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betacontrol of America · P.O. Box 18 · Towaco · NJ 07082 NUCLEAR REGULATORY COMMISSION RERGION 1 Attn.: Thomas K. Thompson 475 Allendale Road King of Prussia, PA 19406-1415 P.O. Box 18 425 Route 202 Towaco, NJ 07082 Phone: (973) 263-8053 Fax: (973) 263-0477 Email: gage263@aol.com Home: www.betacontrol.de

Contact: Mr. Thomas K. Thompson Tel.: 610-337-5303

Cc: Betacontrol GmbH Germany, Fax: 49-2734-7711 Att.: Mr. Hans Schlemm

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Your ref. / S/ref.	Your	letter / Su carta	Our ref. / N/ref.	Direct	t connection / Conexión directa	a Date / Fecha	··· · · · · · · · · · · · · · · · · ·
Control #13	6076		M.Hannig	(97	3) 263-8053	Mar. 29,	, 05

SUBJECT: ADDITIONL INFORMATION FOR RENEWAL OF LICENSE 29-23394-01; CONTROL NO. 1360706

Dear Thomas

This is in reference to your letter from March 9th, 2005 requesting additional information concerning application for renewal of license, control no. 136076, I give you the following additional information:

1. Markus Hannig will be the authorized user who will be installing and servicing the gauges.

Markus Hannig was employed at betacontrol GmbH, Am Weidekamp 10, D-57258 Freudenberg, Germany from August 1991 to June 2001. He was involved in building the thickness measuring systems. Therefore he has experiences in handling Kr-85, Sr-90, Pr-147, Am-241 and X-Ray devices.

Additional training is as follows:

Successfully completed the course, "Radiation Safety". One week in Germany.

Training completed March, 2001*

Successfully completed the course, "Radiation Safety Officer" conducted by Raymond Johnson. 40 hours classroom in the USA.

Training completed September, 2003*

Successfully completed the course, "DOT & NRC Requirements for Shipping and Receiving Radioactive Materials. In the USA.

Training completed September, 2003*

*Certificates attached

136076



ADDITIONAL INFORMATION FOR RENEWAL OF LICENSE 29-23394-01 То

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CONTROL NO. 136070 6 RUS Α

Date 28-Mar-05

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2. We are using a Ludlum Model 3 as a survey instrument. The last certificate of calibration is attached to this letter.

We added a 1" X1" Nal gamma scintillator to the survey instrument. At the same time, in May 2004, it was calibrated again. The new calibration date is May 28th, 2005.

3. The authorized user will have monitoring devices as finger rings and whole body badges. The last invoice from our provider GDS is attached to this letter

If you have any questions, please feel free to call me.

I appreciate your assistance in this matter.

Best regards,

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Markus Hannig

Attachments:

Certificate from Zentrum für Strahlenschutz und Radioökolgie Certificate from Radiation Safety Academy Certificate from Radiation Safety Academy

Certificate from RSA Laboratories, Inc Invoice from Global Dosimetry

Basic Course in Radiation Protection Radiation Safety Officer DOT & NRC Requirements for Shipping and Receiving **Radioactive Materials** Calibration

Zentrum für Strahlenschutz und Radioökologie

Universität Hannover

Am Kleinen Felde 30 30167 Hannover

Tel.: (05 11) 7 62-33 13 Fax.: 33 19 Home: www.strahlenschutzkurse.de

Certified English Translation of the certificate of compentence in radiation protection for the handling of radioactive material of the March 16, 2001, undersigned by Dr. H. G. Vogt of the Centre of Radiation Protection and Radioecology of the University of Hannover

CERTIFICATE

about the participation in a training course on radiation protection

Mr. Markus Hannig

born on 06.02.1971 in Siegen

regularly attended from **12.03.2001** to **16.03.2001** a training course designated as

BASIC COURSE IN RADIATION PROTECTION

Handling of sealed radioactive material:

Activities up to the 10⁶- fold of the limit not yet subject to authorization Handling of unsealed radioactive material:

Activities up to the 10⁵- fold of the limit not yet subject to authorization

according to the decree about the protection against harms caused by ionizing radiation (Strahlenschutzverordnung - StrlSchV) in its revision of May 18, 1989.

The course included 43 lessons and imparted the subjects of **special knowledge groups 2.2 and 4.2** of the guidline regarding special knowledge in radiation protection.

The following subjects were treated:

Fundamentals of radiation physics, kinds of nuclear radiation and sources, interaction of radiation with matter, dose quantities, dose monitoring, radiation monitoring principles and instruments, protection against radiation fields, biological effects of radiation, mechanical and constructional radiation protection, maximum permissible doses, radiation protection areas, handling of radiation sources, transport of radioactive material, radiation protection safety, safety precautions to be taken in case of abnormal occurences and accidents, tasks and duties of the radiation protection supervisor, legal rules and guidlines, danger by unsealed radioactive material, protection against contamination, radiation monitoring of activities - contaminations and incorporations, identification of nuclides, fundamentals of radiochemistry, handling of unsealed radioactive material, maximum permissible uptake of radioactive material, radiation protection supervision, radiation protection technics, handling of waste, decontamination, official proceedings.

The participant passed the final examination.

Hannover, 16.03.2001

Dr.H.G.Vogu (Head of the Course)

The Land authority (Niedersächsischer Minister für Bundesangelegenheiten) has been informed about the designated course on radiation protection (Gem. RdErl. d. MU u.d. MW vom 24.08.1992 - 403.b-40341/1-, Nds. MBI. 32, 1992, S. 1293)

Hannover, 22,44 - 2004

Dr. H. G. Vogt

Certificate of Training

Awarded To

Markus Hannig

Recognizing completion of 40 hours of specialized instruction in

Radiation Safety Officer

September 26, 2003

Presented By

Radiation Safety Academy 481 North Frederick Avenue, Suite 302 Gaithersburg, Maryland 20877

AAHP has awarded this course 32 Continuing Education Credits, 2003-00-018 ABIH has awarded this course 4.5 CM Points, CM Approval # 03-021

Ray Johnson

Raymond Johnson, CHP, PE, RSO Training Director



Certificate of Training

This Certifies That

Markus Hannig

has been trained, tested and successfully completed the specialized instruction in

DOT & NRC Requirements for Shipping and Receiving Radioactive Materials

September 24, 2003

Presented By:

Sean M. Austin, Instructor Radiation Safety Academy

481 North Frederick Avenue, Suite 302, Gaithersburg, Maryland 20877 www.RadiationSafetyAcademy.com -- 301-990-6006

Presented For: Betacontrol of America

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, Subpart II.

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.

Sean Milind .

Sean Austin, CHP Senior Health Physicist

CERTIFICATE OF CALIBRATION (COUNT-RATE INSTRUMENT)



Customer and Contact: Beta Control, c/o Atlantic Nuclear Corp. (781) 828-9118) Customer Address: 425-RT202, Towado, NJ 07082 Inst. Mfr. & Model Ludlum Model 3 Inst. Type Survey Meter Inst. s/n 194710 Det. Mfr. & Model not indicated Det. Type Pancake G-M Det. s/n not indicated Cal. Date 04 March 2004 Due Date 04 March 2005 Cal. Interval 1 year Environmental conditions: Temperature: 68°F Relative Humidity 32% Atmospheric Pressure 29.45 inches Hg Pre-calibration Checks: ■ Contamination survey ■ Battery check ■ Slow response check Mechanical check Audio check Det. volts 900 Vdc □ Window operation Meter zero D Reset check D Plateau check

Geotropism check	Fast response check	Alarm set	Input sens. 35 mV		
■ Pulse generator s/n 94926	Oscilloscope s/	n 171-04928	■ Voltmeter s/n 57410002		
HV Readout (2 points) Ref./Inst.	V/	V Ref./Inst.	V/	v	
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Comments: Precision check measurement taken with probe face in contact with source.

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 S/N of source used for precision check not indicated Isotope latern mantleDedicated Source? □Yes ■No

 Reading #1 9,000 cpm
 Reading #2 9,000 cpm
 Reading #3 9,000 cpm
 Mean 9,000 cpm

 Precision: ■± <10%</td>
 □±10-20%
 □Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 100	400,000 cpm	400,000 cpm
x 100	100,000 срт	100,000 cpm
x 10	40,000 срт	40,000 cpm
x 10	10,000 срт	10,000 срт
x 1	4,000 cpm	4,000 cpm
x 1	1,000 срш	1,000 cpm
x 0.1	400 cpm	400 cpm
x 0.1	100 срш	100 срт

All ranges calibrated electronically.

		Local b	50	
Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	C-14 #4456	202,100	8000	3.93
x 1	Pm-147 #5381	9,825	800	7.63
x 1	Tc-99 #D702	23,064	2600	11.06
x 1	Cs-137 #2886	18,011	3700	20.27
x 10	C1-36 #D700	23,598	5000	20.98
x 10	Sr/Y-90 #D711	45,115	10,000	22.05

RSA Laboratories ID# 8339. Instrument indicates within $\pm 10\%$ of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

17 marp ling Date Calibrated by: Kurt D. Newton 04 ho-2000 Date Reviewed by: Jay R. Dockendert

