)	1.5
	7:00	Adjourn for the day	

Day 4		Thursday December 11, 2008	
Class Selected	Start Time	Class Titles (electives in <i>bold</i> , <i>italics</i> )	Class Hours
6	8:00	Interpreting Radiation Measurements and Quality Assurance	
đ	9:30	Transportation of Radioactive Materials Overview and Package Receiving	2.5
	12:00	Lunch (provided)	
Ø	1:00	Developing a Training Program	1.5
8	2:30	Practical Record-Keeping For RSOs	1.0
0	3:30	Radioactive Waste Management, Mixed Wastes	2.0
Q	3:30	X-Ray Safety	2.0
Ø	5:30	Daily Review	0.5
0	6:00	Reception (refreshments)	
	7:30	Adjourn for the day	

Day 5		Friday December 12, 2008	
Class Selected	Start Time	Class Titles (electives in <i>bold, italics)</i>	Class Hours
đ	8:00	Legal Implications: Radiation Litigation	1.5
Ø	9:30	First Steps For New RSOs	1.0
ð	10:30	Radiation Safety Program Management, Preparing for Regulatory Inspections	1.5
	12:00	Presentation of Certificates and Adjourn 40-hour course	
0	12:30	Liquid Scintillation Counting Option – Additional Fee	4.0
0	12:30	DOT HAZMAT Certification Option – Additional Fee	4.0
	5:00	Adjourn optional modules	

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

1/12/2009, and to inform you that the initial processing which includes an administrative review has been performed.

 $\checkmark$ 

Amon 19-22772-01 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

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 143223 When calling to inquire about this action, please refer to this control number. You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI) (6-96)

Sincerely, Licensing Assistance Team Leader