

### **MEMO**

TO:

Mike Herr, U.S. Nuclear Regulatory Commission

FROM:

Mohammed Al-Shatel, P.E., City Engineer

City of Muskegon

11-17-11

CC:

Bryan Heath, Radiation Safety Officer

RE:

Renewal of Application for Materials License #21-16304-01

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DATE:

November 17, 2011

Attached for your reference, please find our amended application reflecting the updated information you requested according to our phone conversations and e-mails.

The City of Muskegon is requesting permission to use the gauges at temporary job sites where the U.S. Nuclear Regulatory Commission maintains jurisdiction.

If you have any questions, please feel free to contact me directly at 231.724.6944, or e-mail me at mo@postman.org

Thank you for your assistance in this matter.

## ITEMS 5 AND 6: MATERIALS TO BE POSSESSED AND PROPOSED USES

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
X		Cesium-137	Sealed source manufacturer or distributor and model number:  Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes Specific description of the gauge use:	O Not applicable  Uses are:  (Submit safety analysis supporting safe use)
X		Americium- 241	Sealed source manufacturer or distributor and model number:  Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes Specific description of the gauge use:	☐ Not applicable ☐ Uses are: ☐ (Submit safety analysis supporting safe use)

#### APPENDIX B

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity .	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
	X	Californium- 252	Sealed source manufacturer or distributor and model number:  Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes D Specific description of the gauge use:	☐ Uses are:  ———————————————————————————————————
	X	Other Isotope (Specify):	Sealed source manufacturer or distributor and model number:  Device manufacturer or distributor and model number;	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes  Specific description of the gauge use:	O Not applicable  O Uses are:  (Submit safety analysis supporting safe use)

# ITEMS 7 THROUGH 11: TRAINING AND EXPERIENCE, FACILITIES AND EQUIPMENT, RADIATION SAFETY PROGRAM, AND WASTE DISPOSAL

	Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
7. Ne	INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER	Before obtaining licensed materials, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer" in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.	X	0
8.	TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS	Before using licensed materials, authorized users will have successfully completed one of the training course described in Criteria in the section entitled "Training for Individuals Working In or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev 1, dated November 2001.	X	ם
9.	FACILITIES AND EQUIPMENT	No information needs to be submitted in response to this item; key issues are addressed under "Radiation Safety Program – Public Dose" and "Radiation Safety Program – Operating and Emergency Procedures."	Separate Item 9 Response Need Not Be Submitted With Application	
10.	RADIATION SAFETY PROGRAM – AUDIT PROGRAM	The applicant is <i>not</i> required to, and should not, submit its audit program to NRC for review during the licensing phase.	Need Not Be Submitted With Application	
10.	RADIATION SAFETY PROGRAM – TERMINATION OF ACTIVITIES	The applicant is not required to submit a response to the termination of activities section during the initial application.  However, when the license expires when the licensee ceases operation, NRC Form 314 must be submitted.	Need Not Be Submitted With Application	
10,	RADIATION SAFETY PROGRAM SURVEY INSTRUMENTS	We will either possess and use, or have access to and use, a radiation survey meter that meets the Criteria in the section entitled "Radiation Safety Program Instruments" in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.	*	

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Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
10. RADIATION SAFETY PROGRAM – MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.	×	O
10. RADIATION SAFETY PROGRAM OCCUPATIONAL DOSIMETRY	Either we will maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20, or we will provide dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.	150	
10. RADIATION SAFETY PROGRAM – PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section during the licensing phase. This matter will be examined during an inspection.	Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM – OPERATING AND EMERGENCY PROCEDURES	We will implement and maintain the operating and emergency procedures in Appendix H of NUREG-1556, Vol. 1, Rev. 1, dated November 2001, and provide copies of these procedures to all gauge users and at each job site.		a
	OR  Operating and emergency procedures will be developed, implemented, and maintained and will meet the criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures" in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.	X	
10. RADIATION SAFETY PROGRAM – LEAK TEST	Leak tests will be performed at intervals approved by NRC or an Agreement Sate and specified in the Sealed Source and Device Registration Sheet. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions.		The information in Appendix J supporting a request to perform leak testing and sample analysis is attached.

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
10. RADIATION SAFETY	Routine Cleaning and Lubrication		
PROGRAM – MAINTENANCE	We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's recommendations and instructions.	1 X	
	Non-Routine Maintenance		
	We will send the gauge to the manufacturer or other person authorized by NRC or an Agreement State to perform non-routine maintenance or repair operations that require the removal of the source or source rod from the gauge.	*	The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.
10.RADIATION SAFETY PROGRAM – TRANSPORTATION	The applicant is <i>not</i> required to submit its response to transportation during the licensing process. However, this issue will be reviewed during inspection.	Need Not Be Submitted With Application	
11. WASTE MANAGEMENT – GAUGE DISPOSAL AND TRANSFER	The applicant is <i>not</i> required to submit a response to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program.	Need Not Be Submitted With Application	