

U.S. NUCLEAR REGULATORY COMMISSION

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MATERIALS LICENSE

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, 36, 37, 39, 40, 70 and 71, 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 persons 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 letter dated	4. Expiration Date: August 31, 2022			
1.	Board of Light and Power City of Marguette		A pril 18, 2018.				
		. C		5. Docket No.: 030-18052			
2.	2200 Wright Street Marguette, MI 49855		3. License number: 21-20174-01 is amended in its entirety to read as	Reference No.:			
	follows:						
6.	Byproduct, source, 7. and/or special nuclear material	Chemical and/or physical fo	orm 8. Maximum amount that licen may possess at any one tim under this license	see 9. Authorized use			
Α.	Cesium-137 A.	Sealed Sources (Gamma Industries, Model VD; Ge Radioisotopes, Model 85 New England Nuclear, W NER-570; Ohmart, Mode A-2102; Thermo Fisher Scientific, Model 517570	A. 100 millicuries per source and 1500 millicuries total lodel	 A. For use in Thermo Fisher Scientific (formerly TN Technologies/Texas Nuclear) Model 5192, Rosemount/Kay-Ray/Sensall, Inc. Model 7062P and Ohmart Corporation Model SH-100 fixed gauging devices to perform level measurements. 			
	CONDITIONS						
10	 Licensed material may be u Michigan, 49855. 	sed or stored only at the	licensee's facilities located at Shiras Por	wer Station, 400 East Hampton, Marquette,			

11. The Radiation Safety Officer (RSO) for this license is Daniel A. McDougall.

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 Licensed material shall only be used by, or dated January 10, 2012, and have been or individuals designated as users for three years A Second sources and detector cells shall 	12. Licensed material shall only be used by, or under the supervision of, individuals who have received the training described in the application dated January 10, 2012, and have been designated in writing by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for three years following the last use of licensed material by the individual.			
 A. Sealed sources and detector cells shat the certificate of registration issued by absence of a registration certificate, s months, or at such other intervals as B. In the absence of a certificate from a registration issued by the U.S. Nuclear sealed source received from another 	 A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State. In the absence of a registration certificate, sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months, or at such other intervals as specified. B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received. 			
C. Sealed sources need not be tested if or transferred to another person, and transfer. No sealed source shall be st	 C. Sealed sources need not be tested if they 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 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 185 becquerels (0.005 microcuries) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 microcuries) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. 			
D. The leak test shall be capable of deters sample. If the test reveals the presen filed with the U.S. Nuclear Regulatory immediately from service and decontst				
E. Analysis of leak test samples and/or Commission or an Agreement State t the analysis.	contamination shall be performed by per o perform such services. The licensee is	rsons specifically licensed by the U.S. Nuclear Regulatory s authorized to collect leak test samples but not perform		
F. Records of leak test results shall be k	cept in units of becquerels (microcuries)	and shall be maintained for three years.		

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14.	Sealed sources containing licensed mate specifically authorized.	erial shall not be opened or sources remo	oved from source holders by the licensee, except as	
15.	5. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 3 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.			
16.	 6. A. Each gauge shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed six months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State. B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested 			
17.	The licensee may initially mount a gauge an Agreement State, and under the follow A. The gauge must be mounted in acco	e, if permitted by the certificate of registration of the certificate of registration of the certificate of registration of the certificate of the	ation issued by the U.S. Nuclear Regulatory Commission or d by the manufacturer.	
	 B. The gauge must be mounted in a loc Use in the certificate of registration is 	cation compatible with the Conditions of I ssued by the U.S. Nuclear Regulatory Co	Normal Use and Limitations and/or Other Considerations of commission or an Agreement State.	
	C. The on-off mechanism (shutter) mus	t be locked in the off position, if applicab	ble, or the source must be otherwise fully shielded.	
	D. The gauge must be received in good	l condition (e.g., the package was not da	amaged).	

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 E. The gauge must not require any m Mounting does not include electrical comay not be used until it is installed and Agreement State to perform such oper 18. A. The licensee may maintain, repair, byproduct material and that do not increased radiation levels in access B. The licensee may not maintain, rep drive mechanism, on-off mechanism the device, except as provided other 19. Prior to initial use and after installation, shielding, the licensee shall assure that and below the gauge with the shutter of Regulatory Commission or an Agreeme 20. The licensee shall operate each device limits such that the shielding and shutted 21. The licensee shall assure that the shutter whenever a new device is obtained to it 	odification to fit in the proposed local innection, activation, or operation of made operational by a person spec- ations or replace device components that result in the potential for any portion sible areas. Dair, or replace any of the following of m (shutter), shutter control, or shield envise by specific condition of this li- relocation, dismantling, alignment, t a radiological survey is performed pen. This survey shall be performed pen. This survey shall be performed in State.	tion. the gauge. The source must remain cifically licensed by the U.S. Nuclear are not related to the radiological sate of the body to come into contact we device components: the sealed source ing, or any other component related cense. or any other activity involving the set to determine radiation levels in accord d only by persons authorized to per- the manufacturer's specified temper are not compromised. ked in the closed position during per- e shall review and modify, as appropriate 's recommendations.	n fully shielded, and the gauge r Regulatory Commission or an afety of the device containing rith the primary beam or in rce, the source holder, source d to the radiolog ical safety of ource or removal of the essible areas around, above, form such services by the U.S. erature and environmental eriods when a portion of an priate, its "lock-out" procedures	

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- 22. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device or source-device combination that would alter the description or specifications as indicated in the respective certificate of registration seed either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
- 23. The following services shall not be performed by the licensee: installation, initial radiation surveys, relocation, removal from service, dismantling, alignment, replacement, disposal of the sealed source, and non-routine maintenance or repair of components related to the radiological safety of the gauge (i.e., the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, shielding). These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

North Marine Star

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24.	Except as specifically provided otherwise representations, and procedures contains those procedures that are required to be regulations shall govern unless the states restrictive than the regulations. A. Application dated January 10, 2012 B. Letter dated July 10, 2012 (ML12220 C. Letter dated August 29, 2017 with att D. Facsimile dated April 18, 2018 (ML18	in this license, the licensee shall conduced in the documents, including any enclose submitted in accordance with the regulation ents, representations, and procedures (ML 120200324) (ML	tember 4, 2017 (ML17249A221)	statements, dition applies only to Commission's espondence are more
Date	e: MAY 2 3 2018	FOR By: _ F R	THE U.S. NUCLEAR REGULATORY	COMMISSION