WILLIAM B. BENESEK, PE DIRECTOR OF TRANSPORTATION (636) 477-6600, EXT. 1390

July 31, 2014

United States Nuclear Regulatory Commission, Region III 2443 Warrensville Road Suite 210 Lisle, IL 60532-4352

Attn: Document Control Desk, Washington DC 20555-001

RE: Response to the Apparent Violations in Inspection Report No. 03018256/2014001 (DNMS); EA-14-106

In response to the letter received from the Nuclear Regulatory Commission, dated July 1, 2014 and subject titled, "NRC ROUTINE INSPECTION REPORT NO. 03018256/2014001 (DNMS) AND NOTICE OF VIOLATION — CITY OF SAINT PETERS", below is a written summary of comprehensive corrective action taken, that will be immediately incorporated into the City of St. Peters' portable gauge radiation safety program.

As noted in said "NOTICE OF VIOLATION" dated July 1, 2014:

1) "Title 10 of the Code of Federal Regulations (CFR) 71.5(a) requires, in part, that a licensee who transports licensed material outside of the site usage, as specified in the NRC License, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Part 172.

Title 49 CFR 172.704(a)(1) requires that each hazmat employee be provided general awareness/familiarization training designed to provide familiarity with the requirements of this subchapter, and to enable the employees to recognize and identify hazardous materials consistent with the hazard communication standards of this subchapter. A hazmat employee is defined, in part, as an individual who, during the course of employment loads, unloads, or handles hazardous materials. Pursuant to 49 CFR 172.101, radioactive material is classified as hazardous material.

Title 49 CFR 172.704(c)(2), requires in part that a hazmat employee must receive the training required by 49 CFR 172.704(a)(1) at least once every three years."

CITY OF SAINT PETERS NOTED VIOLATION: <u>Severity Level IV (Section 6.8)</u>, The last record of Nuclear Gauge Users Training was February 15, 2002, in which Humboldt manufacturing performed, "Nuclear Gauge Training Certification". This period of time exceeds the allotted three (3) year period of training certification.

CITY OF SAINT PETERS NOTED CAUSE OF APPARENT VIOLATION: The current RSO (Jason Lewis) was not familiar with the training requirement on the license to be certified every three (3) years for Hazmat Training.

CITY OF SAINT PETERS CORRECTIVE ACTION: The RSO (Jason Lewis) and supervisor (Burt Benesek) are now aware of the requirement. The RSO has arranged for Hazmat Training to be provided by R. M. Wester and Associates, Incorporated. R. M. Wester is a local

company specializing in radiation safety and training. R. M. Wester has approved training programs with Humbolt and CPN.

The RSO will also create a meeting notification on Microsoft Outlook that will send notification prior to expiration of any and all hazmat trained individuals.

Full compliance shall be completed approximately thirty (30) days from the date of this response letter, or no later than September 3, 2014.

Please note that since notification of this apparent violation on June 2, 2014 the use of the portable radiation gauge has been prohibited and the gauge properly secured at its approved, permitted storage facility at 100 Boone Hills Drive, St. Peters, MO 63367. The portable radiation gauges will remain secured and unused until said training is successfully completed and approval to resume use is approved by Nuclear Regulatory Commission, Region III, Division of Nuclear Materials Safety.

As noted in said "NOTICE OF VIOLATION" dated July 1, 2014:

2.) "Title 10 CFR 71.5(a) requires, in part, that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, comply with the applicable requirements of the regulations appropriate to the mode of transport of the department of transportation (DOT) in 49 CFR Part 177.

Title 49 CFR.817(a) requires, in part, with the exceptions not applicable here, that a person may not transport a hazardous material by highway unless that person has received a shipping paper prepared in accordance with 10 CFR Part 172. Pursuant to 49 CFR 172.101, radioactive material is classified as hazardous material."

CITY OF SAINT PETERS NOTED VIOLATION: Severity Level IV (Section 6.8), City of Saint Peters personnel transported portable gauges containing radioactive materials by highway without the proper shipping papers, namely a "Bill of Lading", listing the contained hazardous material.

CITY OF SAINT PETERS NOTED CAUSE OF APPARENT VIOLATION: The current RSO (Jason Lewis) was not familiar with requirement to include a "Bill of Lading" in the documents required to transport portable gauges containing hazardous material.

CITY OF SAINT PETERS CORRECTIVE ACTION: The RSO and supervisor (Burt Benesek) are now aware of the requirement. The RSO has prepared generic "Bill of Lading" that properly list hazardous material for the Humbolt and CPN portable gauges. This "Bill of Lading" as prepared will be included with all other required documents when gauges are being transported for use at various projects within the city limits of the City of Saint Peters.

Full compliance was completed on June 6, 2014. Generic Bill of Lading documents are complete.

Please note that since notification of this apparent violation on June 2, 2014 the use of the portable radiation gauge has been prohibited and the gauge properly secured at its approved, permitted storage facility at 100 Boone Hills Drive, St. Peters, MO 63367.

As noted in said "NOTICE OF VIOLATION" dated July 1, 2014:

3.) "Title 10 CFR 20.1101(c) requires that the licensee periodically (at least annually) review the radiation protection program content and implementation."

CITY OF SAINT PETERS NOTED VIOLATION: Severity Level IV (Section 6.8), City of Saint Peters (RSO) did not perform annual reviews of the current radiation protection program.

CITY OF SAINT PETERS NOTED CAUSE OF APPARENT VIOLATION: The current RSO (Jason Lewis) was not familiar with requirement to perform, at least annual, review and inspection of the radiation protection program.

CITY OF SAINT PETERS CORRECTIVE ACTION: The RSO and supervisor (Burt Benesek) are now aware of the requirement. The RSO has performed an audit and inspection of the current radiation protection program as provided by current NRC license. The said audit and inspection is the form provided in Appendix F of NUREG-1556, Volume 1, Revision 1. A copy of this audit shall be on file and available for review and will be performed bi-annually.

Full compliance was completed on June 6, 2014. Generic Bill of Lading documents are complete. A copy of the audit form, Appendix F of NUREG-1556, Volume 1, Revision, has been completed and is currently in file.

Please note that since notification of this apparent violation on June 2, 2014 the use of the portable radiation gauge has been prohibited and the gauge properly secured at its approved, permitted storage facility at 100 Boone Hills Drive, St. Peters, MO 63367.

Please be advised that "NOTICE OF VIOLATION" Items 2 (Bill of Lading) and Item 3 (Annual Review) have been addressed or completed, and are currently incorporated in the City of St. Peters' Radiation Safety Program. Item 1 (Nuclear Gauge Users Training) of said "NOTICE OF VIOLATION" will be completed within the next thirty (30) calendar days. Use of the portable gauges will be remain prohibited and the gauges secured at their approved, permitted storage facility until verification of compliant nuclear gauge training is reviewed and approved by Nuclear Regulatory Commission, Region III, Division of Nuclear Materials Safety.

If you have any questions or require further action, please contact me at (636) 477-6600, ext. 1390.

Sincerely,

William B. Benesek, PE Director of Transportation

City of St. Peters

Cc: Jason Lewis, Civil Engineer, City of St. Peters, Nuclear Gauge RSO

# BILL OF LADING – SHORT FORM – NOT NEGOTIABLE CITY OF SAINT PETERS, MO 63376 CPN MODEL MC 1DRP SERIAL # 10015

SHIP FROM								Bill of Lading Number: 1					
Jason B. Lewis, RSo 100 Boone Hills Drive Saint Peters, MO 63376 SID No.:													
								carrier Name: City of Saint Peters employee that is trained in the proper transportation and handling of a Nuclear Densometer device					
Variou	ıs Job Site In	Saint Pete	ers, Missouri	63376			<del> </del>	F) in a consequence of the conse					
SID No	NA	,					· 40 \$ · · · • 40 0						
		THIRD	PARTY FREIG	HT CHARG	ES BILL TO			scac: NA					
NA								Pro Number: NA					
Special Instructions: A Nuclear Densometer containing small levels of radionboard. The Nuclear Densometer shall be used in various constructions returned to the "SHIP FROM" address daily								Freight Charge Terms (Freight				rwise):	
Handli	ing Unit	Packag	e					LTL Only					
Qty	Туре	Qty	Туре	Weight	HM (X)	Commoditie	Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of NMFC				NMFC No.	Class	
		1	A - BULK	90	xxx	RQ : Rad	loactive Ma	terial, Class 7, UN3332;				<del> </del>	
					Westernam of the second	i	-	3Q (10 mCi) Yellow II 1.88 GBq (50 mCi) Yellow II					
•						Special F	orm Type 'A	A' Package	<b></b>				
							77-				<b></b>		
	a popular di Prancibina di Abbia di Abbia di Abbia		agistig of manya war nighty or the professional right of the significant and the signi			TI 0.5	cv Resnors	e Telephone : Jason Lewis, RSO	314-596-8866	<del></del>			
	Emergency Response Telephone : Jason Lewis, RSO 314-596-8866  R.M. Wester – 636-928-9857								<u></u>				
the prop	ne rate is depende erty as follows: "T g NA per NA.	he agreed or	r declared value o	of the property	is specifically s	stated by the s	shipper to be no	ot \$ NA			Customer chec	dx acceptable	
		N	ote: Liability	limitation	for loss or	damage in		ent may be applicable. See 49 t		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
writing b	writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper, on request, and					lawful fees	arrier shall not make delivery of this shipment without payment of charges and all other I fees. er Signature						
							Freight Counted: Carrier Signature/Date						
This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the DOT.					By driver By driver	certifies emergency response information was made evailable and/or carrier has the DOT emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in							

## BILL OF LADING – SHORT FORM – NOT NEGOTIABLE CITY OF SAINT PETERS, MO 63376 HUMBOLT MODEL 5001-P SERIAL # 341

SHIP FROM								Bill of Lading Number: 1					
Jason B. Lewis, RSo 100 Boone Hills Drive Saint Peters, MO 63376 SID No.:													
SHIPTO								carrier Name: City of Saint Peters employee that is trained in the proper transportation and handling of a Nuclear Densometer device					
Variou	Various Job Site in Saint Peters, Missouri 63376												
SID No	.: NA					wa mga na i-i							
	ம் ஊல்ல்	THIRD	PARTY FREIO	HT CHAR	SES BILL TO			scac: NA					
			N	IA				Pro Number: NA					
onboa	Special Instructions: A Nuclear Densometer containing small levels of rac onboard. The Nuclear Densometer shall be used in various constructions returned to the "SHIP FROM" address daily							Freight Charge Terms (Freight Prepaid Collect	charges are prepaid unles	ss marked othe	rwise):		
Handli	ng Unit	Packag	e					LTL Only					
Qty	Туре	Qty	Туре	Weight	нм (х)		requiring spec	tion cial or additional care or attention in ham ensure safe transportation with ordinary		NMFC No.	Class		
		1	A - BULK	90	xxx	RQ : Radio	active Ma						
						Cesium 13 Americium	37, 370 MB n 241/Be 1	<u> </u>					
						Special For	rm Type 'A						
						TIOS							
	TI 0.5  Emergency Respons					y Response	e Telephone : Jason Lewis, RSO						
the prope			shippers are req r declared value of						Fee terms:	Customer che	ck acceptable		
		N	ote: Liability	limitation	for loss or	damage in t	his shipme	ent may be applicable. See 49	USC § 14706(c)(1)(A) and (	в}.			
writing be	etween the carri	er and shippe blished by the	nined rates or co er, if applicable, o e carrier and are a lations.	therwise to tl	ne rates, classific	ations, and la	The carrier awful fees Shipper Sig		shipment without paymen	t of charges an	d all other		
Shipper Signature/Date Trailer Loaded: Freight							reight Cou						
This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the DOT						I	By shippe By driver	certifies emergency response information was made available and/or carrier has the DOT emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in					

	to 1	te: All areas indicated in audit notes may not be applicable to every license and may not need be addressed during each audit.
	Lic	ensee's name: CITY OF ST PETRIS License No. 24-20326-01
	Αu	ditor: JAson Ucul, Date of Audit 6-77-14 Telephone No. 636-477-6600
-	(	J. Jen
	Zi	gnature)
_	<b>,</b> (	<b>6</b>
		AUDIT HISTORY 6-2-19
		Last audit of this location conducted on (date)
	ħ.	Were previous audits conducted yearly? [10 CFR 20.1101] - NO.
	C,	Were records of previous audits maintained? [10 CFR 20.2102] - NO
	d.	Were any deficiencies identified during the last two audits or two years, whichever is longer? YE
	e.	Were corrective actions taken? (Look for repeated deficiencies) Cuenarry Being Aominismes
	2.	ORGANIZATION AND SCOPE OF PROGRAM
	a.	If the mailing address or places of use changed, was the license amended? - N/A
	b.	If ownership changed or bankruptcy was filed, was prior NRC consent obtained or was NRC notified? — H/A
	c.	If the RSO was changed, was the license amended? Does the new RSO meet NRC training requirements? - M/A
	d.	If the designated contact person for NRC changed, was NRC notified? -M/A
	e.	Does the license authorize all of the NRC-regulated radionuclides contained in the gauges possessed? — YES
_	f.	Are the gauges as they are described in the Sealed Source and Device (SSD) Registration Certificate or Sheet? Are copies of (or access to) SSD Certificates available? Does the licensee have the manufacturers' manuals for operation and maintenance? [10 CFR 32.210]
	g.	Are the actual uses of gauges consistent with the authorized uses listed on the license? - YES
		Is the RSO fulfilling his/her duties? - VES

#### APPENDIX F

#### 3. TRAINING AND INSTRUCTIONS TO WORKERS

- a. Were all workers who are likely to exceed 100 mrem/yr instructed per 10 CFR 19.12? Was refresher training provided, as needed? H/A, no the courts the received per 10 cross the received per 10 cro
- b. Did each gauge operator attend an approved course before using the gauges? YES
- c. Are training records maintained for each gauge operator? yes
- d. Did interviews with operators reveal that they know the emergency procedures? W/A Yes
- e. Did this audit include observation of operators using the gauge in a field situation?

  Operating gauge? Performing routine cleaning and lubrication? Transporting gauge?

  Storing gauge?
- f. Did the operator demonstrate safe handling and security during transportation, use, and storage? 1655
- g. Was HAZMAT training (required at least once every three years) provided as required? [49 CFR 172.700, 49 CFR 172.701, CFR 172.702, 49 CFR 172.703, 49 CFR 172.704] -NO.

## 4. RADIATION SURVEY INSTRUMENTS

- a. If the licensee possesses its own survey meter, does the survey meter meet NRC's criteria?
- b. If the licensee does not possess a survey meter, are specific plans made to have one available? \*\*MA -\*\*
- c. Is the survey meter needed for non-routine maintenance calibrated as required? 485 [10 CFR 20.1501]
- d. Are calibration records maintained? [10 CFR 20.2103(a)] vas

### 5. GAUGE INVENTORY

- a. Is a record kept showing the receipt of each gauge? [10 CFR 30.51(a)(1)] 4RS
- b. Are all gauges received physically inventoried every 6 months? VKS
- c. Are records of inventory results with appropriate information maintained? yes

#### 6. PERSONNEL RADIATION PROTECTION

- a. Are ALARA considerations incorporated into the radiation protection program?

  [10 CFR 20.1101(b)]
  - b. Is documentation kept showing that unmonitored users receive less than 10 percent of limit? 42
  - c. Did unmonitored users' activities change during the year which could put them over 10 percent of limit? NO
  - d. If yes to c. above, was a new evaluation performed?

e.		vide	rnal dosimetry required (user receiving greater than 10 percent of limit)? Is dosimetry ed to users? ~ \( \gamma = \gamma = \gamma \)
1	7-	i.	Is the dosimetry supplier NVLAP-approved? [10 CFR 20.1501(c)] -
i	<b>-</b>	ii.	Are the dosimeters exchanged monthly for film badges and at the industry-recommended frequency for TLDs?
		iii.	Are dosimetry reports reviewed by the RSO when they are received? - YES
		iv.	Are the records NRC forms or equivalent? [10 CFR 20.2104(d), 10 CFR 20.2106(c)]
			• NRC-4 "Cumulative Occupational Exposure History" completed?
			• NRC-5 "Occupational Exposure Record for a Monitoring Period" completed?
Ţ	_ _^	, <b>v.</b>	If a worker declared her pregnancy, did licensee comply with 10 CFR 20.1208? Were records kept of embryo/fetus dose per 10 CFR 20.2106(e)?
f.	Ar 10	e rec CFI	cords of exposures, surveys, monitoring, and evaluations maintained? [10 CFR 102, R 20.2103, 10 CFR 20.2106] - ري العام
7.	. PU	JBL	AC DOSE
	[1Č	CF	uges stored in a manner to keep doses below 100 mrem in a year? - 465 R 1301(a)(1)]
	ado neo	litio ess	survey or evaluation been performed per 10 CFR 20.1501(a)? Have there been any one or changes to the storage, security, or use of surrounding areas that would itate a new survey or evaluation?
c.	Do	un	restricted area radiation levels exceed 2 mrem in any one hour? [10 CFR 0.1301(a)(2)]
d.	Ar	e ga	uges being stored in a manner that would prevent unauthorized use or removal? [10 0.1801] — YES
e.	Ar	e re	cords maintained? [10 CFR 20.2103, 10 CFR 20.2107] - YES
8.	<b>,O</b> ]	PEF	RATING AND EMERGENCY PROCEDURES
a.	Ha	ve (	operating and emergency procedures been developed? - YKJ
b.	Do	the	ey contain the required elements? - YES
c.			each operator have a current copy of the operating and emergency procedures, — ing current telephone numbers?
9.	LI	EAF	K TESTS
a.	W	as e	ach sealed source leak tested every 6 months or at other prescribed intervals? - Yes
b.	W		ne leak test performed as described in correspondence with NRC and according to the
			•

#### APPENDIX F

- c. Are records of results retained with the appropriate information included? 7,75
- d. Were any sources found leaking and if yes, was NRC notified? NO

## 10. MAINTENANCE OF GAUGES

- a. Are manufacturer's procedures followed for routine cleaning and lubrication of the gauge?\_ NO
- b. Does the source or source rod remain attached to the gauge during cleaning? \_ 455
- c. Is non-routine maintenance performed where the source or source rod is detached from the gauge? If yes, was it performed according to license requirements (e.g., extent of work, individuals performing the work, procedures, dosimetry, survey instrument, compliance with 10 CFR 20.1301 limits)? WO

### 11. TRANSPORTATION

- a. Were DOT-7A or other authorized packages used? [49 CFR 173,415, 49 CFR 173,416(b)]
- b. Are package performance test records on file? \_ 10
- c. Are special form sources documented? [49 CFR 173,476(a)] MO
- d. Did the package have 2 labels (ex. Yellow-II) with TI, Nuclide, Activity, and Hazard Class? [49 CFR 172.403, 49 CFR 173.441] 465
- e. Was the package properly marked? [49 CFR 172.301, 49 CFR 172.304, 49 CFR 172.310, 49 CFR 172.324] 485
- f. Was the package closed and sealed during transport? [49 CFR 173.475(f)] ->>>>
- g. Were shipping papers prepared and used? [49 CFR 172.200(a)] -yas
- h. Did the shipping papers contain proper entries (Shipping name, Hazard Class, Identification Number (UN Number), Total Quantity, Package Type, Nuclide, RQ, Radioactive Material, Physical and Chemical Form, Activity, category of label, TL, Shipper's Name, Certification and Signature, Emergency Response Phone Number, Cargo Aircraft Only [if applicable])? [49 CFR 172.200, 49 CFR 72.201, 49 CFR 172.202, 49 CFR 172.203, 49 CFR 172.204, 49 CFR 172.604]
- i. Were the shipping papers within the driver's reach and readily accessible during transport? [49 CFR 177. 817(e)] 765
- j. Was the package secured against movement? [49 CFR 177. 834] -7,55
- k. Was the vehicle placarded, if needed? [49 CFR 172.504] MA
- 1. Were overpacks, if needed, used properly? [49 CFR 173.25] HA
- m. Were any incidents reported to DOT? [49 CFR 171.15, 16] Nove occurred

## 12. AUDITOR'S INDEPENDENT SURVEY MEASUREMENTS (IF MADE)

a. Describe the type, location, and results of measurements. Do any radiation levels exceed regulatory limits?

## 13. NOTIFICATION AND REPORTS

- a. Was any radioactive material lost or stolen? Were reports made? [10 CFR 20.2201, 10 CFR 30.50]
- b. Did any reportable incidents occur? Were reports made? [10 CFR 20.2202, 10 CFR 30.50]
- c. Did any overexposures and high radiation levels occur? Were they reported? -~0 [10 CFR 20.2203, 10 CFR 30.50]
- d. If any events (as described in items a through c above) did occur, what was the root cause?

  Were the corrective actions appropriate?
- e. Is the licensee aware of the telephone number for the NRC Emergency Operations Center? [(301) 816-5100]

## 14. POSTING AND LABELING

- a. Is NRC-3 "Notice to Workers" posted? [10 CFR 19.11] URS.
- b. Are NRC regulations and license documents posted or is a notice posted stating where these documents are located? [10 CFR 19.11, 10 CFR 21.6] YES
- c. Is there any other posting and labeling? [10 CFR 20.1902, 10 CFR 20.1904] No

## 15. RECORDKEEPING FOR DECOMMISSIONING

- a. Are records kept of information important to decommissioning? [10 CFR 30.35(g)]
- b. Do records include all information outlined? [10 CFR 30.35(g)] MA

## 16. BULLETINS AND INFORMATION NOTICES

- a. Are NRC bulletins, NRC Information Notices, and NMSS Newsletters, received? 485
- b. Is appropriate training and action taken in response? No

## 17. SPECIAL LICENSE CONDITIONS OR ISSUES

a. Did the auditor review special license conditions or other issues (e.g., non-routine maintenance)?

## 18. DEFICIENCIES IDENTIFIED IN AUDIT; CORRECTIVE ACTIONS

a. Summarize problems and/or deficiencies identified during the audit.

#### APPENDIX F

- b. If problems and/or deficiencies were identified in this audit, describe the corrective actions planned or taken. Are corrective actions planned or taken at ALL licensed locations (not just location audited)?
- c. Provide any other recommendations for improvement.

## 19. EVALUATION OF OTHER FACTORS

- a. Is senior licensee management appropriately involved with the radiation protection program and/or RSO oversight?
- b. Does RSO have sufficient time to perform his/her radiation safety duties?
- c. Does licensee have sufficient staff to support the radiation protection program?

## Warren, Geoffrey

From:

Burt Benesek <bbenesek@stpetersmo.net>

Sent:

Thursday, July 31, 2014 4:49 PM

To:

Warren, Geoffrey

Cc:

Jason Lewis

Subject:

Response to Apparent Violations in Inspection Report No. 03018256/2014001 (DNMS)

EA-14-106

**Attachments:** 

Response to Notice of Violation - Report No 03018256-2014001 DNMS EA-14-106.pdf

Mr. Warren,

Please find attached the City of St. Peters' response to apparent violations per Inspection Report No. 03018256/2014001 (DNMS) EA-14-106. A hard copy will follow. Please let me know if further action is required.

<< Response to Notice of Violation - Report No 03018256-2014001 DNMS EA-14-106.pdf>>

William B. Benesek, PE Director of Transportation City of St. Peters, Missouri

Office: (636) 477-6600, ext 1390

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E-mail: bbenesek@stpetersmo.net