

January 18, 2005 CEC 96434

License No. 37-18456-02	P-2	9.	
Docket No. 030-15116	•	JAN	<u>ين</u> د
Licensing Assistant Section		20	RECEIVED
Nuclear Materials Safety Branch		ص	Z-M
U.S. Nuclear Regulatory Commission, Region I			0
475 Allendale Road		39	
King of Prussia, PA 19406-1415			

RE: Supplemental Information Related to Application for Renewal of License No. 37-18456-02

Dear Sir or Madam,

Attached please find additional information which supplements information submitted previously with NRC form 313 (reference CEC Letter 95825 dated December 10, 2004).

Attachments include:

- 1) Revised pages for our Radiation Safety Procedure
- 2) Appendix B Checklist from NUREG-1556

Please contact me if you have any questions or require any additional information.

Sincerely,

David R. Mitrik Radiation Safety Officer

Attachments DM/kmc and About a property of the control of the c

cc:

R. Artuso

File

2018 WAVERLY STREET PITTSBURGH, PA 15218-2402 (412) 351-6465 FAX: (412) 351-6401

E-MAIL: lab@cectesting.com

136158

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
		Cesium-137	Sealed source manufacturer or distributor and model number: SEE ATTACHED SHEET Device manufacturer or distributor and model number: SEE ATTACHED SHEET	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)
✓		Americium- 241	Sealed source manufacturer or distributor and model number: SEE ATTACHED SHEET Device manufacturer or distributor and model number: SEE ATTACHED SHEET	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)

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
	✓	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 [] Specific description of the gauge use:	☐ Not applicable ☐ Uses are: ☐ (Submit safety analysis supporting safe use)
	✓ '	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 Uses are: (Submit safety analysis supporting safe use)
	Financial Assurance Required and Evidence of Financial Assurance Provided					

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
	INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE - RADIATION SAFETY OFFICER THE: DAVID MITRIK	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. SEE ATTACHED TRAINING CERTIFICATE	and the second	O
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.	đ	O
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 not required to, and should not, submit its audit program to NRC for review during the licensing phase.		ot Be Submitted
10.	RADIATION SAFETY PROGRAM – TERMINATION OF ACTIVITIES	The applicant is <i>not</i> 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.	d	O

APPENDIX B

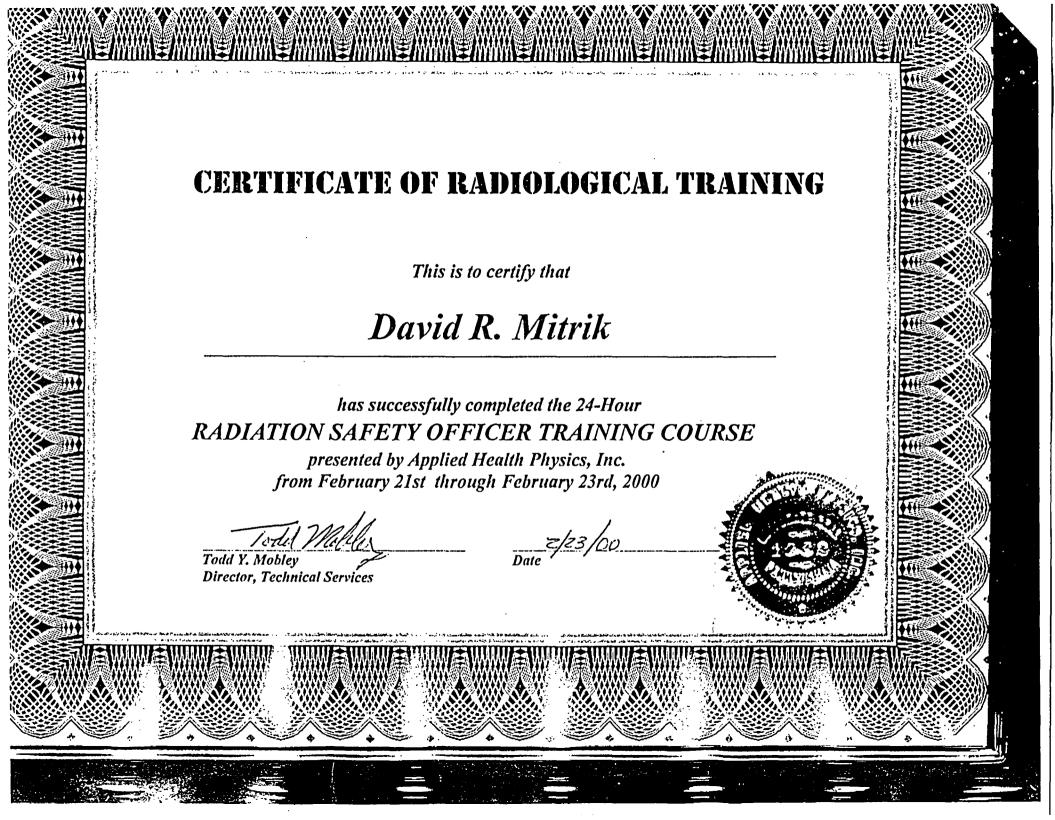
Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
10. RADIATION SAFETY PROGRAM – MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.	G	٥
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.	₽	ά
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.	٥	D D
	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.	ø	
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.	a	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.		o
	Non-Routine Maintenance		
	We will send the gauge to the manufacturer or	g	o
	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.		ot Be Submitted oplication
11. WASTE MANAGEMENT – GAUGE DISPOSAL AND TRANSFER	The applicant is not 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.		ot Be Submitted oplication



<u>Manufacturer</u>	Model No.	Serial No.	Sources
HUMBOLDT	5001	200	CS-137 (10 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	5867	CS-137 (8.9 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	7597	CS-137 (7.9 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	8065	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	10094	CS-137 (8.3 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	11136	CS-137 (8.1 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	12369	CS-137 (8.2 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	13844	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	14450 -	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	14544	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	14579	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	15632	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	15717	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3411-B	15926	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3440	17276	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	20778	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	23749	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	28876	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	28878	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	33051	CS-137 (8.0 MCI) AM241:BE (40 MCI)
TROXLER	3430	35330	CS-137 (8.0 MCI) AM241:BE (40 MCI)

2018 WAVERLY STREET
PITTSBURGH, PA 15218-2402
(412) 351-6465
FAX: (412) 351-6401
E-MAIL: lab@cectesting.com





RADIATION SAFETY MANUAL GENERAL RESPONSIBILITIES

DATE: January 11, 2005

REVISION: 10

APPROVAL: DRM

NUCLEAR DENSITY GAUGES APPENDIX 2 PART I

SUMMARY OF NOTIFICATION REQUIREMENTS	<u>S</u>
SECTION AND	

	SUMMARY OF HOTH TEATION REQUIREMENTS					
	<u>ITEM</u>	SECTION AND WHEN REQUIRED	<u>WHOM</u>	METHOD		
1)	Loss or Theft of Source	20.2201 and/or State Regulation: IMMEDIATELY	Nearest NRC Compliance Office and/or State Agency of Agreement State (whichever is applicable)	Telephone or Telegraph		
2.A)	Exposure of 25 Rems or more	20.2202 and/or State Regulation:	Nearest NRC Compliance	Telephone or Telegraph		
B)	Release of Source from Capsule	IMMEDIATELY	Office, NRC Operations	Telegraph		
C)	Loss of any Work Area for 1 Day		Center and/or State Agency			
D)	Property Damage Over \$200,000					
3.A)	Exposure of 5 Rems or more	20.2202 (b) and/or State Regulation:	Nearest NRC Compliance	Telephone or Telegraph		
B)	Loss of any Work Area for 1 Day	WITHIN 24 HRS.	Office, NRC Operations			
C)	Property Damage Over \$200,000		Center and/or State Regulation			
4.A)	Any incident in 1, 2 or 3 above					
B)	Any other over- exposure					
C)	Levels over 10 Times Allowable in unrestricted areas	20.2203(a) and/or State Regulation: WITHIN 30 DAYS	Director, (Div. of State and Licensee Relations) U.S. RC Washington D.C. cc: Nearest NRC Compliance Office and/or State Agency	In writing describing: a) extent of exposure b) Levels of radiation c) Cause d) Corrective steps taken or planned.		
<u>Note:</u>	If accidents or inciden D.O.T. per 49 CFR, 1	ts occur during transporta 71.15 and 171.16 may be	tion of radioactive mat required.	erials, reporting to		
		EMERGENCY PHON				
1) 2)	Troxler 24 Hours Per NRC Operations Cent	Day Emergency Response er: 301-816-5100	e: y1y-83y-2070	Page 11		

U.S. Department of Transportation: 800-424-8802



NUCLEAR DENSITY GAUGE RADIATION SAFETY MANUAL

DATE: January 11, 2005

REVISION: 5

APPROVAL: DRM

PART I

APPENDIX 3

377/500 ? 12649376 SHIPPER'S DECLARATION FOR DANGEROUS GOODS (Provide at least two copies to the airline) PSI PITTSBURGH TESTING LAB DIV SED DODLAR ST PITTSBURGH Consignee Two completed and signed copies of this Declaration WARNING . must be handed to the operator. Failure to comply in all respects with the applicable TRANSPORT DETAILS Dangerous Goods Regulations may be in breach of the This shipment is within the limitations prescribed for: Airport of Departure applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a CARGO forwarder, or an IATA cargo agent. AIRCHAFT ARGEATIX XXXX Shipment type: (delete non-applicable) Airport of Destination: RADIOACTIVE ... NON-RAPIGACTIVE NATURE AND QUANTITY OF DANGEROUS GOODS Dangerous Goods Identification 野岩草 Quantity and Packing Authorization range and and Inst ing . Group type of packaging or ID No. Proper Shipping Name יי אט Radioactive CS-137/AM241:BE Yellow II Material 3332 Special : .296/1.480GBQ :: - 0,1 . . . Form ... (1) Type A DIM : R.Q. 35x41x75cm Non Fissile or Fissile-Excepted Additional Handling Information **Emergency Telephone Number** Name/Title of Signatory
DAVID R. MITRIK/LAD
SUPERUSAR I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are Place and Date C.E.G. 12/17/01 classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable Signature (1) International and National Governmental Regulations. (see warning above) IF ACCEPTABLE FOR PASSENGER AIRCRAFT, THIS SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED

FOR USE IN, OR INCIDENT TO, RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.

FedEx M-1421 2:99 LOGOS# 2041730848



RADIATION SAFETY MANUAL OPERATING & RADIATION SAFETY PROCEDURE FOR USE OF NUCLEAR SURFACE MOISTURE DENSITY GAUGES

DATE: January 11, 2005

REVISION: 6

APPROVAL: DRM

PART III

SECTION VII

- 7.1.3 Due to the fact that Transport Indexes for density gauges may range from 0.1 to 1.0 mRem/hr., containers may not be stored closer than 12 inches (30 centimeters) to passengers per 49 CRF 177.842. Containers also should not be stored within 1 meter of undeveloped film.
- 7.2 The following labels are displayed on the transport containers as required by 49 CFR.
 - a) Two (2) "Yellow II" labels indicating the contents as: 8 mCi Cs-137, 40 mCi AM-241/Beryllium (172.403, 172.441)
 - b) USA DOT 7A TYPE "A" RQ, RADIOACTIVE MATERIAL SPECIAL FORM NOS UN3332 (172.301, 306, 310, 312, 324)
- 7.3 A "Bill of Lading" certificate must be in the vehicle within sight of the driver's sent at all times along with the CEC Emergency Response Information (i.e., Part III of the CEC Radiation Safety Manual).

The "Bill of Lading" certificate for CEC transport of gauges must comply with 49 CFR 172, subpart C in identifying the following:

- a) The Shipper
- b) Description of the Shipment (proper shipping name, material identification number, hazard class, type of package, name and activity of each nuclide, category of labeling and transport index).
- c) 24-Hour Emergency Response Phone Number
- d) Document must be Signed by the Shipper
- 7.4 Security of Nuclear Density Gauges Containing Sealed Sources
 - a) Each unit will be provided with a lock designed to prevent unauthorized or accidental removal and shall be kept locked at all times except when in use and under the direct surveillance of an operator.
 - 1) Each device containing a sealed source when not in use, shall be stored in a vault container or such other safeguards as may be needed to protect against unauthorized or accidental removal.



RADIATION SAFETY MANUAL

DATE: January 11, 2005

REVISION: 2

APPROVAL: DRM

OPERATING & RADIATION SAFETY PROCEDURE FOR USE OF NUCLEAR GAUGES

PART III

APPENDIX I

Gauge Serial No.:

Gauge Model No.:

BILL OF LADING

Shipper:

Construction Engineering Consultants, Inc.

2018 Waverly Street Pittsburgh, PA 15218 (412)-351-6465

Consignce:

Construction Engineering Consultants, Inc.

·Various Temporary Job Sites

RQ, RADIOACTIVE MATERIAL, SPECIAL FORMS, NOS., UN 3332 CLASS 7, TYPE "A" PACKAGE, CONTAINING:

CESIUM 137, 8 mCi (0.30 GBq)

AMERICIUM 241: BERYLLIUM, 40 mCi (1.48 GBq)

RADIOACTIVE YELLOW II LABEL, TI=0.1

24 HOURS PER DAY EMERGENCY RESPONSE TELEPHONE NO.

******* (919)-839-2676 ******

This is to certify that the above-named material are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

BY:	
Radiation Safety Officer	