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1. LICENS	- D - an to a trapps	TNC	2. NRC/REGIONAL OFFICE				
1110	-America Isoloposs		2443 WARREN VI	lle Rd.			
706	E. Liberty Lane		Select a location (Use	keyboard arrows to s	select).		
Ash	land, MO				select)		
REPORT	NUMBER(S) 2014-001						
3. DOCKET	NUMBER(S)	4. LICENSE NUMB	ER(S)	5. DATE(S) OF INSPECTIO	N		
03	0-31896	24-2	6241-01mD	7/25/14			
LICENSE	E:			•			
The inspe Regulator procedure	ction was an examination of the activities con y Commission (NRC) rules and regulations a and representative records, interviews with	nducted under your lice and the conditions of you a personnel, and observe	nse as they relate to radiation sa ur license. The inspection consis ations by the inspector. The insp	ety and to compliance with ted of selective examination section findings are as follo	h the Nucl ons of		
V 1.	Based on the inspection findings, no violati	ions were identified.					
V <sup>2</sup> .	Previous violation(s) closed.						
3.	The violations(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identifie non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.						
	Non-cited violation(s) were discussed involving the following requirement(s):						
	·						
4.	During this inspection, certain of your activicited in accordance with NRC Enforcement with 10 CFR 19.11. (Violations and Corrective Actions)	ities, as described belov t Policy. This form is a N	v and/or attached, were in violatio NOTICE OF VIOLATION, which r	on of NRC requirements a hay be subject to posting i	nd are bei n accorda		
				· · · · · · · · · · · · · · · · · · ·			
		Statement of Corr	rective Actions				
I hereby s corrective date whe	state that, within 30 days, the actions describ extractions is made in accordance with the requ	Statement of Corr ed by me to the Inspect irements of 10 CFR 2.2 and that no further writh	rective Actions or will be taken to correct the viol 01 (corrective steps already take on response to NRC will be requi	ations identified. This stat n, corrective steps which red, unless specifically red	tement of will be tak		
l hereby s corrective date whe T	state that, within 30 days, the actions describ e actions is made in accordance with the requin full compliance will be achieved). I underst	Statement of Corr ed by me to the Inspect urements of 10 CFR 2.2 and that no further writh ME	rective Actions or will be taken to correct the viol 01 (corrective steps already take en response to NRC will be requ SIGNATURE	ations identified. This stat n, corrective steps which red, unless specifically rec	ement of will be tak quested.		
I hereby s corrective date whe T ICENSEI	state that, within 30 days, the actions describe actions is made in accordance with the requin full compliance will be achieved). I underst ITLE PRINTED NA E'S NTATIVE	Statement of Corr ed by me to the Inspect urements of 10 CFR 2.2 and that no further writt ME	rective Actions or will be taken to correct the viol 01 (corrective steps already take en response to NRC will be requ SIGNATURE	ations identified. This stat n, corrective steps which red, unless specifically rec	tement of will be tak quested.		
I hereby s corrective date whe T LICENSEI REPRESE	state that, within 30 days, the actions describe actions is made in accordance with the requ n full compliance will be achieved). I underst ITLE PRINTED NA E'S ENTATIVE PECTOR Rohert G. Gatton	Statement of Cor ed by me to the Inspect uirements of 10 CFR 2.2 land that no further writt ME	rective Actions or will be taken to correct the viol 101 (corrective steps already take en response to NRC will be requ SIGNATURE Ruffert D. Hutto	ations identified. This stat n, corrective steps which red, unless specifically red	tement of will be take quested. DATE		

NRC FORM 591M PART 3 (07-2012)	NRC FORM 591M PART 3 U.S. NUCLEAR REGULATORY COMMISSION (07-2012) Docket File Information									
10 CFR 2.201		REPORT AND	) COMPLIANCE INS	SPECTION						
1. LICENSEE/LOCATION INSPECT	ED:									
			2							
Mid-America Isotopes, In	IC.		Region III							
706 E. Liberty Lane			U. S. Nuclear Regula	tory Commission						
Ashland, MO			2443 Warrenville Ro	ad, Suite 210						
	001		Lisle, IL 60332-4332	2						
REPORT NUMBER(3) 2014-0	JUI									
3. DUCKET NUMBER(S)		4. LICENSE NUMBERG	5)	5. DATE(S) OF INSPECTION						
030-31896		24-26241-01MD	1	7/25/14						
	-D	7 INSPECTION FOCU	CADEAR							
87127	20	Δ []	SAREAS							
		TNITAL INSPECT								
1 PROGRAM CODE(S)	JUFFLLIN	TAL INGE CONTAC								
02500	2	Scott Brower, R	SO	(573) 657-1776						
			- 07/05/00							
✓ Main Office Inspec	stion	Next Inspection	Date: 0//25/20	16						
Field Office Inspec	ction									
Temporary Job Si	te Inspection			Ny 9						
		PROGRAM S	COPE							
The licensee had 5 Autho	orized Nuclear Pharm	acists (ANPs), Th	he licensee served about	20 clients in mid-Missouri.						
The licensee's activities	were as authorized in	accordance with i	ts NRC license, includin	ig iodine-131 compounding and						
use of beta-emitting radio	onuclides. The licens	see dispensed abou	ut 200 dosages per day, i	ncluding about 3 iodine-131						
dosages per week. No io	dine-131 compoundi	ng or handling of	beta emitters was done d	luring the inspection.						
The langestory (1) obsor	1 + 66 des desimet	Performance Obse	ervations	to a second (2) abcomund						
that the licensee impleme	The inspector: (1) observed staff don dosimeter badges and personal protective equipment as required; (2) observed that the licenses implemented actions to provent a provious non-sited violation of 10 CER 20 1802 involving response									
to a courier who did not	have the key to the lic	censee's vestibule	during delivery of licens	sed material (i.e., have the						
courier call the on-call A	courier call the on-call ANP, have the ANP direct the courier to wait for the ANP to arrive at the facility, and have the									
ANP give the courier acc	ANP give the courier access to the vestibule for the delivery); (3) observed that licensed material was secured from									
unauthorized access; (4) observed that the facility was as authorized; (4) observed licensee staff use time, distance,										
shielding and other mean	is to reduce personnel	I radiation exposur	re; (5) observed staff pre	pare packages for delivery,						
including required packa	ge surveys, package l	labeling and marki	ng, blocking and bracing	g, and use of shipping papers;						
(6) noted that selected sta	aff members knew ho	w to respond to ra	dioactive spills; (7) mea	sured a maximum of 1 millirem						
per hour at selected suria	ces of the restricted a	irea using a calibra	ated, NRC-owned survey	/ instrument; (8) noted that						
drivers knew how to deli	w to respond to trans	in accordance wit	5 resulting in radiation in 5 DOT requirements: (1)	(1) observed that the licensee						
used an adequate means	to measure the radioa	In accordance mil	$m_{-153}$ (11) observed th	e RSO measure 100 feet per						
minute at the face of the	fume hood; (12) note	d that a selected s	taff member knew when	and how fume hood filters						
were checked, what the a	action level was, and l	how to respond if	the action level was exce	eeded; (13) observed an ANP						
demonstrate how he had	compounded iodine-	131; (14) observed	I that the licensee had im	plemented actions to address						
the licensee's previous us	the licensee's previous use of a non-conservative calibration factor of 1.33 to determine the 1-131 radioactivity on air									
samples (e.g., revised the	samples (e.g., revised the applicable calculation to apply a calibration factor of 1.0 instead of 1.33, multiplied the									
previous air sampling result data times 1.33 for 2012, 2013, and 2014 (to date), determined that the constraint on air										

previous air sampling result data times 1.33 for 2012, 2013, and 2014 (to date), determined that the constraint on air emissions referenced in 10 CFR 20.1101(d) was not exceeded); and (15) noted that dosimetry results showed that the highest annual whole body and extremity doses received from 2012 through May 2014 were 1241 millirem and 13,134 millirem, respectively.