



VCU

Procurement Services

11/09/2020

Procurement Services
912 W. Grace Street, 5th Floor
Richmond, VA 23284

804 828-1077
Fax: 804 828-7837
www.vcu.edu/procurement

David Wellner
RSO, Inc.
5204 Minnick Road
Laurel, MD 20707
RE: Contract #: 6258137SW
Renewal No.: Contract Extension

Mr. Wellner,

Your firm's contract with Virginia Commonwealth University (VCU) for **Radioactive Waste Disposal Services** expires on **12/31/2020**. VCU intends to extend this contract for the period of 12/31/2020, through April 30, 2021 after which the contract shall terminate.

Your signature constitutes your firm's acceptance of this extension, to include the optional-use language requirement provision below.

OPTIONAL USE CONTRACT:

This contract is an optional use, requirements based contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources.

- Pricing remains the same as the previous contract period.
- Attached is the revised pricing in accordance with the contract terms
- By signing and submitting this contract extension letter, Contractor certifies that it will maintain the insurance coverages required at the time the contract was awarded. At renewal, Contractor shall have a new Certificate of Insurance listing VCU as the "Additional Insured", citing the contractor's name and contract number, mailed to VCU Risk Management, P.O. Box 843040, Richmond, VA.

Please return this document to me as soon as possible. Your response may be emailed to chunt3@vcu.edu. If you have any questions, please contact me at (804) 828-0663.


Sincerely,
Cornelius Hunt
Senior Buyer and Supplier Diversity Coordinator

Contract #: 6258137SW - Radioactive Waste Disposal Services

RESPONSE:

RSO, Inc.

Name of Firm


Signature

David E. Wellner

Name Printed

Manager

Title

11/10/2020

Date



VCU

Procurement Services

December 5, 2019

Procurement Services
912 W. Grace Street, 5th Floor
Richmond, VA 23284

804 828-1077
Fax: 804 828-7837
www.vcu.edu/procurement

David Wellner
RSO, Inc.
5204 Minnick Road
Laurel, MD 20707

RE: Contract #: 6258137SW
Renewal No.: Four of Four available

Mr. Wellner,


Your firm's contract with Virginia Commonwealth University (VCU) for **Radioactive Waste Disposal Services** expires on **12/31/2019**. VCU intends to exercise the renewal of this contract in accordance with the terms and conditions of contract 6258137SW.

Services shall be provided for renewal period: 1/1/2020 through 12/31/2020.


Your signature constitutes your firm's acceptance of this renewal, to include the optional-use language requirement provision below.

OPTIONAL USE CONTRACT:

This contract is an optional use, requirements based contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources. Any estimates/quantities on a purchase order issued against this contract do not represent a purchase commitment by VCU.

 Pricing remains the same as the previous contract period.

 Attached is the revised pricing in accordance with the contract terms.

 By signing and submitting this contract renewal letter Contractor certifies that it will maintain the insurance coverages required at the time the contract was awarded. At renewal, Contractor shall have a new Certificate of Insurance listing VCU as the "Additional Insured", citing the contractor's name and contract number, mailed to VCU Risk Management, P.O. Box 843040, Richmond, VA, 23284.

Please return this document to me as soon as possible. Your response may be emailed to me at tlhall2@vcu.edu. If you have any questions, please contact me at (804) 828-3409.

Sincerely,
Teresa L. Hall, CUPO, VCO, VCCO
Senior Buyer

Contract #: 6258137SW Radioactive Waste Disposal Services

RESPONSE:

RSO Inc.

Name of Firm



Signature

David Wellner

Name Printed

Manager

Title

12/5/19

Date



VCU Procurement Services

December 11, 2018

David Wellner
RSO, Inc.
5204 Minnick Road
Laurel, MD 20707

Procurement Services
University Purchasing

912 W Grace Street, 5th Floor
Box 980327
Richmond, Virginia 23284

804 828-1077
Fax: 804 828-7837
TDD: 1-800-828-1120
www.vcu.edu/procurement

RE: Contract #:6258137SW
Renewal No.:3 (three) of 4 (four)

Dear Mr. Wellner:

Your firm's contract with Virginia Commonwealth University (VCU) for (Radioactive Waste Disposal Services) expires on (December 31, 2018). VCU intends to exercise the renewal of this contract.

Your signature constitutes your firm's acceptance of this renewal, to include the optional use language and the eVA registration requirement provisions below.

OPTIONAL USE CONTRACT:

This contract is an optional use, requirements based contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources. Any estimates/quantities identified on a purchase order issued against this contract do not represent a purchase commitment by VCU. Services shall be provided in accordance with the contract for the renewal period: (January 1, 2019) through (December 31, 2019).

DCW Pricing remains the same as the previous contract period.

Attached is the revised pricing in accordance with the contract terms.

DCW By signing and submitting this contract renewal letter Contractor certifies that it will maintain the insurance coverages required at the time the contract was awarded. At renewal, Contractor shall have a new Certificate of Insurance listing VCU as the "Additional Insured", citing the contractor's name and contract number, mailed to VCU Risk Management, Box 843040, Richmond, VA.

Please return this document to me no later than (December 14, 2018). Your response may be emailed to be at ewcharity@vcu.edu. If you have any questions, please contact me at (804) 828-0904.

Sincerely,

Earlene Charity

Earlene Charity, Senior Buyer

Contract #: 6528137SW

RESPONSE:

RSO, Inc.

Name of Firm



Signature

David E. Wellner

Name Printed

Manager

Title

12/12/2018

Date

RSO, Inc.
VCU Contract Pricing
Renewal No: 2 of 4
1/26/2018

Line Item	Waste Type	Unit Price (RSO Furnished Packaging)	Unit Price (VCU Furnished Packaging)
A	Dry, Solid Material (UOM=per 55-gal. container-compacted; 250 lbs per 55-gal. container)	\$ 6.50	\$ 6.27
	Dry, Solid Material Incineration(UOM=per 3.9 cu ft box. container-compacted; <50 lbs per container)	\$ 6.13	\$ 5.61
B	Animal Carcasses (UOM=per lb for incineration) 75 lb x 2	\$ 19.22	\$18.83
C	Category I (Deregulated/Exempt) – C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half life. (UOM= per 55-gallon container; 7.5 cu.ft. per container)	\$ 897.45	\$ 822.99
D	Category II (Regulated 30-9- Day) – C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <109 day half-life. (UOM=per 55-gallon container; 7.5 cu.ft. per container)	\$1,496.29	\$1,421.83
E	Category III (Regulated >109 Day) – C-14 and/or H-3 with specific activities >0.05 uCi/ml and isotopes with >109 day half-life. (UOM=per 55-gallon container; 7.5 cu.ft. per container)	\$ 3,620.60	\$3,546.14
F	Regulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack) Assumes 30 gallon shipped on spill pallet without 55 gallon overpack. H-3 or C-14 are less than 10.0 mCi each	\$ 3,734.58	\$3,607.08
G	Deregulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack) Assumes scintillation media only	\$ 1,004.55	\$ 822.99
H	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc.; UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers=222.5 cu.ft.)	\$ 1.49	\$ 0.88



VCU

Procurement Services

January 26, 2018

David Wellner
RSO, Inc.
5204 Minnick Rd.
Laurel, MD 20707

RE: Contract #: 6528137SW
Renewal No.: Two of Four available

Mr. Wellner,

Your firm's contract with Virginia Commonwealth University (VCU) for **Radioactive Waste Disposal Services** expired on **12/31/2017**. VCU intends to exercise the renewal of this contract in accordance with the terms of the contract.

Your signature constitutes your firm's acceptance of this renewal, to include the optional-use language requirement provision below.

OPTIONAL USE CONTRACT:

This contract is an optional use, requirements based contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources.

Pricing remains the same as the previous contract period.

—

Attached is the revised pricing in accordance with the contract terms

By signing and submitting this contract renewal letter Contractor certifies that it will maintain the insurance coverages required at the time the contract was awarded. At renewal, Contractor shall have a new Certificate of Insurance listing VCU as the "Additional Insured", citing the contractor's name and contract number, mailed to VCU Risk Management, P.O. Box 843040, Richmond, VA.

Please return this document to me as soon as possible. Your response may be emailed to me at kostyniukis@vcu.edu. If you have any questions, please contact me at (804) 828-5954.

Sincerely,
John Kostyniuk
Construction Procurement Manager

Procurement Services
912 W. Grace Street, 5th Floor
Richmond, VA 23284

804 828-1077
Fax: 804 828-7837
www.vcu.edu/procurement

Contract #: 6528137SW

RESPONSE:

RSO Inc.

Name of Firm



Signature

David E Wellner

Name Printed

Manager

Title

2/5/18

Date

RSO, Inc.
VCU Contract Pricing
Renewal No: 2 of 4
1/26/2018

Line Item	Waste Type	Unit Price (RSO Furnished Packaging)	Unit Price (VCU Furnished Packaging)
A	Dry, Solid Material (UOM=per 55-gal. container-compacted; 250 lbs per 55-gal. container)	\$ 6.50	\$ 6.27
	Dry, Solid Material Incineration(UOM=per 3.9 cu ft box. container-compacted; <50 lbs per container)	\$ 6.13	\$ 5.61
B	Animal Carcasses (UOM=per lb for incineration) 75 lb x 2	\$ 19.22	\$18.83
C	Category I (Deregulated/Exempt) – C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half life. (UOM= per 55-gallon container; 7.5 cu.ft. per container)	\$ 897.45	\$ 822.99
D	Category II (Regulated 30-9- Day) – C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <109 day half-life. (UOM=per 55-gallon container; 7.5 cu.ft. per container)	\$1,496.29	\$1,421.83
E	Category III (Regulated >109 Day) – C-14 and/or H-3 with specific activities >0.05 uCi/ml and isotopes with >109 day half-life. (UOM=per 55-gallon container; 7.5 cu.ft. per container)	\$ 3,620.60	\$3,546.14
F	Regulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack) Assumes 30 gallon shipped on spill pallet without 55 gallon overpack. H-3 or C-14 are less than 10.0 mCi each	\$ 3,734.58	\$3,607.08
G	Deregulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack) Assumes scintillation media only	\$ 1,004.55	\$ 822.99
H	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc.; UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers=222.5 cu.ft.)	\$ 1.49	\$ 0.88

**VCU**

Make it real.

1/18/17

David Wellner
RSO, Inc.
5204 Minnick Rd.
Laurel, MD 20707

RE: Contract #: 6528137SW
Renewal No.: 1 of 4 available

Procurement Services
University Purchasing

912 W Grace St.
P.O. Box 980327
Richmond, Virginia 23298-0327

804 828-1077
Fax: 804 828-7837
TDD: 1-800-828-1120
www.vcu.edu/procurement

Dear David:

Your firm's contract with Virginia Commonwealth University (VCU) for Radioactive Waste Disposal Services expired on 12/31/16. VCU intends to exercise the renewal of this contract in accordance with the terms of the contract.

Your signature constitutes your firm's acceptance of this renewal, to include the optional use language and the eVA registration requirement provisions below.

OPTIONAL USE CONTRACT:

This contract is an optional use, requirements based contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources. Any estimates/quantities identified on a purchase order issued against this contract do not represent a purchase commitment by VCU. Services shall be provided in accordance with the contract for the renewal period: 1/1/2017 through 12/31/2017.

Pricing remains the same as the previous contract period.

DW Attached is the revised pricing in accordance with the contract terms.

DW By signing and submitting this contract renewal letter Contractor certifies that it will maintain the insurance coverages required at the time the contract was awarded. At renewal, Contractor shall have a new Certificate of Insurance listing VCU as the "Additional Insured", citing the contractor's name and contract number, mailed to VCU Risk Management, P.O. Box 843040, Richmond, VA.

Please return this document to me as soon as possible. Your response may be emailed to me at jvvandyck@vcu.edu. If you have any questions, please contact me via email or at (804) 628-2878.

Sincerely,
Josh Van Dyck
Associate Director of Procurement

Contract #: 6528137SW

RESPONSE:

RSO Inc.

Name of Firm

David E Wellner

Signature

David E Wellner

Name Printed

Manager

Title

1/23/17

Date

RSO, Inc.
VCU Contract Pricing
Renewal No.: 1 of 4
01/23/2017

Line Item	Waste Type	(1) Unit Price (RSO furnished packaging)	(2) Unit Price (VCU furnished packaging)
a	Dry, Solid Material (UOM = per 55-gal. container - compacted; 250 lbs per 55-gal. container)	\$ 6.50	\$ 6.27
	Dry, Solid Material Incineration (UOM = per 3.9 cu ft box. container - compacted; <50 lbs per container)	\$ 6.13	\$ 5.61
b	Animal Carcasses (UOM = per lb for incineration) 75 lb x 2	\$ 19.22	\$ 18.83
c	Category I (Deregulated/Exempt) - C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half life. (UOM = per 55-gallon container; 7.5 cu.ft. per container)	\$ 897.45	\$ 822.99
d	Category II (Regulated 30-90 Day) - C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <109 day half-life. (UOM = per 55-gallon container; 7.5 cu.ft. per container)	\$ 1,496.29	\$ 1,421.83
e	Category III (Regulated >109 Day) - C-14 and/or H-3 with specific activities >0.05 uCi/ml and /or other isotopes with >109 day half-life. (UOM = per 55-gallon container; 7.5 cu.ft. per container)	\$ 3,620.60	\$ 3,546.14
f	Regulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack) Assumes 30 gallon shipped on spill pallet without 55 gallon overpack., H-3 or C-14 are less than 10.0 mCi each	\$ 3,734.58	\$ 3,607.08
g	Derugulated Bulk Liquid (UOM = per 30/55-gallon overpack; 7.5 cu. ft. per overpack) Assumes scintillation media only.	\$ 1,004.55	\$ 822.99
h	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc.; UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu. ft. x 25 containers = 222.5 cu.ft.)	\$ 1.49	\$ 0.88



COMMONWEALTH OF VIRGINIA STANDARD CONTRACT

Contract Number: 6528137SW

This contract entered into date by RSO, Inc., hereinafter called the "Contractor" and Commonwealth of Virginia, Virginia Commonwealth University, called the "Purchasing Agency".

WITNESSETH that the Contractor and the Purchasing Agency, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

PERIOD OF THE PERFORMANCE: From January 01, 2016 through December 31, 2016 with four (4) successive one (1) year renewal options.

SCOPE OF CONTRACT: The Contractor shall provide the goods/services to the Purchasing Agency as set forth in the Contract Documents.

The contract documents shall consist of:

- (1) This signed form;
- (2) The Request for Proposals # 6528137SW dated August 13, 2015 including Addendum One (1) dated August 14, 2015, Addendum Two (2) dated August 27, 2015, and Addendum Three (3) dated September 02, 2015;
- (3) The Contractor's Proposal dated September 04, 2015; and
- (4) The Negotiation Modifications to include RSO, Inc.'s response to the VCU Clarification Questions and Negotiation Points dated October 20, 2015, RSO's response to the Final Discussions/Negotiations dated November 06, 2015, and RSO's final pricing schedule dated December 1, 2015.

All of which documents are incorporated herein by reference.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

RSO, Inc.

By: *David E. Wellner* Name Printed: David E. Wellner

Date: 12/9/15 Title: Manager

PURCHASING AGENCY:

Virginia Commonwealth University

By: *Brenda Mowen* Name Printed: Brenda Mowen

Date: 12/9/15 Title: Director, VCU Procurement Services

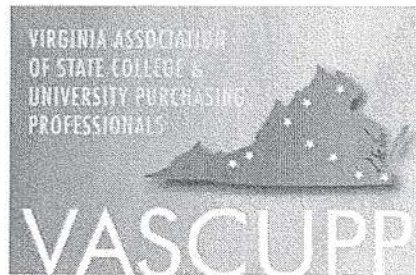


Request for Proposals

RFP No.: 6528137SW

RFP Title: Radioactive Waste Disposal Services

Date: August 13, 2015



College of William and Mary
George Mason University
James Madison University
Old Dominion University
Radford University
The University of Virginia
Virginia Commonwealth University
Virginia Military Institute
Virginia Tech

A VASCUPP Member Institution

REQUEST FOR PROPOSALS RFP# 6231585SW

Issue Date: August 13, 2015
Title: Radioactive Waste Disposal Services
Issuing and Using Agency: Virginia Commonwealth University
Attention: Sandra White
912 West Grace Street, 5th Floor
P.O. Box 980327
Richmond, Virginia 23298-0327

Period of Contract: One (1) year with four (4) successive one-year periods.

Proposals for furnishing the services described herein will be received until 11:00 a.m. EST on September 7, 2015.

All inquiries for information should be directed to: Issuing Agency, address listed above or to phone (804) 828-0663; email to sdwhite2@vcu.edu; fax (804) 828-9188; VOICE TDD (800) 828-1120.

This solicitation and any addenda are posted on the eVa website at: http://www.eva.virginia.gov.

HARD COPY, ORIGINAL PROPOSALS MUST BE RECEIVED IN VIRGINIA COMMONWEALTH UNIVERSITY'S OFFICE OF PROCUREMENT SERVICES ON OR BEFORE THE DATE AND TIME DESIGNATED ON THIS SOLICITATION. ELECTRONIC SUBMISSIONS AND FACSIMILE SUBMISSIONS WILL NOT BE ACCEPTED IN LIEU OF THE HARD COPY, ORIGINAL PROPOSAL. VENDORS ARE RESPONSIBLE FOR THE DELIVERY OF THEIR PROPOSAL. PROPOSALS RECEIVED AFTER THE OFFICIAL DATE AND TIME WILL BE REJECTED. THE OFFICIAL DATE AND TIME USED IN RECEIPT OF RESPONSES IS THAT TIME ON THE CLOCK OR AUTOMATIC TIME STAMP IN THE OFFICE OF PROCUREMENT SERVICES.
IF PROPOSALS ARE MAILED, SEND DIRECTLY TO VIRGINIA COMMONWEALTH UNIVERSITY, PROPOSAL PROCESS DEPARTMENT, P.O. Box 980327, RICHMOND, VA 23298-0327. IF PROPOSALS ARE HAND DELIVERED OR SENT BY COURIER, DELIVER TO: VIRGINIA COMMONWEALTH UNIVERSITY OFFICE OF PROCUREMENT SERVICES, 912 WEST GRACE STREET, 5th FLOOR, RICHMOND, VIRGINIA 23284. THE RFP NUMBER, DATE AND TIME OF PROPOSAL SUBMISSION DEADLINE, AS REFLECTED ABOVE, MUST CLEARLY APPEAR ON THE FACE OF THE RETURNED PROPOSAL PACKAGE.

In compliance with this request for proposals and to all conditions imposed therein and hereby incorporated by reference, the undersigned offers and agrees to furnish the services described herein in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation. Furthermore, the undersigned agrees not to start any work relative to this particular solicitation until a resulting formal signed Purchase Order is received by the Contractor from University Purchasing. Any work relative to this solicitation performed by the Contractor prior to receiving a formal signed Purchase Order shall be at the Contractor's own risk and shall not be subject to reimbursement by the University. Signature below constitutes acknowledgement of all information contained through links referenced herein.

NAME AND ADDRESS OF FIRM:

Form fields for firm information including Date, By (Signature In Ink), Name Typed, Title, E-Mail Address, Telephone, Toll free, DUNS NO., FEI/FIN NO., and Zip Code.

Minority-owned business, Women-owned, Registered with eVA, Small business, Virginia DBE certified, and Virginia DBE certification number fields.

A pre-proposal conference will be held. See Section V herein.

THIS SOLICITATION CONTAINS 28 PAGES

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Attachment 1 - Specification Data

Attachment 2 - Pricing Schedule

Attachment 3 - Sample Waste Inventory Report

Attachment 4 - Sample Mixed Waste Profile Form

Attachment 5 - Participation in State Procurement Transactions Small Business and Businesses Owned

Attachment 6 - Invoicing and Payment

I. PURPOSE

The purpose of this Request for Proposals (RFP) is to solicit sealed proposals from qualified firms to provide Radioactive Waste Disposal Services for Virginia Commonwealth University (VCU).

II. OPTIONAL USE CONTRACT

Any resulting contract(s) will be an optional use contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources.

III. THE UNIVERSITY

Located on two downtown campuses in Richmond, VCU enrolls more than 31,000 students in 216 certificate and degree programs in the arts, sciences and humanities. Sixty-nine of the programs are unique in Virginia, and 28 graduate and professional programs are ranked among the best in the nation in U.S. News & World Report's "America's Best Graduate Schools," including the No. 1 ranked sculpture and nurse anesthesia programs. As one of the nation's top research universities, VCU attracts more than \$255 million a year in sponsored research funding.

VCU Medical Center is one of the nation's leading and Central Virginia's only academic medical center. It includes the 865-bed MCV Hospitals and outpatient clinics, MCV Physicians - a practice of more than 600-physician-faculty, and the health sciences schools of VCU.

VCU is an urban leader, forging ties with business, industry and government in such innovative projects as the collocation of the schools of Business and Engineering, the da Vinci Center for Innovation in Product Design and Development and the Virginia BioTechnology Research Park.

The university and its medical center are the largest-single employer in the Richmond area, with more than 18,650 employees, including almost 2,000 full-time instructional faculty, and many of them nationally and internationally recognized in their fields. VCU's direct economic impact to Virginia is estimated to be \$3.6 billion in annual spending that supports 43,705 jobs.

VCU's 16 varsity sports compete at the NCAA Division I level as members of the Colonial Athletic Association. In recent years, VCU has participated in NCAA Tournaments in men's and women's basketball, baseball, golf, men's soccer and men's and women's tennis, including the VCU men's basketball's run to the Final Four.

IV. REPORTING AND DELIVERY REQUIREMENTS

It is the policy of the Commonwealth of Virginia that 42% of its purchases be made from small businesses to contribute to the establishment, preservation, and strengthening of small businesses, and businesses owned by women and minorities, and to encourage their participation in State procurement activities. The Commonwealth encourages Contractors to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts or other contractual opportunities.

Use of Subcontractors: If the Offeror intends to use subcontractors to perform any portion of the work described in this RFP, the Offeror must clearly state so. VCU is placing increased emphasis on its SWAM (Small, Women, and Minority Owned) business program and is interested in identifying any potential

opportunities that may be available to engage SWAM vendors to certified by the Virginia Department of Small Business and Supplier Diversity (DSBSD) through new or existing contracts. **Identify and list any such opportunities that your firm would commit to if awarded this contract in Attachment 1 Appendix 1- Participation in State Procurement Transactions Small Businesses and Businesses Owned by Women and Minority.** The Offeror's response must include a description of which portion(s) of the work will be sub-contracted out and the names and addresses of potential subcontractor under the Contract.

By submitting a proposal, Offerors certify that all information provided in response to the Request for Proposals is true and accurate. Failure to provide information required by this Request for Proposals will ultimately result in rejection of the Proposal.

**REPORT ON THE PARTICIPATION OF SMALL BUSINESSES AND BUSINESSES
OWNED
BY WOMEN AND MINORITIES**

Unless the contractor is a DSBSD certified small business, the contractor shall submit quarterly reports on the direct involvement of Department of Small Business and Supplier Diversity (DSBSD) certified SWaM Businesses in the performance of the contract. The report shall specify the actual dollars spent to date with Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses based upon the Contractor's commitment for utilization of DSBSD SWaM Businesses.

The Contractor shall provide this information to:

Virginia Commonwealth University
Department of Procurement Services
Attn: Tonia Darrisaw
912 W. Grace Street, POB 980327
Richmond, VA 23284
Email: tdarrisaw@vcu.edu

Failure to submit the required information will be considered a contract compliance issue and will be addressed accordingly. In addition, failure to submit the required information will result in invoices being returned without payment.

V. PRE-PROPOSAL CONFERENCE

An optional pre-proposal conference will be held at

**10:00 a.m.
August 26, 2015
912 West Grace Street, 5th Floor
Richmond, Virginia 23284**

The purpose of the conference is to allow Offerors an opportunity to ask questions and obtain clarification relative to any facet of this solicitation.

While attendance at this conference is optional, Offerors who intend to submit a proposal are highly encouraged to attend and to have a copy of the solicitation to reference. Any questions and answers that are presented during the conference or any changes to the solicitation resulting from this conference will be issued in a written addendum to the solicitation.

Firms may participate in the pre-proposal conference via conference call. Dial in information is below:

- “Dial-In” numbers:
 - 866-842-5779 (United States and Canada)
 - 832-445-3763 (International)
- Conference Code # 8291055716, Enter when prompted followed by the # sign.
- “Dial-In” at the scheduled date and time.

Firms who participated in the pre-proposal conference via conference call shall submit an email to sdwhite2@vcu.edu within three (3) business days of the pre-proposal conference, confirming their participation with contact information.

QUESTIONS:

Firms are encouraged to submit questions regarding the solicitation three days (3) in advance of the pre-proposal conference by email to: sdwhite2@vcu.edu.

The last day for questions shall be August 28, 2015.

VI. COOPERATIVE PROCUREMENT:

- A. It is the intent of this solicitation and resulting contract(s) to allow for cooperative procurement. Accordingly, any public body, public or private health or educational institution or lead-issuing institution's affiliated foundations may access any resulting contract(s) if authorized by the contractor.
- B. Participation in this cooperative procurement is strictly voluntary. If authorized by the Contractor(s), the resultant contract(s) may be extended to the entities indicated above to purchase at contract prices in accordance with contract terms.
- C. The Contractor shall notify the lead issuing institution in writing of any entities accessing the contract. No modification of this contract or execution of a separate contract is required to participate.
- D. The Contractor shall provide usage reports for all entities accessing the Contract upon request. Participating entities shall place their own orders directly with the Contractor(s) and shall fully and independently administer their use of the contract(s) to include contractual disputes, invoicing and payments without direct administration from the lead-issuing institution.
- E. The lead-issuing institution shall not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Contractor to extend the contract. It is understood and agreed that the lead issuing institution is not responsible for the acts or omissions of any entity, and will not be considered in default of the Agreement no matter the circumstances.
- F. The Use of this contract(s) does not preclude any participating entity from using other contracts or competitive processes.

VII. STATEMENT OF NEEDS:

- A. General Information: The Contractor will provide all necessary materials, tools, and supplies to provide radioactive waste disposal services to the Virginia Commonwealth University (VCU).
1. Specification Data: If the proposer meets the specification requirements as specified and defined in the Specification Data, the Offeror shall indicate "**Yes**" in the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
 2. If the proposer deviates from the specifications requirements as specified in the Specification Data in Attachment 1, the Offeror shall indicate "**No**" on the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
 3. The proposer shall note and explain as to how the Offeror deviates from the Specification Data, in a separate document to include in their proposal response to this Request for Proposal.
 4. Waste Material Information:
 - a. Contaminated Animal Carcasses:
 - (1) Frozen; and
 - (2) Packaged for shipment for eventual incineration in 3.9 cu. ft. wax bottom cardboard boxes.
 - b. Dry/Solid Waste:
 - (1) The dry/solid waste material inside the drums is compacted;
 - (2) The average drum weight is 250 lbs.
 - (3) Refer to "**ATTACHMENT 3**" (pages 1 through 4) for a "**Sample Waste Inventory Report.**"
 - c. Deregulated and Regulated Bulk Liquids/Vial Drums:
 - (1) Deregulated and regulated bulk liquids/vial drums are "Scintillation Waste(Fluids)", not "Mixed Waste".
 - (a) Scintillation waste is divided into two (2) categories for pricing (also refer to "**ATTACHMENT 2,**" the "**PRICE SCHEDULE**"):
 - (b) Regulated and deregulated.
 - (2) Scintillation media is divided into three (3) categories for disposal: (also refer to "**ATTACHMENT 2,**" the "**PRICE SCHEDULE**")
 - (a) Category I (Deregulated/Exempt)—C-14 and/or H-3 with specific activities <0.05 $\mu\text{Ci/ml}$ and isotopes with <30 day half-life;
 - (b) Category II (Regulated Isotopes with 30 - 109 day half-life; and
 - (c) Category III (Regulated >109 day half-life)— C-14 and/or H-3 with specific activities >0.05 $\mu\text{Ci/ml}$ and/or other isotopes with >109 day half-life.
 - (3) The deregulated bulk liquids/vial drums are shipped as:

- (a) Waste Flammable Liquid” and “Limited Quantity Radioactive Material” for exempt quantities of:
- (b) H-3; and
- (c) C-14 below 0.05 $\mu\text{Ci/g}$.

(4) The regulated bulk liquids/vial drums are shipped as:

Waste Flammable Liquid” and “Limited Quantity Radioactive Material”:
The “Limited Quantity Radioactive Material” could change to “Low Specific Activity” (“LSA”) depending on the isotopes disposed and their activity.

(5) The deregulated and regulated bulk liquids/vial drums are currently treated/processed at:

Perma-Fix Environmental Services
1940 N. W. 67” Place
Gainesville, FL 32653

Note: Refer to “**ATTACHMENT 3**” (pages 1 through 4) for a “**Sample Waste Inventory Report**” for past isotopes and concentrations that apply to regulated scintillation media.

- 5. Annual radioactive Waste Disposal Service Requirements: VCU typically requires radioactive waste disposal services two (2) to four (4) times per year.
- 6. Designated VCU Pick-Up Point(s): Currently, VCU has one (1) designated pick-up point, located at the Sanger Hall loading dock, 1101 East Marshall Street, Richmond, Virginia.

B. Definitions: For the purpose of this solicitation, the following definitions should apply:

1. Terms:

- a. VCUHS: Virginia Commonwealth University Health System.
- b. Possession” (by the Contractor): takes place once the Contractor has picked-up/taken the radioactive waste products from VCU.

2. Radioactive Waste Products:

a. To include:

- (1) Radioactive materials;
- (2) Low-level mixed waste that may be toxic in nature;
- (3) Mixed waste that may be toxic in nature; and

b. As being:

- (1) Described;
- (2) Identified;
- (3) Marked;
- (4) Labeled, in accordance with applicable federal, state and local regulations; and
- (5) Acceptable for receipt and disposal under licenses issued by the appropriate regulatory agency, to the transport contractor.

C. Radioactive Waste Types and the Corresponding Isotopes (As Applicable) Source Activity:

1. Dry, Solid Material, to include, but not limited to:

a. Waste Products:

Contaminated paper
Plastic
Glass
Latex gloves

b. Isotopes:

H-3
C-14
S-35
Ca-45
Mn-54
Fe-55
Zn-65
Cd-109 and
I-125

c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.

d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

2. Double-Walled Animal Carcasses:

a. Waste Products: Contaminated animal carcasses

b. Isotopes, to include, but not limited to:

H-3
C-14
Ca-45
Sc-46
Co-57
I-125

c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.

d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

3. Regulated Scintillation Vials:

- a. Waste Products: Scintillation vials containing scintillation cocktail fluid (i.e., a mixed waste due to its radioactive/chemical components).
- b. Isotopes, to include, but not limited to:
 - H-3
 - C-14
 - P-32;
 - S-35;
 - Ca-45;
 - Cr-51.
- c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
- d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

4. Deregulated Scintillation Vials:

- a. Waste Products: Scintillation vials containing scintillation cocktail fluid.
- b. Isotopes, to include, but not limited to: H-3 and C-14 with activity $<0.05 \mu\text{Ci/g}$.
- c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
- d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

5. Regulated Bulk Liquid:

- a. Waste Products: Organic solvents (i.e., a mixed waste due to its radioactive/chemical components).
- b. Isotopes, to include, but not limited to:
 - Activity of H-3 and C-14 $>0.05 \mu\text{Ci/g}$
 - P-32
 - S-35
 - Ca-45
 - Co-57
 - I-125

Note: Refer to "ATTACHMENT 4" for a "Sample Mixed Waste Profile Form."
("ATTACHMENT B" applies to "regulated"/"deregulated" bulk liquid and vial drums.)

6. Deregulated Bulk Liquid:
 - a. Waste Products: Organic solvents
 - b. Isotopes, to include, but not limited to: Activity of H-3 and C-14 $<0.05 \mu\text{Ci/g}$.
 - c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 4" for a "Sample Mixed Waste Profile Form."
("ATTACHMENT B" applies to "regulated"/"deregulated" bulk liquid and vial drums.)

7. Decayed Waste for Final Destruction:
 - a. Waste Products: Waste that has been held until it is no longer considered radioactive; which can be:

Dry, solid (e.g., paper, plastic, etc.); or
Liquid (aqueous) material
 - b. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - c. Activity: The activity is below regulatory concern.
8. Uranyl Acetate/Uranyl Nitrate and Uranium Chloride/Thorium Chloride for Solidification:
 - a. Source: Material used in research and diagnosis at VCU and VCUHS.
 - b. Activity: An estimate of the activity is based upon the gram quantity of the uranyl acetate/uranyl nitrate or uranium chloride/thorium chloride.
9. Sealed Sources:
 - a. Source:
 - (1) The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - (2) Internal Sources in liquid scintillation counters.
 - (3) VCU will, at its sole discretion, request disposal of properly removed internal sources or request removal of either the source or the entire counter by the Contractor.
 - b. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

VIII. PROPOSAL RESPONSE REQUIREMENTS AND SUBMISSION INSTRUCTIONS

A. General Instructions:

Proposal response must be written in the same order as outlined below. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities. Emphasis should be placed on completeness and clarity of content. Proposals which are substantially incomplete or lack key information may be rejected by VCU.

1. Return the RFP cover and sheet and all addenda acknowledgements, if any, signed and filled out as required.
2. Experience and Qualifications of the Firm:
 - a. Letter of Introductions: Provide a letter of introductions to include the official name and address of the firm submitting the proposal, the Request for Proposal name, number and issue date, and the name, address, and telephone number of person(s) who will be authorized to act on behalf of the Offeror and bind the Offeror to all commitments made in the proposal and negotiations.
 - b. Submit a narrative statement in your own words that describes the statement of needs requested in the RFP.
 - c. Describe your business structure to include the relationship between any parent company and subsidiaries, if applicable to your firm.
 - d. Identify the number of years your company has provided/performed the radioactive waste disposal services specified in this RFP for institutions of higher education.
 - e. Briefly identify the benefits to Virginia Commonwealth University (VCU) of using your firm's goods and services and why contracting with your firm would be the best decision for VCU.
 - f. Describe the experience and qualifications of the persons your firm will use in providing the goods and services. Identify whether the persons are employees of your firm or partners or subcontractors.
 - g. By my signature on this solicitation, I certify that my firm and any subcontractors are properly licensed for providing the goods/services specified. Attached to your proposal a correct and complete copy of licenses, operating permits or other authorization that allow your firm to provide Debt Collection Services.
3. Capability of the Firm:
 - a. Submit a copy of the current United States Nuclear Regulatory Commission ("NRC") license or Agreement State license for your company; and all proposed subcontractors.
 - b. Provide an overview of your firm's financial status that may include financial statements, bank references, Dun & Bradstreet or equivalent rating, and any other information that is relevant to your firm's financial stability and solvency.

- c. Describe your firm's availability to start work immediately upon award and to dedicate staff until completion of the project. Describe how your firm would handle the transition from the current contractor to your firm. Identify issues to be addressed and describe what steps your firm would take to minimize the impact on the agencies using the current contract.
 - d. Describe and identify the geographic location of your company's office that would service VCU (to include the geographic location of all proposed subcontractors).
 - e. Describe in detail and submit a photograph of your company's uniform.
 - f. Your company's quality control and customer satisfaction policies/procedures for providing/performing the radioactive waste disposal services specified in, and in response to, this RFP. Submit copies of all quality control and customer satisfaction polices/procedures.
 - g. Describe your company's personnel training and development program and specifically address CFR 49, Subpart H training.
 - h. Identify the type and quantity of the equipment/tools/materials/supplies, etc. that your company typically utilizes to provide/perform radioactive waste disposal services, to include, but not limited to:
 - Vehicles; and
 - "Green" certified packaging containers/materials/supplies and labels.
4. Proposed Fee: Identify all costs/fees associated with providing and performing the radioactive waste disposal services specified in, and in response to, this RFP, in accordance with **"Attachment 3 Pricing Schedule"**.
5. Plan and Methodologies:
- a. Describe in detail, the proposed approach (work plan, to include all associate activities and personnel) for performing and providing radioactive waste disposal services.
 - b. Describe in detail, the typical types of facilities for which your company provides/performs radioactive waste disposal services.
 - c. Identify the number of full-time personnel devoted to radioactive waste disposal typically employed by your company at one (1) time; specifically identify the number of:
 - Packaging/labeling employees;
 - Vehicle drivers;
 - Treatment/ disposal employees;
 - Supervisory personnel; and the number of
 - Non-supervisory personnel.

- d. Outline and explain your company's process for providing/performing the radioactive waste disposal services.
 - e. Identify and explain the standard disposal methods employed by your company for the radioactive waste products specified in this RFP, to include:
 - Your company's disposal (i.e. for final destruction) method(s) for decayed waste.
 - f. Identify and explain any alternative disposal methods (i.e. alternative to the "standard disposal methods") that your company can employ for the radioactive waste products specified in this RFP.
 - g. Identify and explain your company's disposal method(s) for "Sealed Sources."
 - h. Identify any service implementation milestones and the associated time schedule.
 - i. Identify any requirements of VCU, and identify:
 - The recommended methods to be employed; by VCU; and
 - The average time schedule associated with those requirements performed by your previous/current clients.
 - Identify and explain any important additional items that VCU may need to consider.
6. Comparable Services:
- a. Provide three (3) references for your firm preferably universities with volume and expenditure level similar to Virginia Commonwealth University (VCU). Each reference to include the name of the organization, a brief summary of the scope, complete mailing address, the name of the contact person with email address and telephone number.
 - b. Provide three (3) references from other organizations where your firm has provided the goods and services offered in your proposal, and the length of time your firm has been providing such goods and services.
 - c. Describe the success rate of your firm in radioactive waste disposal services and the length of time services were provided.
7. Small, Women-Owned and Minority-Owned Business Commitment:
Unless the firm is a DSBSD certified small business, it must submit and complete Appendix I which is available at:
- http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_1.pdf
- DSBSD certified small businesses must include their certification number on the coversheet of this RFP, but are not required to complete Appendix I.

8. Proposed Fee: See RFP Attachment 3- Pricing Schedule.
9. Exceptions/Alternatives: Provide a detailed list of any exceptions taken to the Statement of Needs and Terms and Conditions sections of this RFP. For each exception, specify the RFP page number, the exception, by reference or in full text described in the RFP. Submit as a separate document in your proposal.

B. Proposal Submission Instructions:

1. Complete and return cover page of the RFP. Proposals shall be signed by an authorized representative of the Contractor.
2. Complete and return signed addenda acknowledgments (if applicable).
3. Proposals should be organized in the order in which the requirements are presented in the RFP. It is helpful to cite the paragraph number, subletter, and repeat the text of the requirement as it appears in the RFP. The proposal should contain a table of contents which cross-references the RFP requirements. Information which the Offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.
4. Complete and return Attachment 1 -Appendix 1 if applicable, which is also available at:
http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_1.pdf
5. Complete and return Attachment 2 -Appendix II which is also available at:
http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_2.pdf
6. Submit one (1) original and three (3) copies of each proposal of the entire proposal, including all attachments and proprietary information.
7. The original proposal must be clearly marked on the outside of the proposal. Submit one (1) unsecured, electronic copies (on a disc or flash drive) of the entire proposal including all attachments and any PROPRIETARY INFORMATION.

This disc or flash drive must be clearly marked on the outside that it includes proprietary information.
8. Submit one (1) unsecured electronic copy (on a disc or flash drive) of the entire Proposal; excluding proprietary information.
9. If applicable, the outside of the proposal must be marked to denote proprietary information is contained in the documents. Written notice of proprietary information must be submitted as a separate document in the proposal submission. Notice must specifically identify the applicable portions of the Contractor's proposal that contains data or materials to be

protected and state the reasons why protection is necessary. In addition, the specific (i.e. specific words, figures or paragraphs) proprietary or trade secret material submitted must be identified. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable.

10. Communications regarding this Request for Proposals shall be formal from the date of issue for this RFP, until either a Contractor has been selected or University Purchasing rejects all proposals. Formal communications shall be directed to Sandra White, VCO. Informal communications, including but not limited to, request for information, comments or speculations, regarding this RFP to any University employee other than a Purchasing Department representative may result in the offending Contractor's proposal being rejected.
11. Additional information is available at:

http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Additional_Information.pdf

IX. ORAL PRESENTATION

- A. Offerors who submit a proposal in response to this RFP may be required to conduct an oral presentation of their proposal to VCU. This provides an opportunity for the Contractor to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. Oral presentations are an option and may or may not be conducted. Should an oral presentation be required, VCU will designate the date and location for the presentation; the date is critical and alternative dates will not be available.
- B. Offeror who are invited to conduct an oral presentation shall include the individual(s) who would be the primary point of contact for VCU on the Contractor's presentation team.

X. EVALUATION AND AWARD CRITERIA

- A. Proposals will be evaluated based upon the information provided in the Contractor's proposal using the following criteria: 1) Experience of the Firm, 2) Capabilities of Firm, 3) Comparable Services, 4) Small, Women-Owned and Minority-Owned Business Commitment, and 5) Price.
- B. Selection shall be made of two or more Contractors deemed to be fully qualified and best suited among those submitting proposals. Negotiations shall be conducted with Contractors so selected. After negotiations have been conducted with each Contractor so selected, the University shall select the Contractor which, in its opinion, has made the best offer, and shall award the contract to that Contractor. The University may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous. (Governing Rules Section 49.D) Should the University determine in writing and in its sole discretion that only one Contractor has made the best proposal, a contract may be negotiated and awarded to that Contractor. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation.
- C. Notice of Award(s) or Notice of Intent to Award may be accessed electronically at

<http://www.eva.virginia.gov>.

XI. GENERAL TERMS AND CONDITIONS

- A. PURCHASING MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and their Vendors and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available for review at the purchasing office. In addition, the manual may be accessed electronically at <http://procurement.vcu.edu/> or a copy can be obtained by calling University Purchasing at (804) 828-1077.
- B. APPLICABLE LAW AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with all applicable federal, state and local laws, rules and regulations.
- C. ANTI-DISCRIMINATION: By submitting their proposals, Offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and Section 2.2-4311 of the *Virginia Public Procurement Act*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia, § 2.2-4343.1*).

In every contract over \$10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the Contractor agrees as follows:
 - a) Virginia Commonwealth University is an equal opportunity/affirmative action institution providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability. As such, the Contractor will not discriminate against any employee or applicant for employment because of age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability or any other basis prohibited by state law related to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b) The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
 - c) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The Contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- D. ETHICS IN PUBLIC CONTRACTING: By submitting their proposals, Offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Offeror, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
- E. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By submitting their proposals, Offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986.
- F. DEBARMENT STATUS: By submitting their proposals, Offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- G. ANTITRUST: By entering into a contract, the Contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.
- H. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS: Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.
- I. CLARIFICATION OF TERMS: If any prospective Offeror has questions about the specifications or other solicitation documents, the prospective Offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.
- J. PAYMENT:
1. To Prime Contractor:
 - a) Invoices for items ordered, delivered and accepted shall be submitted by the Contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual Contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
 - b) Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

- c) All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the Contractor at the contract price, regardless of which public agency is being billed.
- d) The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- e) Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (Code of Virginia, § 2.2-4363).
- f) Professional Fees shall be paid in thirds, 1/3 paid on initiation of the search, 1/3 paid upon delivery of qualified slate of candidates, and the final 1/3 paid upon placement of the candidate.
- g) If a hired candidate leaves the University's employee due to no fault of VCU within the first year of employment, the Executive Search Firm shall re-perform all of the work necessary to place a 2nd qualified candidate, however, shall only be paid out of pocket expenses that are preapproved plus travel and "not" any labor or other fees or expenses.

2. To Subcontractors:

- a) Contractor awarded a contract under this solicitation is hereby obligated:
 - i. To pay the Subcontractor(s) within seven (7) days of the Contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the Subcontractor(s) under the contract; or
 - ii. To notify the agency and the Subcontractor(s), in writing, of the Contractor's intention to withhold payment and the reason.
- b) The Contractor is obligated to pay the Subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the Contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in 2. above. The date of mailing of any payment by U.S. Mail is deemed to be payment to the addressee. These provisions apply to each sub tier Contractor performing under the primary contract. A Contractor's obligation to pay an interest charge to a Subcontractor may not be construed to be an obligation of the Commonwealth.

K. PRECEDENCE OF TERMS: Paragraphs A-J of these General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions

and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

- L. QUALIFICATIONS OF OFFERORS: The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the Offeror to perform the services/furnish the goods and the Offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect Offeror's physical facilities prior to award to satisfy questions regarding the Offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Offeror fails to satisfy the Commonwealth that such Offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- M. TESTING AND INSPECTION: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.
- N. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the Contractor in whole or in part without the written consent of the Commonwealth.
- O. CHANGES TO THE CONTRACT: Changes can be made to the Contract in any one of the following ways:
1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
 2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the Contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The Contractor shall comply with the notice upon receipt. The Contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:
 - a) By mutual agreement between the parties in writing; or
 - b) By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the Contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the Contractor's records and/or to determine the correct number of units independently; or
 - c) By ordering the Contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The Contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the Contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or

decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and Their Vendors. Neither the existence of a claim or a dispute resolution process, litigation or any other provision of this contract shall excuse the Contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

- P. **DEFAULT:** In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.
- Q. **TAXES:** Sales to the Commonwealth of Virginia are normally exempt from State sales tax, State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against this contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.
- R. **USE OF BRAND NAMES:** Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict Offerors to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article, which the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Offeror is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Commonwealth to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Unless the Offeror clearly indicates in its proposal that the product offered is an "equal" product, such proposal will be considered to offer the brand name product referenced in the solicitation.
- S. **TRANSPORTATION AND PACKAGING:** By submitting their proposals, all Offerors certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.
- T. **INSURANCE:** By signing and submitting a proposal under this solicitation, the offeror certifies that if awarded the contract, it will have the following insurance coverages at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The offeror further certifies that the contractor and any subcontractors will maintain these insurance coverages during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

Minimum Insurance Coverages and Limits Required for Most Contracts:

1. Worker's Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.
 2. Employers Liability - \$100,000.
 3. Commercial General Liability - \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
 4. Automobile Liability - \$1,000,000 per occurrence. (Only used if motor vehicle is to be used in the contract.)
- U. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract as a result of this solicitation, Virginia Commonwealth University will publicly post such notice electronically at <http://www.eva.virginia.gov> for a minimum of 10 days.
- V. DRUG-FREE WORKPLACE: During the performance of this contract, the Contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violation of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.
- W. NONDISCRIMINATION OF CONTRACTORS: A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, or against faith-based organizations or any other basis prohibited by state law relating to discrimination in employment. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.
- X. eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION, CONTRACTS, AND ORDERS: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to

provide goods and/or services to the Commonwealth shall participate in the eVA Internet procurement solution by completing the free eVA Vendor Registration. All bidders or offerors must register in eVA and pay the Vendor Transaction Fees specified below; failure to register will result in the bid/proposal being rejected.

Vendor transaction fees are determined by the date the original purchase order is issued and are as follows:

1. For orders issued July 1, 2014 and after, the Vendor Transaction Fee is:
 - a) DSBSD-certified Small Businesses: 1%, capped at \$500 per order.
 - b) Businesses that are not DSBSD-certified Small Businesses: 1%, capped at \$1,500 per order.

2. For orders issued July 1, 2014 the vendor transaction fees can be found at www.eVA.virginia.gov

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

- Y. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA). The Selected Firm/Vendor acknowledges that for the purposes of this agreement it will be designated as a "school official" with "legitimate educational interests" in the University education records, as those terms have been defined under FERPA and its implementing regulations, and the Selected Firm/Vendor agrees to abide by the limitations and requirements imposed on school officials. Selected Firm/Vendor will use the education records only for the purpose of fulfilling its duties under this agreement for University's and its students' benefit, and will not share such data with or disclose it to any third party except as provided for in this agreement, required by law, or authorized in writing by the University.

XII. SPECIAL TERMS AND CONDITIONS

- A. GOVERNANCE: The terms and conditions of RFP #6253333SW govern the contract and not any Contractor terms and conditions or services agreement.

- B. ADVERTISING: In the event a contract is awarded for supplies, equipment, or services resulting from this proposal, no indication of such sales or services to Virginia Commonwealth University will be used in product literature or advertising. The Contractor shall not state in any of the advertising or product literature that the Commonwealth of Virginia or any agency or institution of the Commonwealth has purchased or uses its products or services.

- C. AUDIT: The Contractor shall retain all books, records, and other documents relative to this contract for five (5) years after final payment or until audited by the Commonwealth of Virginia, whichever is sooner. The agency, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.

- D. AUTHORIZED USERS: Virginia Commonwealth University is issuing this solicitation in cooperation with other agencies and institutions. Requirements of Executive Search Services have been

combined, and the total estimated usage is shown within this solicitation. Virginia Commonwealth University is responsible for administering the program; therefore, correspondence should be directed to Virginia Commonwealth University. The Contractor shall provide a volume purchase report prior to contract expiration or renewal action.

E. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the University shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

F. AWARD OF CONTRACT:

AWARD TO MULTIPLE CONTRACTORS: Selection shall be made of two or more Contractors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with Contractors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Contractor so selected, the agency shall select the Contractor which, in its opinion, has made the best proposal, and shall award the contract to that Contractor. The Commonwealth reserves the right to make multiple awards as a result of this solicitation. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous. (Governing Rules Section 49.D) Should the Commonwealth determine in writing and in its sole discretion that only one Contractor is fully qualified, or that one Contractor is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Contractor. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the Contractor's proposal as negotiated. Notice of Award(s) or Notice of Intent to Award may be accessed electronically at <http://www.eva.virginia.gov> for a minimum of 10 days.

G. BEST AND FINAL OFFER (BAFO): At the conclusion of negotiations, the Contractor(s) may be asked to submit in writing, a best and final offer (BAFO). After the BAFO is submitted, no further negotiations shall be conducted with the Contractor(s). The Contractor(s) proposal will be re-evaluated to combine and include the information contained in the BAFO. The decision to award will be based on the final evaluation including the BAFO.

H. PROPOSAL ACCEPTANCE PERIOD: Any proposal in response to this solicitation shall be valid for ninety (90) days. At the end of the ninety (90) days, the proposal may be withdrawn at the written request of the Contractor. If the proposal is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.

I. CANCELLATION OF CONTRACT: The University reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon sixty (60) days written notice to the Contractor. In the event the initial contract period is for more than twelve (12) months, the resulting contract may be terminated by either party, without penalty, after the initial twelve (12) months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.

- J. PROMPT PAYMENT DISCOUNTS: Virginia Commonwealth University will pay within 30 days after acceptance.
- K. DRUG FREE WORKPLACE: The Contractor acknowledges and certifies that it understands that the following acts by the Contractor, its employees and/or agents performing services on state property are prohibited:
1. The unlawful manufacture, distribution, dispensing, possession or use of alcohol or other drugs; and
 2. Any impairment or incapacitation from the use of alcohol or other drugs (except the use of drugs for legitimate medical purposes).
 3. The Contractor further acknowledges and certifies that it understands that a violation of these prohibitions constitutes a breach of contract and may result in default action being taken by the Commonwealth in addition to any criminal penalties that may result from such conduct.

- L. IDENTIFICATION OF PROPOSAL: The proposal package should be identified as follows:

From:

Name of Contractor

Due Date

Time

Street or Box Number

RFP No.

City, State, Zip Code +4

RFP Title

Name of Contract/Purchase Officer or Buyer:

The package should be addressed as directed on Page 2 of the solicitation.

If a proposal is not clearly identified, the Contractor takes the risk that the proposal may be inadvertently opened and the information compromised which may cause the proposal to be disqualified. Proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope.

- M. WARRANTY (COMMERICAL): The contractor agrees that the goods or services furnished under any award resulting from this solicitation shall be covered by the most favorable commercial warranties the contractor gives any customer for such goods or services and that the rights and remedies provided therein are in addition to and do not limit those available to the University by any other clause of this solicitation.
- N. LATE PROPOSALS: To be considered for selection, proposals must be received by the issuing office by the designated date and hour. The official time used in the receipt of proposals is that time on the automatic time stamp machine in the issuing office. Proposals received in the issuing office after the date and hour designated are automatically disqualified and will not be considered. The University is not responsible for delays in the delivery of mail by the U.S. Postal Service, private

couriers, or the intra-university mail system. It is the sole responsibility of the Contractor to insure that its proposal reaches the issuing office by the designated date and hour.

- O. INDEMNIFICATION: Contractor agrees to indemnify, defend and hold harmless the Commonwealth of Virginia, its officers, agents, and employees from any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the Contractor/any services of any kind or nature furnished by the Contractor, provided that such liability is not attributable to the sole negligence of the using agency or to failure of the using agency to use the materials, goods, or equipment in the manner already and permanently described by the Contractor on the materials, goods, or equipment delivered.
- P. NEGOTIATION WITH THE LOWEST CONTRACTOR: Not Applicable
- Q. ORDERING OPTION: Virginia Commonwealth University, may during the first 60 days after this contract is awarded, with the concurrence of the Contractor, place additional orders under the contract at the original unit price through the issuance of separate purchase orders. The aggregate of such additional orders shall not exceed 100% of the quantity originally stated in the contract.
- R. RENEWAL OF CONTRACT: The initial term of the contract shall be one (1) year. This contract may be renewed by the Commonwealth for four (4) successive one (1) year periods under the terms and conditions of the original contract.

Price increases may be negotiated only at the time of renewal. Written notice of the Commonwealth's intention to renew should be provided approximately sixty (60) days prior to the expiration date of each contract period: If the Commonwealth elects to exercise the option to renew the contract for an additional one (1) year period, the contract price(s) for the additional one (1) year shall not exceed the contract price(s) of the previous contract period increased/decreased by more than the percentage increase/decrease of the Service category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

- S. SUBCONTRACTS: No portion of the work shall be subcontracted without prior written consent of the University. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.
- T. ELECTRONIC DATA INTERCHANGE: University Purchasing has a great interest in utilizing Electronic Data Interchange (EDI) to improve efficiency of operation in the transmission of purchasing related information. Contractors are encouraged to provide a statement indicating their current EDI capabilities and/or future plans to establish/improve their EDI capabilities.
- U. POLICY OF EQUAL EMPLOYMENT: Virginia Commonwealth University is an equal opportunity/affirmative action employer. Women, Minorities, persons with disabilities are encouraged to apply. The University encourages all vendors to establish and maintain a policy to insure equal opportunity employment. To that end, Contractors should submit along with their proposals, their policy of equal employment.

- V. COMMUNICATIONS: Communications regarding this Request for Proposals shall be formal from the date of issue for this RFP, until either a Contractor has been selected or University Purchasing rejects all proposals. Formal communications shall be directed to University Purchasing. Informal communications includes; but not limited to, request for information, comments or speculations, regarding this RFP to any University employee other than a Purchasing Department representative may result in the offending Contractor's proposal being rejected.
- W. EVA BUSINESS-TO-GOVERNMENT CONTRACTS AND ORDERS: The solicitation/contract will result in purchase order(s) with the eVA transaction fee specified below assessed for each order.
1. For orders issued July 1, 2011 thru December 31, 2013, the Vendor Transaction Fee is:
 - a) DSBSD-certified Small Businesses: 0.75%, Capped at \$500 per order.
 - b) Businesses that are not DSBSD-certified Small Businesses: 1%, Capped at \$1,500 per order.

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

The eVA Internet electronic procurement solution, website portal www.eva.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following: If this solicitation is for a term contract, failure to provide an electronic catalog (price list) or index page catalog for items awarded will be just cause for the Commonwealth to reject your bid/offer or terminate this contract for default. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from www.eVA.virginia.gov. Contractors should email Catalog or Index Page information to eVA-catalog-manager@dgs.virginia.gov

- X. ELECTRONIC COPIES OF PROPOSALS: The successful Contractor may be required to provide the VCU Department of Procurement Services with a copy of the Contractor's entire original proposal (to include all attachments), and all subsequent correspondence (i.e., responses to requests for clarification and documents generated through the negotiation process) in an unsecured electronic format (i.e. email, disc - CD or DVD or flash drive). **VCU will post the Contractor's original proposal, and all subsequent correspondence on the VCU Office of Procurement Services Website, VCU shall not be responsible for the Contractor's failure to exclude proprietary information submitted in the unsecured electronic format).**
- Y. GRAMM-LEACH-BLILEY ACT: The Contractor shall comply with the Act by implementing and maintaining appropriate safeguards to protect and prevent unauthorized release of student, faculty and staff nonpublic information. Nonpublic information is defined as social security numbers, or financial transactions, bank, credit and tax information.

Z. QUANTITIES: Quantities set forth in this solicitation are estimates only, and the contractor shall supply at bid prices actual quantities as ordered, regardless of whether such total quantities are more or less than those shown

AA. REJECTION OF PROPOSALS & WAIVER OF MINOR INFORMALITIES/IRREGULARITIES:

VCU reserves the right to reject any or all Proposals in part or in total for any reason, to accept any Proposal if considered best for its interest, and to waive informalities and minor irregularities in Proposals received, commensurate with best public procurement practices.

BB. DETERMINATION OF RESPONSIBILITY:

The Contract will be awarded to the responsive and responsible Proposer whose Proposal, conforming to the solicitation, will be most advantageous to VCU, technical and financial factors considered. A responsible Proposer is one who affirmatively demonstrates to VCU that it has adequate financial resources and the requisite capacity, capability, and facilities to perform the Contract, has a satisfactory record of performance on other comparable projects, has a satisfactory record of integrity and business ethics, and is otherwise qualified and eligible to receive award under the solicitation and laws or regulations applicable to the procurement. VCU reserves the right to investigate the capabilities of Proposers, confirm any part of the information furnished by a Proposer, and require other evidence to determine that the Proposer is responsible.

CC. DEBARMENT STATUS:

By submitting their proposals, Proposers certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

DD. PROTEST:

Any Proposer who desires to protest the award or decision to award a contract shall submit the protest in writing to:

Director of Procurement Services
Virginia Commonwealth University
10 S. 6th Street, Suite 200
Richmond, VA 23219-3843

VCU will announce the award utilizing the Commonwealth of Virginia's e-Procurement system (eVA).

The protest must be received no later than ten (10) days after the award or the announcement of the decision to award, whichever occurs first.

However, if the protest of any actual or potential proposer depends in whole or in part upon information contained in public records pertaining to the procurement transaction that are subject to inspection under the Rules Governing Procurement of Goods, Services, Insurance, and Construction by a Public Institution of Higher Education of the Commonwealth of Virginia Governed by Subchapter 3 of the Restricted Higher Education Financial and Administrative Operations Act, Chapter 4.10 (§23-38.88 et seq) of Title 23 of the Code of Virginia, §34, then the time within which the protest shall be submitted shall expire ten (10) days after those records are available for inspection by such proposer under §34, or at such later time as provided in this section.

VCU Notices of Award(s) or Notices of Intent to Award may be accessed electronically at <http://www.eva.virginia.gov>.

No protest shall lie for a claim that the selected proposer is not a responsible proposer.

The written protest shall include the basis for the protest and relief sought.

The VCU Director of Procurement Services shall issue a decision in writing within ten (10) days of receipt stating the reasons for the action taken. This decision shall be final unless the proposer appeals within ten (10) days of receipt of the written decision by instituting legal action as provided in Section 54 of the Governing Rules.

Nothing in this paragraph shall be construed to permit an proposer to challenge the validity of the terms or conditions of the RFP.

"Days" as used in this paragraph refer to calendar days. If a deadline falls on a Saturday or Sunday, the next business day shall be considered to be the deadline.

ATTACHMENT C / PRICE SCHEDULE / RFP #: 000000CM
ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
(Page 1 of 4)

A. TOTAL FIXED PRICING:

Offerors shall submit pricing in the following format:

1. Standard Disposal Methods / Hypothetical Price Schedule:

a. Quantities:

- (1) The quantities identified in "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)" are estimates only (based upon historical annual requirements).
- (2) The Contractor should provide radioactive waste disposal services for the actual quantities ordered, at the contract price(s), regardless of whether such total quantities are more or less than those shown (also refer to **Section X**, the "SPECIAL TERMS AND CONDITIONS," subsection "Q").

b. Pricing:

- (1) Offerors shall identify / complete each "UNIT PRICE," "TOTAL EXTENDED PRICE" and the "TOTAL SUM" field / space in "ATTACHMENT 2," for subsection:
 - (a) "A.1.c.(1)(a)" through "A.1.c(1)(i)" / "VCU FURNISHED / LABELED" packaging containers / materials / supplies; and
 - (b) "A.1.c.(2)(a)" through "A.1.c.(2)(i)" / "CONTRACTOR FURNISHED / LABELED" packaging containers / materials / supplies.

Note: VCU reserves the right to award the contract based upon using VCU furnished (refer to "ATTACHMENT 2," the "PRICE SCHEDULE," subsection "A.1.c.(1)"; "VCU FURNISHED / LABELED"); or Contractor furnished (refer to "ATTACHMENT 2," subsection "A.1.c.(2)"; "CONTRACTOR FURNISHED / LABELED"), packaging containers / materials / supplies, whichever is determined to be in the best interest of VCU, as solely determined by VCU.

- (2) Each "UNIT PRICE," "TOTAL EXTENDED PRICE" and "TOTAL SUM" (refer to "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(i)" / "A.1.c.(2)(a)" through "A.1.c.(2)(i)") must be shown (to include decimal points); in case of arithmetic errors, the "UNIT PRICE" will govern.
- (3) Each "UNIT PRICE" (refer to "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)") shall reflect the **total fixed price per container / overpack**, for the disposal of the applicable radioactive waste products specified in, and in response to, this RFP, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

ATTACHMENT C / PRICE SCHEDULE / RFP #: 000000CM
ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
 (Page 2 of 4)

c. Price Schedule:

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR)- TOTAL FIXED PRICING				(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING			
		UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE	UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE
(a)	Dry, Solid Material / UOM = per (lb) / per container - compacted	\$ _____	X	250 lbs x 8 Containers	= \$ _____	\$ _____	X	250 lbs x 8 Containers	= \$ _____
(b)	Double-Walled Animal Carcasses / UOM = per (lb) / Per Container for incineration	\$ _____	X	75 lb x 2 Overpacks	= \$ _____	\$ _____	X	75 lb x 2 Overpacks	= \$ _____
(c)	Category I (Deregulated/Exempt) – C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half-life / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$ _____	X	8 Containers	= \$ _____	\$ _____	X	8 Containers	= \$ _____
(d)	Category II (Regulated Isotopes) 30 - 109 day half-life / UOM = per 55-gallon container; 7.5 cu. ft. per container:	\$ _____	X	4 Containers	= \$ _____	\$ _____	X	4 Containers	= \$ _____
(e)	Category III (Regulated >109 Day) – C-14 and/or H-3 with specific activities >0.05 uCi/ml and/or other isotopes with >109 day half-life. / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$ _____	X	2 Containers	= \$ _____	\$ _____	X	2 Containers	= \$ _____
(f)	Regulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$ _____	X	1 Overpack	= \$ _____	\$ _____	X	1 Overpack	= \$ _____

ATTACHMENT 2 / PRICE SCHEDULE
 RFP6528137SW Radioactive Waste Disposal Services
 (Page 3 of 4)

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR)- TOTAL FIXED PRICING				(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING			
		UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE	UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE
(g)	Derugulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$ _____	X	1 Overpack	= \$ _____	\$ _____	X	1 Overpack	= \$ _____
(h)	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc. / UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers = 222.5 cu.ft.:	\$ _____	X	25 Containers	= \$ _____	\$ _____	X	25 Containers	= \$ _____
(i)	TOTAL SUM (the "TOTAL EXTENDED PRICE" for "(a)" through the "TOTAL EXTENDED PRICE" for "(h)":				\$ _____				\$ _____

2. CI-36 – Activity Surcharge:

- a. Offerors shall submit a price schedule of all "UNIT PRICES" for all applicable surcharges for the disposal of CI-36. (i.e. any "CI-36 activity surcharge; also refer to Section VIII, the "PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS.
- b. Each "UNIT PRICE" shall reflect the total fixed price for the applicable surcharge, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
(Page 4 of 4)

3. **Alternative Methods of Disposal:**

- a. Offerors shall submit a price schedule of all **"UNIT PRICES"** (to include all surcharges) for all applicable alternative methods of disposal (e.g., incineration or thermal treatment of frozen animal carcasses / decayed solids; decay-in-storage, etc.); also refer to **Section VIII**, the **"PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS**, for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each **"UNIT PRICE"** shall reflect the **total fixed price** for the applicable alternative method of disposal, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

4. **Disposal of Sealed Sources:**

- a. Offerors shall submit a price schedule of all **"UNIT PRICES"** (to include all surcharges) for all applicable disposal methods of sealed sources for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each **"UNIT PRICE"** shall reflect the **total fixed price** for the applicable disposal method, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED:**
 - (1) The Contractor should, upon request by VCU, provide VCU with a **total fixed price**, on a case-by-case basis for the disposal of sealed sources; the total fixed price for sealed sources should be based upon (and should **not** exceed) the Contractor's current contract unit price schedule for the:
 - (a) "Standard Disposal Methods" identified in section **"ATTACHMENT 2-2,"** subsection **"1.A.(1)"** through **"1.A.(9)"** / **"1.B.(1) through 1.B.(9)"**;
 - (b) "Alternative Methods of Disposal" (refer to **"ATTACHMENT 2-1,"** subsection **"A.1.c.(2)"**), as applicable. or for the
 - (c) "Disposal of Sealed Sources" (refer to **"ATTACHMENT 2-1,"** subsection **"A.1.d.(2)."**

B. PERFORMANCE:

"Performance" shall be defined as the **FIRM** number of calendar days after receipt of order (ARO), that your company can begin providing / performing the Radioactive Waste Disposal Services specified in, and in response to, this RFP; this timeframe may be a factor in making the award:

_____ **Calendar Days ARO**

RADIOACTIVE WASTE PROFILE FORM

Generator: Virginia Commonwealth University	Phone: (804) 828-8134
Address: Office of Environmental Health & Safety P.O. Box 980112	Fax: (804) 628-1157
City: Richmond	
State: Virginia	
Zip: 23298	Waste Location: Sangar Hall Waste Processing Center
Contact Name: Beth Rosenberg	

Drum or Item No.	Waste Type	Container Size	Weight	Description	Isotope	Activity mCi
1	1	55-gal.	185	Paper, plastic and glass compacted lab trash	H-3	3.115
					C-14	0.108
					Zn-65	0.007
2	7-Scint. Vials CAT I Exempt	55-gal.	161	Plastic and glass scintillation vials	H-3	0.425
3	7-Scint. Vials CAT II	55-gal.	174	Plastic and glass scintillation vials	C-14	0.001
LSC1	3-Equipment	Beckman LS 8000	??	Liquid Scintillation Counter with internal source	S-35	0.148
LSC2	3-Equipment	Wallac Model 1214	??	Liquid Scintillation Counter with internal source	Cs-137	0.017
LSC3	3-Equipment	Packard Tri-Carb	??	Liquid Scintillation Counter with internal source	Ra-226	0.010
		55-gal		Empty drum 1	Ba-133	0.003
		55-gal		Empty drum 2		

Waste Types: 1-Solid Lab Waste, 2-Soil, 3-Equipment, 4-Aqueous Liquid, 5-U/Th Compounds, 6-Animals, 7-Other

Authorized Signature: <i>Beth Rosenberg</i>	Date: December 11, 2014
Title: Radiation Safety Specialist	

RADIOACTIVE WASTE PROFILE FORM

Generator: Virginia Commonwealth University Phone: (804) 828-9134
 Address: Office of Environmental Health & Safety
 P.O. Box 980112 Fax: (804) 828-1157
 City: Richmond
 State: Virginia
 Zip: 23298 Waste Location: Sanger Hall Waste Processing Center

Contact Name: Beth Rosenberg

Drum or Item No.	Waste Type	Container Size	Weight	Description	Isotope	Activity mCi
1	1	55-gal.	148	Paper, plastic and glass compacted lab trash	H-3	0.176
					C-14	0.042
2	1	55-gal.	186	Paper, plastic and glass compacted lab trash	H-3	1.977
					Y-88	0.001
					Y-91	0.002
3	1	55-gal.	165	Paper, plastic and glass compacted lab trash	H-3	0.520
					C-14	0.005
4	7-Scnt. Vials CAT I Exempt	55-gal.	205	Plastic and glass scintillation vials	H-3	1.155
					C-14	0.027
5	7-Scnt. Vials CAT I Exempt	55-gal.	198	Plastic and glass scintillation vials	H-3	0.190
6	7-Scnt. Vials CAT I Exempt	55-gal.	198	Plastic and glass scintillation vials	H-2	0.623
					C-14	0.048
7	7-Scnt. Vials CAT II	55-gal.	202	Plastic and glass scintillation vials	S-35	0.050

Waste Types: 1-Solid Lab Waste, 2-Soil, 3-Equipment, 4-Aqueous Liquid, 5-UVH Compounds, 6-Animals, 7-Other

Authorized Signature: *Beth Rosenberg*
 Title: Radiation Safety Specialist Date: April 9, 2013

RADIOACTIVE WASTE PROFILE FORM

Generator: Virginia Commonwealth University	Phone: (804) 828-9134	
Address: Office of Environmental Health & Safety P.O. Box 980112	Fax: (804) 828-1157	
City: Richmond		
State: Virginia		
Zip: 23298	Waste Location: Sanger Hall Waste Processing Center	
Contact Name: Beth Rosenberg		

Drum or Item No.	Waste Type	Container Size	Weight	Description	Isotope	Activity mCi
#1-2010	1	3.9 cu. Ft.	34.5	Paper, plastic and glass lab trash (decay in storage)	I-125	0.00002
#5-2012	1	3.9 cu. Ft.	33	Paper, plastic and glass lab trash (decay in storage)	I-125	0.00017
#6-2013	1	3.9 cu. Ft.	34	Paper, plastic and glass lab trash (decay in storage)	I-125	0.00530
#10-2012	1	3.9 cu. Ft.	33.5	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00003
#11-2012	1	3.9 cu. Ft.	32	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00002
#12-2012	1	3.9 cu. Ft.	32.5	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00008
#13-2012	1	3.9 cu. Ft.	34	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00080
#14-2012	1	3.9 cu. Ft.	49	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00082
#15-2013	1	3.9 cu. Ft.	28	Paper, plastic and glass lab trash (decay in storage)	P-32	0.05120
#16-2013	1	3.9 cu. Ft.	20	Paper, plastic and glass lab trash (decay in storage)	P-32	0.05190
#17-2012	1	3.9 cu. Ft.	35	Paper, plastic and glass lab trash (decay in storage)	P-32	0.00002

Waste Types: 1-Solid Lab Waste, 2-Soil, 3-Equipment, 4-Aqueous Liquid, 5-U/Th Compounds, 6-Animal, 7-Other

Authorized Signature: <i>Beth Rosenberg</i>	Date: April 8, 2013
Title: Radiation Safety Specialist	

ATTACHMENT 1
SPECIFICATION DATA
RADIOACTIVE WASTE DISPOSAL SERVICES
RFP No.: 6528137SW

Offeror Instructions: The following specifications are intended to define the minimum level of the scope of services for quality, performance, and suitability for the intended purpose of the Radioactive Waste Disposal Services, and are meant to be met or exceed.

1. If the proposer meets the specification requirements as specified and defined in the Specification Data, the Offeror shall indicate "**Yes**" in the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
2. If the proposer deviates from the specifications requirements as specified in the Specification Data below, the Offeror shall indicate "**No**" on the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
3. The proposer shall note and explain as to how the Offeror deviates from the Specification Data in a separate document to include in their proposal response to this Request for Proposal.

SPECIFICATIONS	DESCRIPTION	Proposal Comply with the Specifications?	
		YES	NO
REFERENCE		EXPLAIN	
A: General Requirements	<p>Provide all labor, supervision, equipment, tools, packaging containers, materials, supplies and incidentals, etc., necessary to:</p> <ol style="list-style-type: none"> 1. Package/Label; 2. Receive (i.e., handle/pick-up); 3. Transport; 4. Store; and 5. Treat/Dispose of the radioactive waste products as specified herein. 		
B: Contractor Administrator Requirements	<p>Immediately inform the VCU Contract Administrator or his/her designee, of any and all changes in the laws, rules, regulations, orders, ordinances, actions, and requests, issued by all applicable federal/state/local agencies and the waste processing facility, pertaining to:</p> <ol style="list-style-type: none"> 1. Packaging/Labeling; 2. Receiving (i.e., handling/pick-up); 3. Transportation; 4. Storage; and 5. Treatment/Disposal procedures for any radioactive waste products. 		
C: Packaging and Labeling	<p>Provide the VCU Contract Administrator or his/her designee, with all current packaging and labeling procedures for all waste types within five (5) business days after award of the contract:</p> <p>All packaging and labeling procedures, specified by the Contractor, should be in compliance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the packaging and labeling of the applicable type of low-level radioactive waste. In the event the Contractor wishes to change packaging or labeling procedures during the term of this contract, the Contractor</p>		

	<p>should:</p> <ol style="list-style-type: none"> 1. Submit written notice of the requested change to the VCU Contract Administrator or his/her designee, for approval, at least sixty (60) business days prior to the effective date of such requested change. 2. Receive (i.e., handle/pick-up) all containers packaged and labeled in accordance with the previous procedures, at no additional cost to VCU. 3. If requested by VCU, package the radioactive waste products/ label each packaging container in accordance with the designation specified in the applicable current packaging procedures, and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests pertaining to the packaging and labeling of low-level radioactive waste. 		
	<ol style="list-style-type: none"> 4. Packaging: The Contractor should, upon request by VCU, furnish all: <ol style="list-style-type: none"> a. Packaging containers: Packaging containers should include all materials required for the applicable type of radioactive waste product, to include, but not limited to (as applicable): <ul style="list-style-type: none"> ▪ Drums (e.g. 30 gallon/55 gallon), to include, but not limited to: Closure rings, bolts, and drum liners; ▪ Wax bottom cardboard boxes; and ▪ Overpacks. b. Required materials/supplies, for the applicable type of radioactive waste product/packaging method, to include, but not limited to (as applicable): <ul style="list-style-type: none"> ▪ Vermiculite or other accepted absorbent. <p>Note: VCU, in its sole discretion, reserves the right to utilize packaging containers/materials/supplies furnished by VCU; or to utilize packaging containers, materials, supplies furnished by the Contractor: Pricing should be in accordance with "ATTACHMENT 2," the "PRICE SCHEDULE.</p> 		

	<p>5. Labeling:</p> <p>a. Label all packaging containers, upon request by VCU, at no additional cost to VCU; or the Contractor, upon request by VCU, should furnish VCU with all labels for the packaging containers, at no additional cost to VCU.</p> <p>b. Each label utilized/furnished by the Contractor, should accurately identify the:</p> <ul style="list-style-type: none"> ▪ Contents of each container; and the ▪ Proper shipping name for the applicable material on the certification statement (49 CFR 172.101). <p>Note: VCU, in its sole discretion, reserves the right to label the packaging containers with the labels furnished by the Contractor; or to request the Contractor to label the packaging containers:</p>		
	<p>6. Containers- Material/Supplies and Labels:</p> <p>All packaging containers/materials/supplies and labels furnished by the Contractor should be in compliance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the packaging and labeling of the applicable type of low-level radioactive waste.</p>		
<p>D: Receiving (Handling and Pickup) Procedures</p>	<p>1. Handling and Pickup Procedures:</p> <p>a. At the time of pick-up, verify/ensure that all radioactive waste products are packaged and labeled in a method currently approved by the United States Department of Transportation (USDOT) and by all other applicable federal/state/local agencies, and by the waste processing facility, for the applicable type of low-level radioactive waste.</p> <p>b. Receive (i.e., handle/pick-up) all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the receipt (handling/pick-up) of low-level radioactive waste of all applicable federal/state/local agencies, waste processing</p>		

	<p>facilities; and the Southeast Waste Compact Commission (SWCC).</p> <p>2. Schedule:</p> <p>a. Pick-up the radioactive waste products Monday through Friday, during normal business hours, defined as 8:00AM to 4:30PM.</p> <p>b. Mutually establish a pick-up schedule with the VCU Contract Administrator, Beth Rosenberg (or her designee).</p> <p>3. Possession: Take possession of the radioactive waste products at the designated VCU pick-up point(s).</p> <p>4. Pick-Up Documentation:</p> <p>a. Be solely responsible for properly completing all related documentation prior to pick-up, including, but not limited to:</p>		
	<p>▪ Waste profiles;</p> <p>▪ NRC manifests;</p> <p>▪ EPA manifests; and</p> <p>▪ Land disposal forms, based upon the information provided by VCU.</p> <p>▪ Note: VCU, in its sole discretion, reserves the right to complete all related documentation.</p> <p>b. "Notice of Receipt": Provide the VCU Contract Administrator or his/her designee), with a "Notice of Receipt" for all radioactive waste picked-up from VCU, within twenty (20) calendar days of picking up the radioactive waste from VCU.</p>		
E: Transportation Requirements Procedures	<p>1. Transportation Requirements Procedures:</p> <p>a. Transport all radioactive waste products in accordance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agencies, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the transportation of the applicable type of low-level radioactive waste, to include, but not limited to the:</p>		

	<ul style="list-style-type: none"> ▪ Type of transportation vehicle utilized; ▪ Type of transportation method employed; ▪ Transportation route security plan requirements: <p>b. The Contractor should maintain a copy of the en route security plan in the vehicle and the Vehicle driver documentation requirements.</p> <p>c. The Contractor/ vehicle driver should maintain a copy of the:</p> <ul style="list-style-type: none"> ▪ Vehicle driver(s)' certification of DOT training; and a copy of the ▪ Driver(s)' commercial driver's license, in the vehicle. <p>2. Route: Follow the shortest and/or most expedient route to transport the radioactive waste products.</p>		
F. Storage Requirements	<p>Store all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the storage of low-level radioactive waste of:</p> <p>All applicable federal/state/local agencies, waste processing facilities; and the Southeast Waste Compact Commission (SWCC).</p>		
G. Facility Requirements	<p>Store the radioactive waste products in a facility that is currently approved by all applicable federal/ state/local agencies; and the Southeast Waste Compact Commission (SWCC).</p>		
H. Treatment and Disposal Requirements	<p>1. Treat/dispose all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the treatment/disposal of low-level radioactive waste of:</p> <ul style="list-style-type: none"> ▪ All applicable federal/state/local agencies, waste processing facilities; and the ▪ Southeast Waste Compact Commission (SWCC). <p>2. Treatment Requirements: Perform the solidification for Uranyl Acetate/Uranyl Nitrate and Uranium Chloride/Thorium Chloride radioactive waste products.</p>		

	<p>3. Facility Requirements:</p> <ul style="list-style-type: none"> a. Treat/dispose of the radioactive waste products at a waste processing facility that is currently approved/licensed (as applicable) by all applicable federal/state/local agencies to treat/dispose of the applicable radioactive waste products; and the Southeast Waste Compact Commission (SWCC). b. Notify the VCU Contract Administrator or his/her designee, at least sixty (60) business days prior to a change to a different waste processing facility. <p>4. Documentation:</p> <ul style="list-style-type: none"> a. Reports: Volume Reduction Methods: Submit a written report to the VCU Contract Administrator or his/her designee, within thirty (30) business days of disposal, that contains the following information for all radioactive waste products that are treated/disposed of by volume reduction methods (i.e., incineration or super compaction): quantity; activity; and the disposal date; b. "Certificate of Disposal"/"Certificate of Destruction": Provide the VCU Contract Administrator or his/her designee, with a "Certificate of Disposal" or "Certificate of Destruction," as applicable, within 180 business days of transporting the radioactive waste products from VCU: c. The "Certificate of Disposal" or "Certificate of Destruction" should specify the container identification numbers disposed, treatment/disposal method, and the date of destruction. 		
I. Contractor Requirements	Be licensed during the term of this contract, to perform all of the radioactive waste disposal services for all radioactive waste products that meet the applicable composition as specified herein by the United States Nuclear Regulatory Commission ("NRC"); or by an Agreement State.		
J. Contractor Personnel Requirements	1. All Contractor personnel performing services under this contract (e.g., vehicle drivers, etc.) should be knowledgeable of, qualified, capable and properly trained in all current, to include, but not limited to:		

	<ul style="list-style-type: none"> ▪ Packaging/Labeling; ▪ Receiving (i.e., handling/pick-up); ▪ Transportation; ▪ Storage; and ▪ Treatment/Disposal procedures. <p>2. Training Requirements:</p> <p>The Contractor should ensure that all Contractor personnel (e.g., vehicle drivers, etc.) are trained in accordance with the current requirements set forth in CFR 49, Subpart H.</p>		
	<p>3. Radiation Monitoring Requirements:</p> <p>The Contractor should ensure that all Contractor personnel (e.g., vehicle drivers, etc.) are monitored for radiation exposure in accordance with all current contractor policies/procedures; and all applicable federal/state/local agency and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests pertaining to low-level radioactive waste products.</p> <p>4. Assigned Employees:</p> <ul style="list-style-type: none"> a. VCU reserves the right to observe the Contractors' personnel at any time, while services are being provided/performed on-site at VCU: b. If, in the sole opinion of VCU, an employee of the Contractor is determined not to be qualified, competent, or acceptable for any other reason, the Contractor should not assign that individual for further service at VCU. <p>5. Account Manager:</p> <ul style="list-style-type: none"> a. Assign an "Account Manager" for the VCU account; the "Account Manager" should assist VCU with resolving problems (e.g., service issues, invoice, contract renewals, etc.): <ul style="list-style-type: none"> ▪ The "Account Manager" should be accessible via: <ul style="list-style-type: none"> ▪ Telephone: ▪ A toll-free telephone number, if the telephone number is not a local 		

	<p>telephone number; and</p> <ul style="list-style-type: none"> ▪ E-mail. <p>b. In the event there are any changes to the "Account Manager's" contact information, the Contractor should provide VCU with the updated information by the time the changes are effective.</p>		
<p>K. VCU Obligations</p>	<ol style="list-style-type: none"> 1. Labeling: In the event VCU elects to package/label the radioactive waste products, VCU will label (as applicable) the radioactive waste products in accordance with Contractor's packaging/labeling instructions. 2. Site Charges/Taxes: <ul style="list-style-type: none"> ▪ VCU will pay for exact increases only, for: <ul style="list-style-type: none"> ▪ Waste processing facility charges; ▪ Southeast Waste Compact Commission (SWCC) surcharges; and ▪ State/local taxes. 3. Note: The Contractor should submit evidence of direct cost increases (e.g., a letter from the disposal site, SWCC, and/or the applicable state/local agency) to the VCU Contract Administrator or his/her designee. 		

ATTACHMENT 4 — SAMPLE MIXED WASTE PROFILE FORM (Page 1 of 1)

WASTE PROFILE

Perma-Fix Nuclear Services • GSSI • M&EC • Former/Retired of Florida • Former/Fix Nonresident

Profile Number

Generator Information:

EPA ID#	WAD-88-175-8785
Generator Name	Virginia Commonwealth University
Generator Address	1101 East Marshall Street
City/State/Zip	Richmond, VA 23219
To contact	IMU4829_PFS1
Fax	

Billing Information:

Electronic users: check here to copy Generator info. to same.

Broker/Ship	RSC, Inc.
Address	5284 Mt. Kirk Road
City/State/Zip	Lewis, MO 20707
Telephone	(301) 963-2462
Fax	(301) 487-8382

Check all that apply

<input checked="" type="checkbox"/> Hazardous Waste - include LDR-UMC Constituent Form	<input type="checkbox"/> TSCA Regulated PCB	<input checked="" type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Non-Hazardous Waste
<input type="checkbox"/> Mercury >200 PPM	<input type="checkbox"/> PCB Bulk Products	<input type="checkbox"/> Universal Waste	<input type="checkbox"/> Used Oil Filter
<input type="checkbox"/> Elemental Mercury	<input type="checkbox"/> PCB Transformation Waste	<input type="checkbox"/> Used Oil	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Residues - specify: _____	<input type="checkbox"/> PCB Mixtures		

Please provide a detailed description of the process that generated this waste. Attach additional sheets if needed.

Note: for a line break, press shift-enter.

Description: RCW 60156

Characterization Method:
(check ONE only)

Laboratory Analysis
 MSDS
 Generator Knowledge

Physical Description:
(check all that apply)

Solid
 Liquid
 Sludge
 Debris
 Labelled (per inventory form)

Other: _____

Volume: <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid	Brms. Weight: <input type="checkbox"/> 191 lbs.	Container Type: <input type="checkbox"/> 55 gal Drum	Total Number of Containers: <input type="checkbox"/> 1
---	---	--	--

Dispacked: Yes No
 US DOT Hazardous Material: Yes No

DOT Hazard Class: _____ _____

People Shipping Name: **Waste, UN1993, Flammable liquid, n.o.s., 3, (Limited quantity radioactive material)**

- This waste stream is subject to the Land Disposal Restriction of 40 CFR 268.10. (if checked, complete a Land Disposal Restriction Notification Form)
- This waste stream contains Benzene. (if checked, complete the Benzene MESHAP Worksheet)
- This waste stream consists of off-spec uses oil.
- This is a CERCLA waste.

For Broker Use Only	
Identify the following: The package used to ship this material must meet the requirements of 40 CFR 173 Subpart B (HazMat). This material will be inspected for consistency with the approved profile at the time of transportation.	
Name: _____	Date: 12-17-14

CHEMICAL PROPERTIES AND COMPOSITION:

Percent Free Liquid: _____ % (None=0%, all=100%)	Percent Solids: _____ % (None=0%, all=100%)	Viscosity: _____ Centipoises
pH Actual: _____ OR Range: _____ to _____	Specific Gravity Actual: _____ OR Range: _____ to _____	

CERTIFICATION

I certify that all hazards, known or suspected, have been disclosed on this profile. Furthermore, I understand that a surcharge may be imposed for any materials which is rejected or requires additional handling due to the material being in a system with the profile, improper or damaged containers, or improper shipping documents.

1. Any samples submitted for characterization as defined in 40 CFR 261-Appendix I or is obtained using an equivalent method.
2. I had a Perma-Fix to obtain a sample from any waste shipment for purpose of verification.

Name: <u>Boeth K. Scarborough</u>	Title: <u>Lead Safety Specialist</u>	Date: <u>12-17-14</u>
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Perma-Fix Use Only

Accepted
 Accepted with the following conditions: _____

Rejected for the following reasons: _____

Designated Facility:

DSS1
 M&EC
 PF Florida
 PFNW

Perma-Fix has all of the necessary permits and licenses for the waste that has been characterized and identified by the approved profile and accepted by Perma-Fix.

Name: _____	Title: _____	Date: _____
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APPENDIX I

PARTICIPATION IN STATE PROCUREMENT TRANSACTIONS SMALL BUSINESSES AND BUSINESSES OWNED BY WOMEN AND MINORITIES

The following definitions will be used in completing the information contained in this Appendix.

Definitions

- **Small business** is an independently owned and operated business which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Nothing in this definition prevents a program, agency, institution or subdivision from complying with the qualification criteria of a specific state program or federal guideline to be in compliance with a federal grant or program.
- **Women-owned business** is a business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals.
- **Minority-owned business** is a business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals.
- **Minority Individual:** "Minority" means a person who is a citizen of the United States or a legal resident alien and who satisfies one or more of the following definitions:
 - "Asian Americans" means all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Marianas, the Philippines, U. S. territory of the Pacific, India, Pakistan, Bangladesh and Sri Lanka and who are regarded as such by the community of which these persons claim to be a part.
 - "African Americans" means all persons having origins in any of the original peoples of Africa and who are regarded as such by the community of which these persons claim to be a part.
 - "Hispanic Americans" means all persons having origins in any of the Spanish speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who are regarded as such by the community of which these persons claim to be a part.
 - "Native Americans" means all persons having origins in any of the original peoples of North America and who are regarded as such by the community of which these persons claim to be a part or who are recognized by a tribal organization.
 - "Eskimos and Aleuts" means all persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia and who are regarded as such in the community of which these persons claim to be a part.

PARTICIPATION BY SMALL BUSINESSES, BUSINESSES OWNED BY WOMEN
BUSINESSES OWNED BY MINORITIES

This appendix should only be completed by firms that are not Virginia Department of Minority Business Enterprise (DMBE) certified small businesses.

Offeror certifies that it will involve Small Businesses, Women-Owned Businesses, and/or Minority-Owned Businesses (SWaM) in the performance of this contract either as part of a joint venture, as a partnership, as Subcontractors or as suppliers.

List the names of the SWaM Businesses your firm intends to use and identify the direct role of these firms in the performance of the contract. State whether the firm is a Small Business (SB), Women-Owned (WO), or Minority-Owned (MO).

Name of Businesses:

SB, WO, MO:

Role in contract:

Commitment for utilization of DMBE SWaM Businesses:

_____ % of total contract amount that will be performed by DMBE certified SWaM businesses.

Identify the individual responsible for submitting SWaM reporting information to VCU:

Name Printed: _____
Email: _____
Phone: _____
Firm: _____

Offeror understands and acknowledge that the percentages stated above represent a contractual commitment by the Offeror. Failure to achieve the percentage commitment will be considered a breach of contract and may result in contract default.

Acknowledged:
By (Signature): _____
Name Printed: _____
Title: _____
Email: _____

Note: Small, Minority and/or Women-owned business sub-contractors are required to become certified and maintain certification through the Virginia Department of Minority Business Enterprise (DMBE; <http://www.dmb.e.virginia.gov/swamcert.html>) to fulfill the Offeror's commitment for utilization.

APPENDIX II INVOICING AND PAYMENT

Invoicing:

The Contractor shall submit a fully itemized invoice to Virginia Commonwealth University, Accounts Payable and Support Services, P. O. Box 980327, Richmond, VA 23298-0327, that, at minimum, includes the following information: the Virginia Commonwealth University purchase order number; a description of the goods or services provided; quantities; unit prices; extended prices; and total prices. Payment will be issued in accordance with the payment method selected below and with the Commonwealth of Virginia Prompt Payment Legislation.

Upon request by VCU, the Contractor shall submit invoices electronically using the Ariba Network or other e-commerce channel utilized by VCU; and agrees to comply, within reason, with any future e-commerce initiatives including, but not limited to: procurement, procurement content, sourcing or any other electronic procurement and sourcing solutions.

Questions regarding this method of invoicing should be sent to: ecommerce@vcu.edu.

Payment:

VCU Procurement Services is automating the payment process to the greatest extent possible. Contractors are encouraged to accept payment electronically through the commercial card program. Please review the payment methods described below and select one for your firm. By selecting the payment method below, Contractor acknowledges that the selected payment method is **not specific to the contract resulting from this solicitation and will apply to all payments made to the Contractor** by Virginia Commonwealth University. For example, if the Contractor has an existing contract(s) and is currently receiving payment by paper check, and the Contractor is now electing to receive payment by the commercial card, **all payments** will be made using the commercial card once the commercial card payment process is implemented for the firm.

Payment Methods

1. **Electronically through a Wells Fargo Visa commercial card:** Payment will be made ten days (10) after receipt of a proper invoice for the amount of payment due, or ten (10) days after receipt of the goods or services, whichever is later.

It is the Contractor's responsibility to contact its banking institutions to determine any credit limit that may restrict the payment of invoices. It is the Contractor's responsibility to have its credit limit raised as necessary to facilitate the timely payment of all invoices. Invoices exceeding the Contractor's credit limit will be returned unpaid.

Failure to accept the commercial card after award of contract will be considered a contract compliance issue and will be addressed accordingly. In addition, invoices will be returned without payment until the Contractor can accept the payment through the commercial card.

Questions regarding this method of payment should be sent to commcard@vcu.edu.

2. **ACH:** Electronic payment via automated clearing house (ACH) to the vendor provided bank account of record. Payment is processed thirty (30) days after receipt of a proper invoice for the amount of payment due, or thirty (30) days after receipt of the goods or services, whichever is later. Additional information about ACH payments is available at: <http://www.vcu.edu/treasury/VendorACH.htm>.

Contractor must indicate the method of payment selected:

_____ Commercial Card Payment (Wells Fargo VISA)

_____ Automated Clearing House (ACH)

Invoicing and Payment Method Acknowledgement:

Signature: _____
Name Printed: _____
Title: _____
Name of Firm: _____
Date: _____

Please identify the following contact information for the individual who will serve as the appropriate point of contact within your company to be contacted by VCU Accounts Payable to implement the electronic invoicing and payment processes:

Name of the individual: _____
Title: _____
Mailing address: _____

Email address: _____
Phone number: _____
Fax number: _____



August 14, 2015

ADDENDUM NO.: 1 TO ALL OFFERORS:

Reference – Request for Proposals:	RFP No.:6528137SW
Commodity Title:	Radioactive Waste Disposal Services
Issued Date:	August 14, 2015
Proposal Due Date:	September 7, 2015
Proposal Conference Date:	August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

Attachment 1 Specification Data is hereby revised as of August 14, 2015. This revision replaces and removes Attachment 1 Specification Data submitted on August 13, 2015. The new date of August 14, 2015 will appear on Attachment 1 Specification Data.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not constitute your signature on the original proposal document. The original proposal document must also be signed.

Kind Regards,

Sandra D. White, VCO
Purchasing Manager
Service Category

Name of Firm

Signature/Title

Date



August 27, 2015

ADDENDUM NO.: 2 TO ALL OFFERORS:

Reference – Request for Proposals: RFP No.:6528137SW
 Commodity Title: Radioactive Waste Disposal Services
 Issued Date: August 14, 2015
 Proposal Due Date: September 7, 2015 at 11:00 a.m.
 Proposal Conference Date: August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

1. Will the proposal due date be extended?

VCU Answer: Yes, the proposal due date is September 15, 2015 at 11:00 a.m.

2. What is the last day for questions?

VCU Answer: The last day for questions is August 31, 2015 at 12 noon.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not constitute your signature on the original proposal document. The original proposal document must also be signed.

Kind Regards,

Sandra D. White, VCO
Purchasing Manager
Service Category

Name of Firm

Signature/Title

Date



September 2, 2015

ADDENDUM NO.: 3 TO ALL OFFERORS:

Reference – Request for Proposals: RFP No.:6528137SW
Commodity Title: Radioactive Waste Disposal Services
Issued Date: August 14, 2015
Proposal Due Date: September 15, 2015 at 11:00 a.m.
Proposal Conference Date: August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

1. What is the RFP number?

VCU Answer: The RFP number is 6528137SW.

2. On p13. g: Should the question read "...copy of licenses, operating permits or other authorization that allow your firm to provide Radioactive Waste Disposal services." (Instead of Debt Collection Services)?

VCU Answer: Yes.

3. Can we please get a 1 week extension to 9/14/15?

VCU Answer: The proposal due date is extended until September 18, 2015 at 11:00 a.m.

3. What size animals?

VCU Answer: Most frequently mice and rats; however, we do have the possibility of sheep and non-human primates.

4. Do we have liquids in liquids drum and do we have vials with liquid in drums

VCU Answer: Yes

5. Can you provide us with Material Safety Data Sheet (MSDS)?

VCU Answer: VCU will provide chemical characterization for liquids per pickup.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not

constitute your signature on the original proposal document. The original proposal document should also be signed.

Kind Regards,



Sandra D. White, VCO
Purchasing Manager
Service Category

Name of Firm

Signature/Title

Date

COPY

RSO, Inc.

Laurel, MD

Proposal for:

Virginia Commonwealth University

RFP No.: 6528137SW

RFP Title: Radioactive Waste Services

September 2015



Radiation Service Organization

September 9, 2015

Ms. Sandra White
Virginia Commonwealth University
912 West Grace Street, 5th Floor
P.O. Box 980327
Richmond, VA 23298-0327

Re: Radioactive Waste Disposal Services Letter of Introduction RFP No. 6528137SW

Dear Ms. White:

Please accept this letter and the related attachments as RSO, Inc. (RSO) understanding of and quotation for radioactive waste disposal services for the Virginia Commonwealth University, RFP No. 6528137SW, Title: Radioactive Waste Disposal Services, Issue Date: August 13, 2015.

Proposal is being submitted by:

RSO, Inc.
5204 Minnick Road
Laurel, MD 20707
Authorized Representative: David E. Wellner
Telephone No.: 301-953-2482 x306

RSO has been providing radiation safety and radioactive materials related services to institutional, industrial, and medical users of radiation and radioactive material for over 40 years. RSO's professional staff offers many years of experience and range of expertise required in this constantly changing environment of regulations and safety requirements.

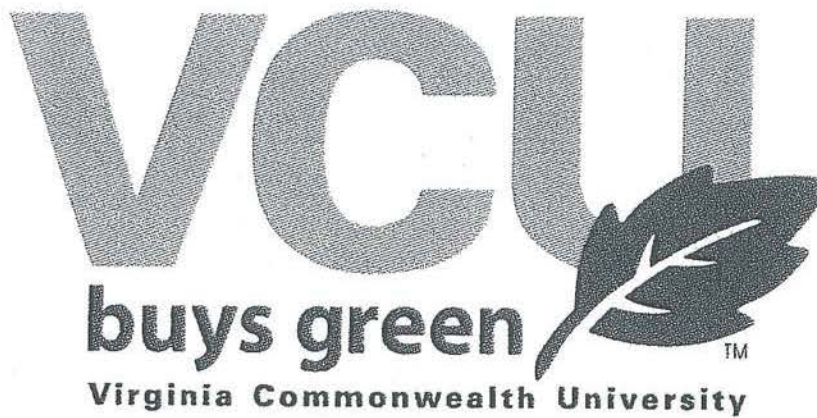
RSO accords the highest priority and commitment to contractual agreements of the type presented in this proposal. RSO believes it will bring to this contract a unique level of service and expertise for the variety of disciplines and services required.

RSO is available to discuss any aspect of this quotation. Please feel free to contact me if you have any questions or need additional information at (410) 792-7444 ext. 306.

Sincerely,

David E. Wellner
Manager, Radioactive Materials Services

1	VCU RFP 6528137SW
2	RSO, Inc. Proposal
3	Attachment A
4	Attachment B
5	Attachment C
6	Attachment D, E
7	Attachment F
8	Attachment G



Request for Proposals

RFP No.: 6528137SW

RFP Title: Radioactive Waste Disposal Services

Date: August 13, 2015



College of William and Mary
George Mason University
James Madison University
Old Dominion University
Radford University
The University of Virginia
Virginia Commonwealth University
Virginia Military Institute
Virginia Tech

A VASCUPP Member Institution

REQUEST FOR PROPOSALS RFP# 6231585SW

Issue Date: August 13, 2015
Title: Radioactive Waste Disposal Services
Issuing and Using Agency: Virginia Commonwealth University
Attention: Sandra White
912 West Grace Street, 5th Floor
P.O. Box 980327
Richmond, Virginia 23298-0327

Period of Contract: One (1) year with four (4) successive one-year periods.

Proposals for furnishing the services described herein will be received until 11:00 a.m. EST on September 7, 2015.

All inquiries for information should be directed to: Issuing Agency, address listed above or to phone (804) 828-0663; email to sdwhite2@vcu.edu; fax (804) 828-9188; VOICE TDD (800) 828-1120.

This solicitation and any addenda are posted on the eVa website at: http://www.eva.virginia.gov.

HARD COPY, ORIGINAL PROPOSALS MUST BE RECEIVED IN VIRGINIA COMMONWEALTH UNIVERSITY'S OFFICE OF PROCUREMENT SERVICES ON OR BEFORE THE DATE AND TIME DESIGNATED ON THIS SOLICITATION. ELECTRONIC SUBMISSIONS AND FACSIMILE SUBMISSIONS WILL NOT BE ACCEPTED IN LIEU OF THE HARD COPY, ORIGINAL PROPOSAL. VENDORS ARE RESPONSIBLE FOR THE DELIVERY OF THEIR PROPOSAL. PROPOSALS RECEIVED AFTER THE OFFICIAL DATE AND TIME WILL BE REJECTED. THE OFFICIAL DATE AND TIME USED IN RECEIPT OF RESPONSES IS THAT TIME ON THE CLOCK OR AUTOMATIC TIME STAMP IN THE OFFICE OF PROCUREMENT SERVICES.

IF PROPOSALS ARE MAILED, SEND DIRECTLY TO VIRGINIA COMMONWEALTH UNIVERSITY, PROPOSAL PROCESS DEPARTMENT, P.O. Box 980327, RICHMOND, VA 23298-0327. IF PROPOSALS ARE HAND DELIVERED OR SENT BY COURIER, DELIVER TO: VIRGINIA COMMONWEALTH UNIVERSITY OFFICE OF PROCUREMENT SERVICES, 912 WEST GRACE STREET, 5th FLOOR, RICHMOND, VIRGINIA 23284. THE RFP NUMBER, DATE AND TIME OF PROPOSAL SUBMISSION DEADLINE, AS REFLECTED ABOVE, MUST CLEARLY APPEAR ON THE FACE OF THE RETURNED PROPOSAL PACKAGE.

In compliance with this request for proposals and to all conditions imposed therein and hereby incorporated by reference, the undersigned offers and agrees to furnish the services described herein in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation. Furthermore, the undersigned agrees not to start any work relative to this particular solicitation until a resulting formal signed Purchase Order is received by the Contractor from University Purchasing. Any work relative to this solicitation performed by the Contractor prior to receiving a formal signed Purchase Order shall be at the Contractor's own risk and shall not be subject to reimbursement by the University. Signature below constitutes acknowledgement of all information contained through links referenced herein.

NAME AND ADDRESS OF FIRM:

RSO, Inc.
5204 Minnick Road
Laurel, MD Zip Code 20707

Date: 9/4/15
By (Signature In Ink): [Signature]
Name Typed: David E. Wellner

E-Mail Address: dwellner@rsoinc.com

Title: Manager, Radioactive Materials Services

Telephone: (301) 953-2482

Fax Number: (301) 497-6363

Toll free, if available

Toll free, if available

DUNS NO.: 06-927-9669

FEI/FIN NO.: 52-1238803

MINORITY-OWNED BUSINESS: () YES (X) NO WOMEN-OWNED: () YES (X) NO
REGISTERED WITH eVA: (X) YES () NO SMALL BUSINESS: (X) YES () NO
VIRGINIA DMBE CERTIFIED: (X) YES () NO VIRGINIA DMBE CERTIFICATION#: 649589

A pre-proposal conference will be held. See Section V herein.

THIS SOLICITATION CONTAINS 28 PAGES

TABLE OF CONTENTS**Page No.:**

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Attachment 1 - Specification Data

Attachment 2 - Pricing Schedule

Attachment 3 - Sample Waste Inventory Report

Attachment 4 - Sample Mixed Waste Profile Form

Attachment 5 - Participation in State Procurement Transactions Small Business and Businesses Owned

Attachment 6 - Invoicing and Payment

I. PURPOSE

The purpose of this Request for Proposals (RFP) is to solicit sealed proposals from qualified firms to provide Radioactive Waste Disposal Services for Virginia Commonwealth University (VCU).

II. OPTIONAL USE CONTRACT

Any resulting contract(s) will be an optional use contract. VCU is in no way required to make purchases from the Contractor and may, in its sole discretion, purchase the identical and/or similar goods/services from other sources.

III. THE UNIVERSITY

Located on two downtown campuses in Richmond, VCU enrolls more than 31,000 students in 216 certificate and degree programs in the arts, sciences and humanities. Sixty-nine of the programs are unique in Virginia, and 28 graduate and professional programs are ranked among the best in the nation in U.S. News & World Report's "America's Best Graduate Schools," including the No. 1 ranked sculpture and nurse anesthesia programs. As one of the nation's top research universities, VCU attracts more than \$255 million a year in sponsored research funding.

VCU Medical Center is one of the nation's leading and Central Virginia's only academic medical center. It includes the 865-bed MCV Hospitals and outpatient clinics, MCV Physicians - a practice of more than 600-physician-faculty, and the health sciences schools of VCU.

VCU is an urban leader, forging ties with business, industry and government in such innovative projects as the collocation of the schools of Business and Engineering, the da Vinci Center for Innovation in Product Design and Development and the Virginia BioTechnology Research Park.

The university and its medical center are the largest-single employer in the Richmond area, with more than 18,650 employees, including almost 2,000 full-time instructional faculty, and many of them nationally and internationally recognized in their fields. VCU's direct economic impact to Virginia is estimated to be \$3.6 billion in annual spending that supports 43,705 jobs.

VCU's 16 varsity sports compete at the NCAA Division I level as members of the Colonial Athletic Association. In recent years, VCU has participated in NCAA Tournaments in men's and women's basketball, baseball, golf, men's soccer and men's and women's tennis, including the VCU men's basketball's run to the Final Four.

IV. REPORTING AND DELIVERY REQUIREMENTS

It is the policy of the Commonwealth of Virginia that 42% of its purchases be made from small businesses to contribute to the establishment, preservation, and strengthening of small businesses, and businesses owned by women and minorities, and to encourage their participation in State procurement activities. The Commonwealth encourages Contractors to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts or other contractual opportunities.

Use of Subcontractors: If the Offeror intends to use subcontractors to perform any portion of the work described in this RFP, the Offeror must clearly state so. VCU is placing increased emphasis on its SWAM (Small, Women, and Minority Owned) business program and is interested in identifying any potential

opportunities that may be available to engage SWAM vendors to certified by the Virginia Department of Small Business and Supplier Diversity (DSBSD) through new or existing contracts. **Identify and list any such opportunities that your firm would commit to if awarded this contract in Attachment 1 Appendix 1- Participation in State Procurement Transactions Small Businesses and Businesses Owned by Women and Minority.** The Offeror's response must include a description of which portion(s) of the work will be sub-contracted out and the names and addresses of potential subcontractor under the Contract.

By submitting a proposal, Offerors certify that all information provided in response to the Request for Proposals is true and accurate. Failure to provide information required by this Request for Proposals will ultimately result in rejection of the Proposal.

**REPORT ON THE PARTICIPATION OF SMALL BUSINESSES AND BUSINESSES
OWNED
BY WOMEN AND MINORITIES**

Unless the contractor is a DSBSD certified small business, the contractor shall submit quarterly reports on the direct involvement of Department of Small Business and Supplier Diversity (DSBSD) certified SWaM Businesses in the performance of the contract. The report shall specify the actual dollars spent to date with Small Businesses, Women-Owned Businesses, and Minority-Owned Businesses based upon the Contractor's commitment for utilization of DSBSD SWaM Businesses.

The Contractor shall provide this information to:

Virginia Commonwealth University
Department of Procurement Services
Attn: Tonia Darrisaw
912 W. Grace Street, POB 980327
Richmond, VA 23284
Email: tdarrisaw@vcu.edu

Failure to submit the required information will be considered a contract compliance issue and will be addressed accordingly. In addition, failure to submit the required information will result in invoices being returned without payment.

V. PRE-PROPOSAL CONFERENCE

An optional pre-proposal conference will be held at

**10:00 a.m.
August 26, 2015
912 West Grace Street, 5th Floor
Richmond, Virginia 23284**

The purpose of the conference is to allow Offerors an opportunity to ask questions and obtain clarification relative to any facet of this solicitation.

While attendance at this conference is optional, Offerors who intend to submit a proposal are highly encouraged to attend and to have a copy of the solicitation to reference. Any questions and answers that are presented during the conference or any changes to the solicitation resulting from this conference will be issued in a written addendum to the solicitation.

Firms may participate in the pre-proposal conference via conference call. Dial in information is below:

- "Dial-In" numbers:
 - 866-842-5779 (United States and Canada)
 - 832-445-3763 (International)
- Conference Code # 8291055716, Enter when prompted followed by the # sign.
- "Dial-In" at the scheduled date and time.

Firms who participated in the pre-proposal conference via conference call shall submit an email to sdwhite2@vcu.edu within three (3) business days of the pre-proposal conference, confirming their participation with contact information.

QUESTIONS:

Firms are encouraged to submit questions regarding the solicitation three days (3) in advance of the pre-proposal conference by email to: sdwhite2@vcu.edu.

The last day for questions shall be August 28, 2015.

VI. COOPERATIVE PROCUREMENT:

- A. It is the intent of this solicitation and resulting contract(s) to allow for cooperative procurement. Accordingly, any public body, public or private health or educational institution or lead-issuing institution's affiliated foundations may access any resulting contract(s) if authorized by the contractor.
- B. Participation in this cooperative procurement is strictly voluntary. If authorized by the Contractor(s), the resultant contract(s) may be extended to the entities indicated above to purchase at contract prices in accordance with contract terms.
- C. The Contractor shall notify the lead issuing institution in writing of any entities accessing the contract. No modification of this contract or execution of a separate contract is required to participate.
- D. The Contractor shall provide usage reports for all entities accessing the Contract upon request. Participating entities shall place their own orders directly with the Contractor(s) and shall fully and independently administer their use of the contract(s) to include contractual disputes, invoicing and payments without direct administration from the lead-issuing institution.
- E. The lead-issuing institution shall not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Contractor to extend the contract. It is understood and agreed that the lead issuing institution is not responsible for the acts or omissions of any entity, and will not be considered in default of the Agreement no matter the circumstances.
- F. The Use of this contract(s) does not preclude any participating entity from using other contracts or competitive processes.

VII. STATEMENT OF NEEDS:

- A. General Information: The Contractor will provide all necessary materials, tools, and supplies to provide radioactive waste disposal services to the Virginia Commonwealth University (VCU).
1. Specification Data: If the proposer meets the specification requirements as specified and defined in the Specification Data, the Offeror shall indicate "**Yes**" in the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
 2. If the proposer deviates from the specifications requirements as specified in the Specification Data in Attachment 1, the Offeror shall indicate "**No**" on the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
 3. The proposer shall note and explain as to how the Offeror deviates from the Specification Data, in a separate document to include in their proposal response to this Request for Proposal.
 4. Waste Material Information:
 - a. Contaminated Animal Carcasses:
 - (1) Frozen; and
 - (2) Packaged for shipment for eventual incineration in 3.9 cu. ft. wax bottom cardboard boxes.
 - b. Dry/Solid Waste:
 - (1) The dry/solid waste material inside the drums is compacted;
 - (2) The average drum weight is 250 lbs.
 - (3) Refer to "**ATTACHMENT 3**" (pages 1 through 4) for a "**Sample Waste Inventory Report.**"
 - c. Deregulated and Regulated Bulk Liquids/Vial Drums:
 - (1) Deregulated and regulated bulk liquids/vial drums are "Scintillation Waste(Fluids)", not "Mixed Waste".
 - (a) Scintillation waste is divided into two (2) categories for pricing (also refer to "**ATTACHMENT 2,**" the "**PRICE SCHEDULE**"):
 - (b) Regulated and deregulated.
 - (2) Scintillation media is divided into three (3) categories for disposal: (also refer to "**ATTACHMENT 2,**" the "**PRICE SCHEDULE**")
 - (a) Category I (Deregulated/Exempt)—C-14 and/or H-3 with specific activities <0.05 $\mu\text{Ci/ml}$ and isotopes with <30 day half-life;
 - (b) Category II (Regulated Isotopes with 30 - 109 day half-life; and
 - (c) Category III (Regulated >109 day half-life)— C-14 and/or H-3 with specific activities >0.05 $\mu\text{Ci/ml}$ and/or other isotopes with >109 day half-life.
 - (3) The deregulated bulk liquids/vial drums are shipped as:

- (a) Waste Flammable Liquid" and "Limited Quantity Radioactive Material" for exempt quantities of:
- (b) H-3; and
- (c) C-14 below 0.05 $\mu\text{Ci/g}$.

- (4) The regulated bulk liquids/vial drums are shipped as:

Waste Flammable Liquid" and "Limited Quantity Radioactive Material":
The "Limited Quantity Radioactive Material" could change to "Low Specific Activity" ("LSA") depending on the isotopes disposed and their activity.

- (5) The deregulated and regulated bulk liquids/vial drums are currently treated/processed at:

Perma-Fix Environmental Services
1940 N. W. 67th Place
Gainesville, FL 32653

Note: Refer to "**ATTACHMENT 3**" (pages 1 through 4) for a "**Sample Waste Inventory Report**" for past isotopes and concentrations that apply to regulated scintillation media.

- 5. Annual radioactive Waste Disposal Service Requirements: VCU typically requires radioactive waste disposal services two (2) to four (4) times per year.
- 6. Designated VCU Pick-Up Point(s): Currently, VCU has one (1) designated pick-up point, located at the Sanger Hall loading dock, 1101 East Marshall Street, Richmond, Virginia.

B. Definitions: For the purpose of this solicitation, the following definitions should apply:

1. Terms:

- a. VCUHS: Virginia Commonwealth University Health System.
- b. Possession" (by the Contractor): takes place once the Contractor has picked-up/taken the radioactive waste products from VCU.

2. Radioactive Waste Products:

- a. To include:
 - (1) Radioactive materials;
 - (2) Low-level mixed waste that may be toxic in nature;
 - (3) Mixed waste that may be toxic in nature; and
- b. As being:
 - (1) Described;
 - (2) Identified;
 - (3) Marked;
 - (4) Labeled, in accordance with applicable federal, state and local regulations; and
 - (5) Acceptable for receipt and disposal under licenses issued by the appropriate regulatory agency, to the transport contractor.

C. Radioactive Waste Types and the Corresponding Isotopes (As Applicable) Source Activity:

1. Dry, Solid Material, to include, but not limited to:

a. Waste Products:

Contaminated paper
Plastic
Glass
Latex gloves

b. Isotopes:

H-3
C-14
S-35
Ca-45
Mn-54
Fe-55
Zn-65
Cd-109 and
I-125

c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.

d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

2. Double-Walled Animal Carcasses:

a. Waste Products: Contaminated animal carcasses

b. Isotopes, to include, but not limited to:

H-3
C-14
Ca-45
Sc-46
Co-57
I-125

c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.

d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

3. Regulated Scintillation Vials:

- a. Waste Products: Scintillation vials containing scintillation cocktail fluid (i.e., a mixed waste due to its radioactive/chemical components).
- b. Isotopes, to include, but not limited to:
 - H-3
 - C-14
 - P-32;
 - S-35;
 - Ca-45;
 - Cr-51.
- c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
- d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 3" (pages 1 through 4) for a "Sample Waste Inventory Report."

4. Deregulated Scintillation Vials:

- a. Waste Products: Scintillation vials containing scintillation cocktail fluid.
- b. Isotopes, to include, but not limited to: H-3 and C-14 with activity $<0.05 \mu\text{Ci/g}$.
- c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
- d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

5. Regulated Bulk Liquid:

- a. Waste Products: Organic solvents (i.e., a mixed waste due to its radioactive/chemical components).
- b. Isotopes, to include, but not limited to:
 - Activity of H-3 and C-14 $>0.05 \mu\text{Ci/g}$
 - P-32
 - S-35
 - Ca-45
 - Co-57
 - I-125

Note: Refer to "ATTACHMENT 4" for a "Sample Mixed Waste Profile Form."
("ATTACHMENT B" applies to "regulated"/"deregulated" bulk liquid and vial drums.)

6. Deregulated Bulk Liquid:
 - a. Waste Products: Organic solvents
 - b. Isotopes, to include, but not limited to: Activity of H-3 and C-14 $<0.05 \mu\text{Ci/g}$.
 - c. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - d. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

Note: Refer to "ATTACHMENT 4" for a "Sample Mixed Waste Profile Form."
("ATTACHMENT B" applies to "regulated"/"deregulated" bulk liquid and vial drums.)

7. Decayed Waste for Final Destruction:
 - a. Waste Products: Waste that has been held until it is no longer considered radioactive; which can be:

Dry, solid (e.g., paper, plastic, etc.); or
Liquid (aqueous) material
 - b. Source: The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - c. Activity: The activity is below regulatory concern.
8. Uranyl Acetate/Uranyl Nitrate and Uranium Chloride/Thorium Chloride for Solidification:
 - a. Source: Material used in research and diagnosis at VCU and VCUHS.
 - b. Activity: An estimate of the activity is based upon the gram quantity of the uranyl acetate/uranyl nitrate or uranium chloride/thorium chloride.
9. Sealed Sources:
 - a. Source:
 - (1) The radioisotopes used in research and diagnosis at VCU and VCUHS.
 - (2) Internal Sources in liquid scintillation counters.
 - (3) VCU will, at its sole discretion, request disposal of properly removed internal sources or request removal of either the source or the entire counter by the Contractor.
 - b. Activity: VCU will provide the Contractor with information pertaining to the activity, prior to the shipment date, in a time frame mutually agreed upon by the Contractor and VCU.

VIII. PROPOSAL RESPONSE REQUIREMENTS AND SUBMISSION INSTRUCTIONS

A. General Instructions:

Proposal response must be written in the same order as outlined below. Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities. Emphasis should be placed on completeness and clarity of content. Proposals which are substantially incomplete or lack key information may be rejected by VCU.

1. Return the RFP cover and sheet and all addenda acknowledgements, if any, signed and filled out as required.
2. Experience and Qualifications of the Firm:
 - a. Letter of Introductions: Provide a letter of introductions to include the official name and address of the firm submitting the proposal, the Request for Proposal name, number and issue date, and the name, address, and telephone number of person(s) who will be authorized to act on behalf of the Offeror and bind the Offeror to all commitments made in the proposal and negotiations.
 - b. Submit a narrative statement in your own words that describes the statement of needs requested in the RFP.
 - c. Describe your business structure to include the relationship between any parent company and subsidiaries, if applicable to your firm.
 - d. Identify the number of years your company has provided/performed the radioactive waste disposal services specified in this RFP for institutions of higher education.
 - e. Briefly identify the benefits to Virginia Commonwealth University (VCU) of using your firm's goods and services and why contracting with your firm would be the best decision for VCU.
 - f. Describe the experience and qualifications of the persons your firm will use in providing the goods and services. Identify whether the persons are employees of your firm or partners or subcontractors.
 - g. By my signature on this solicitation, I certify that my firm and any subcontractors are properly licensed for providing the goods/services specified. Attached to your proposal a correct and complete copy of licenses, operating permits or other authorization that allow your firm to provide Debt Collection Services.
3. Capability of the Firm:
 - a. Submit a copy of the current United States Nuclear Regulatory Commission ("NRC") license or Agreement State license for your company; and all proposed subcontractors.
 - b. Provide an overview of your firm's financial status that may include financial statements, bank references, Dun & Bradstreet or equivalent rating, and any other information that is relevant to your firm's financial stability and solvency.

- c. Describe your firm's availability to start work immediately upon award and to dedicate staff until completion of the project. Describe how your firm would handle the transition from the current contractor to your firm. Identify issues to be addressed and describe what steps your firm would take to minimize the impact on the agencies using the current contract.
 - d. Describe and identify the geographic location of your company's office that would service VCU (to include the geographic location of all proposed subcontractors).
 - e. Describe in detail and submit a photograph of your company's uniform.
 - f. Your company's quality control and customer satisfaction policies/procedures for providing/performing the radioactive waste disposal services specified in, and in response to, this RFP. Submit copies of all quality control and customer satisfaction policies/procedures.
 - g. Describe your company's personnel training and development program and specifically address CFR 49, Subpart H training.
 - h. Identify the type and quantity of the equipment/tools/ materials/ supplies, etc. that your company typically utilizes to provide/perform radioactive waste disposal services, to include, but not limited to:
 - Vehicles; and
 - "Green" certified packaging containers/materials/supplies and labels.
4. Proposed Fee: Identify all costs/fees associated with providing and performing the radioactive waste disposal services specified in, and in response to, this RFP, in accordance with **"Attachment 3 Pricing Schedule.**
5. Plan and Methodologies:
- a. Describe in detail, the proposed approach (work plan, to include all associate activities and personnel) for performing and providing radioactive waste disposal services.
 - b. Describe in detail, the typical types of facilities for which your company provides/performs radioactive waste disposal services.
 - c. Identify the number of full-time personnel devoted to radioactive waste disposal typically employed by your company at one (1) time; specifically identify the number of:
 - Packaging/labeling employees;
 - Vehicle drivers;
 - Treatment/ disposal employees;
 - Supervisory personnel; and the number of
 - Non-supervisory personnel.

- d. Outline and explain your company's process for providing/performing the radioactive waste disposal services.
 - e. Identify and explain the standard disposal methods employed by your company for the radioactive waste products specified in this RFP, to include:
 - Your company's disposal (i.e. for final destruction) method(s) for decayed waste.
 - f. Identify and explain any alternative disposal methods (i.e. alternative to the "standard disposal methods") that your company can employ for the radioactive waste products specified in this RFP.
 - g. Identify and explain your company's disposal method(s) for "Sealed Sources."
 - h. Identify any service implementation milestones and the associated time schedule.
 - i. Identify any requirements of VCU, and identify:
 - The recommended methods to be employed; by VCU; and
 - The average time schedule associated with those requirements performed by your previous/current clients.
 - Identify and explain any important additional items that VCU may need to consider.
6. Comparable Services:
- a. Provide three (3) references for your firm preferably universities with volume and expenditure level similar to Virginia Commonwealth University (VCU). Each reference to include the name of the organization, a brief summary of the scope, complete mailing address, the name of the contact person with email address and telephone number.
 - b. Provide three (3) references from other organizations where your firm has provided the goods and services offered in your proposal, and the length of time your firm has been providing such goods and services.
 - c. Describe the success rate of your firm in radioactive waste disposal services and the length of time services were provided.
7. Small, Women-Owned and Minority-Owned Business Commitment:
Unless the firm is a DSBSD certified small business, it must submit and complete Appendix I which is available at:
- http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_1.pdf
- DSBSD certified small businesses must include their certification number on the coversheet of this RFP, but are not required to complete Appendix I.

8. Proposed Fee: See RFP Attachment 3- Pricing Schedule.
9. Exceptions/Alternatives: Provide a detailed list of any exceptions taken to the Statement of Needs and Terms and Conditions sections of this RFP. For each exception, specify the RFP page number, the exception, by reference or in full text described in the RFP. Submit as a separate document in your proposal.

B. Proposal Submission Instructions:

1. Complete and return cover page of the RFP. Proposals shall be signed by an authorized representative of the Contractor.
2. Complete and return signed addenda acknowledgments (if applicable).
3. Proposals should be organized in the order in which the requirements are presented in the RFP. It is helpful to cite the paragraph number, subletter, and repeat the text of the requirement as it appears in the RFP. The proposal should contain a table of contents which cross-references the RFP requirements. Information which the Offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.
4. Complete and return Attachment 1 -Appendix 1 if applicable, which is also available at:
http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_1.pdf
5. Complete and return Attachment 2 -Appendix II which is also available at:
http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Appendix_2.pdf
6. Submit one (1) original and three (3) copies of each proposal of the entire proposal, including all attachments and proprietary information.
7. The original proposal must be clearly marked on the outside of the proposal. Submit one (1) unsecured, electronic copies (on a disc or flash drive) of the entire proposal including all attachments and any PROPRIETARY INFORMATION.

This disc or flash drive must be clearly marked on the outside that it includes proprietary information.
8. Submit one (1) unsecured electronic copy (on a disc or flash drive) of the entire Proposal; excluding proprietary information.
9. If applicable, the outside of the proposal must be marked to denote proprietary information is contained in the documents. Written notice of proprietary information must be submitted as a separate document in the proposal submission. Notice must specifically identify the applicable portions of the Contractor's proposal that contains data or materials to be

protected and state the reasons why protection is necessary. In addition, the specific (i.e. specific words, figures or paragraphs) proprietary or trade secret material submitted must be identified. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable.

10. Communications regarding this Request for Proposals shall be formal from the date of issue for this RFP, until either a Contractor has been selected or University Purchasing rejects all proposals. Formal communications shall be directed to Sandra White, VCO. Informal communications, including but not limited to, request for information, comments or speculations, regarding this RFP to any University employee other than a Purchasing Department representative may result in the offending Contractor's proposal being rejected.
11. Additional information is available at:

http://documents.procurement.vcu.edu/purchasing/pdf_docs/forms/RFP_Website_Link_Additional_Information.pdf

IX. ORAL PRESENTATION

- A. Offerors who submit a proposal in response to this RFP may be required to conduct an oral presentation of their proposal to VCU. This provides an opportunity for the Contractor to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. Oral presentations are an option and may or may not be conducted. Should an oral presentation be required, VCU will designate the date and location for the presentation; the date is critical and alternative dates will not be available.
- B. Offeror who are invited to conduct an oral presentation shall include the individual(s) who would be the primary point of contact for VCU on the Contractor's presentation team.

X. EVALUATION AND AWARD CRITERIA

- A. Proposals will be evaluated based upon the information provided in the Contractor's proposal using the following criteria: 1) Experience of the Firm, 2) Capabilities of Firm, 3) Comparable Services, 4) Small, Women-Owned and Minority-Owned Business Commitment, and 5) Price.
- B. Selection shall be made of two or more Contractors deemed to be fully qualified and best suited among those submitting proposals. Negotiations shall be conducted with Contractors so selected. After negotiations have been conducted with each Contractor so selected, the University shall select the Contractor which, in its opinion, has made the best offer, and shall award the contract to that Contractor. The University may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous. (Governing Rules Section 49.D) Should the University determine in writing and in its sole discretion that only one Contractor has made the best proposal, a contract may be negotiated and awarded to that Contractor. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation.
- C. Notice of Award(s) or Notice of Intent to Award may be accessed electronically at

<http://www.eva.virginia.gov>.

XI. GENERAL TERMS AND CONDITIONS

- A. **PURCHASING MANUAL:** This solicitation is subject to the provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and their Vendors and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available for review at the purchasing office. In addition, the manual may be accessed electronically at <http://procurement.vcu.edu/> or a copy can be obtained by calling University Purchasing at (804) 828-1077.
- B. **APPLICABLE LAW AND COURTS:** This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with all applicable federal, state and local laws, rules and regulations.
- C. **ANTI-DISCRIMINATION:** By submitting their proposals, Offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and Section 2.2-4311 of the *Virginia Public Procurement Act*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1).

In every contract over \$10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the Contractor agrees as follows:
 - a) Virginia Commonwealth University is an equal opportunity/affirmative action institution providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability. As such, the Contractor will not discriminate against any employee or applicant for employment because of age, race, color, national origin, gender, religion, sexual orientation, veteran's status, political affiliation or disability or any other basis prohibited by state law related to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b) The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
 - c) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The Contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- D. ETHICS IN PUBLIC CONTRACTING: By submitting their proposals, Offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Offeror, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
- E. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By submitting their proposals, Offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986.
- F. DEBARMENT STATUS: By submitting their proposals, Offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- G. ANTITRUST: By entering into a contract, the Contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.
- H. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS: Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.
- I. CLARIFICATION OF TERMS: If any prospective Offeror has questions about the specifications or other solicitation documents, the prospective Offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.
- J. PAYMENT:
1. To Prime Contractor:
 - a) Invoices for items ordered, delivered and accepted shall be submitted by the Contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual Contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
 - b) Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

- c) All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the Contractor at the contract price, regardless of which public agency is being billed.
 - d) The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
 - e) Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (Code of Virginia, § 2.2-4363).
 - f) Professional Fees shall be paid in thirds, 1/3 paid on initiation of the search, 1/3 paid upon delivery of qualified slate of candidates, and the final 1/3 paid upon placement of the candidate.
 - g) If a hired candidate leaves the University's employee due to no fault of VCU within the first year of employment, the Executive Search Firm shall re-perform all of the work necessary to place a 2nd qualified candidate, however, shall only be paid out of pocket expenses that are preapproved plus travel and "not" any labor or other fees or expenses.
2. To Subcontractors:
- a) Contractor awarded a contract under this solicitation is hereby obligated:
 - i. To pay the Subcontractor(s) within seven (7) days of the Contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the Subcontractor(s) under the contract; or
 - ii. To notify the agency and the Subcontractor(s), in writing, of the Contractor's intention to withhold payment and the reason.
 - b) The Contractor is obligated to pay the Subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the Contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in 2. above. The date of mailing of any payment by U.S. Mail is deemed to be payment to the addressee. These provisions apply to each sub tier Contractor performing under the primary contract. A Contractor's obligation to pay an interest charge to a Subcontractor may not be construed to be an obligation of the Commonwealth.

K. PRECEDENCE OF TERMS: Paragraphs A-J of these General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions

and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

- L. QUALIFICATIONS OF OFFERORS: The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the Offeror to perform the services/furnish the goods and the Offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect Offeror's physical facilities prior to award to satisfy questions regarding the Offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Offeror fails to satisfy the Commonwealth that such Offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- M. TESTING AND INSPECTION: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.
- N. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the Contractor in whole or in part without the written consent of the Commonwealth.
- O. CHANGES TO THE CONTRACT: Changes can be made to the Contract in any one of the following ways:
1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
 2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the Contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The Contractor shall comply with the notice upon receipt. The Contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:
 - a) By mutual agreement between the parties in writing; or
 - b) By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the Contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the Contractor's records and/or to determine the correct number of units independently; or
 - c) By ordering the Contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The Contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the Contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or

decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia's Purchasing Manual for Institutions of Higher Education and Their Vendors. Neither the existence of a claim or a dispute resolution process, litigation or any other provision of this contract shall excuse the Contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

- P. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.
- Q. TAXES: Sales to the Commonwealth of Virginia are normally exempt from State sales tax, State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against this contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.
- R. USE OF BRAND NAMES: Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict Offerors to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article, which the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Offeror is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Commonwealth to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Unless the Offeror clearly indicates in its proposal that the product offered is an "equal" product, such proposal will be considered to offer the brand name product referenced in the solicitation.
- S. TRANSPORTATION AND PACKAGING: By submitting their proposals, all Offerors certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.
- T. INSURANCE: By signing and submitting a proposal under this solicitation, the offeror certifies that if awarded the contract, it will have the following insurance coverages at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The offeror further certifies that the contractor and any subcontractors will maintain these insurance coverages during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

Minimum Insurance Coverages and Limits Required for Most Contracts:

1. Worker's Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.
 2. Employers Liability - \$100,000.
 3. Commercial General Liability - \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
 4. Automobile Liability - \$1,000,000 per occurrence. (Only used if motor vehicle is to be used in the contract.)
- U. ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract as a result of this solicitation, Virginia Commonwealth University will publicly post such notice electronically at <http://www.eva.virginia.gov> for a minimum of 10 days.
- V. DRUG-FREE WORKPLACE: During the performance of this contract, the Contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violation of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.
- W. NONDISCRIMINATION OF CONTRACTORS: A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, or against faith-based organizations or any other basis prohibited by state law relating to discrimination in employment. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.
- X. eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION, CONTRACTS, AND ORDERS: The eVA Internet electronic procurement solution, website portal www.eVA.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to

provide goods and/or services to the Commonwealth shall participate in the eVA Internet procurement solution by completing the free eVA Vendor Registration. All bidders or offerors must register in eVA and pay the Vendor Transaction Fees specified below; failure to register will result in the bid/proposal being rejected.

Vendor transaction fees are determined by the date the original purchase order is issued and are as follows:

1. For orders issued July 1, 2014 and after, the Vendor Transaction Fee is:
 - a) DSBSD-certified Small Businesses: 1%, capped at \$500 per order.
 - b) Businesses that are not DSBSD-certified Small Businesses: 1%, capped at \$1,500 per order.

2. For orders issued July 1, 2014 the vendor transaction fees can be found at www.eVA.virginia.gov

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

- Y. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA). The Selected Firm/Vendor acknowledges that for the purposes of this agreement it will be designated as a "school official" with "legitimate educational interests" in the University education records, as those terms have been defined under FERPA and its implementing regulations, and the Selected Firm/Vendor agrees to abide by the limitations and requirements imposed on school officials. Selected Firm/Vendor will use the education records only for the purpose of fulfilling its duties under this agreement for University's and its students' benefit, and will not share such data with or disclose it to any third party except as provided for in this agreement, required by law, or authorized in writing by the University.

XII. SPECIAL TERMS AND CONDITIONS

- A. GOVERNANCE: The terms and conditions of RFP #6253333SW govern the contract and not any Contractor terms and conditions or services agreement.
- B. ADVERTISING: In the event a contract is awarded for supplies, equipment, or services resulting from this proposal, no indication of such sales or services to Virginia Commonwealth University will be used in product literature or advertising. The Contractor shall not state in any of the advertising or product literature that the Commonwealth of Virginia or any agency or institution of the Commonwealth has purchased or uses its products or services.
- C. AUDIT: The Contractor shall retain all books, records, and other documents relative to this contract for five (5) years after final payment or until audited by the Commonwealth of Virginia, whichever is sooner. The agency, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.
- D. AUTHORIZED USERS: Virginia Commonwealth University is issuing this solicitation in cooperation with other agencies and institutions. Requirements of Executive Search Services have been

combined, and the total estimated usage is shown within this solicitation. Virginia Commonwealth University is responsible for administering the program; therefore, correspondence should be directed to Virginia Commonwealth University. The Contractor shall provide a volume purchase report prior to contract expiration or renewal action.

- E. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the University shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

F. AWARD OF CONTRACT:

AWARD TO MULTIPLE CONTRACTORS: Selection shall be made of two or more Contractors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with Contractors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Contractor so selected, the agency shall select the Contractor which, in its opinion, has made the best proposal, and shall award the contract to that Contractor. The Commonwealth reserves the right to make multiple awards as a result of this solicitation. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous. (Governing Rules Section 49.D) Should the Commonwealth determine in writing and in its sole discretion that only one Contractor is fully qualified, or that one Contractor is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Contractor. The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation and the Contractor's proposal as negotiated. Notice of Award(s) or Notice of Intent to Award may be accessed electronically at <http://www.eva.virginia.gov> for a minimum of 10 days.

- G. BEST AND FINAL OFFER (BAFO): At the conclusion of negotiations, the Contractor(s) may be asked to submit in writing, a best and final offer (BAFO). After the BAFO is submitted, no further negotiations shall be conducted with the Contractor(s). The Contractor(s) proposal will be re-evaluated to combine and include the information contained in the BAFO. The decision to award will be based on the final evaluation including the BAFO.
- H. PROPOSAL ACCEPTANCE PERIOD: Any proposal in response to this solicitation shall be valid for ninety (90) days. At the end of the ninety (90) days, the proposal may be withdrawn at the written request of the Contractor. If the proposal is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.
- I. CANCELLATION OF CONTRACT: The University reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon sixty (60) days written notice to the Contractor. In the event the initial contract period is for more than twelve (12) months, the resulting contract may be terminated by either party, without penalty, after the initial twelve (12) months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.

J. PROMPT PAYMENT DISCOUNTS: Virginia Commonwealth University will pay within 30 days after acceptance.

K. DRUG FREE WORKPLACE: The Contractor acknowledges and certifies that it understands that the following acts by the Contractor, its employees and/or agents performing services on state property are prohibited:

1. The unlawful manufacture, distribution, dispensing, possession or use of alcohol or other drugs; and
2. Any impairment or incapacitation from the use of alcohol or other drugs (except the use of drugs for legitimate medical purposes).
3. The Contractor further acknowledges and certifies that it understands that a violation of these prohibitions constitutes a breach of contract and may result in default action being taken by the Commonwealth in addition to any criminal penalties that may result from such conduct.

L. IDENTIFICATION OF PROPOSAL: The proposal package should be identified as follows:

From:

<u>RSO, Inc.</u>	<u>9/15/2015</u>	<u>11:00 am</u>
Name of Contractor	Due Date	Time
<u>5204 Minnick Road</u>	<u>6528137SW</u>	
Street or Box Number	RFP No.	
<u>Laurel, MD 20707-3138</u>	<u>Radioactive Waste Disposal Services</u>	
City, State, Zip Code +4	RFP Title	
Name of Contract/Purchase Officer or Buyer:	<u>Sandra White</u>	

The package should be addressed as directed on Page 2 of the solicitation.

If a proposal is not clearly identified, the Contractor takes the risk that the proposal may be inadvertently opened and the information compromised which may cause the proposal to be disqualified. Proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope.

M. WARRANTY (COMMERICAL): The contractor agrees that the goods or services furnished under any award resulting from this solicitation shall be covered by the most favorable commercial warranties the contractor gives any customer for such goods or services and that the rights and remedies provided therein are in addition to and do not limit those available to the University by any other clause of this solicitation.

N. LATE PROPOSALS: To be considered for selection, proposals must be received by the issuing office by the designated date and hour. The official time used in the receipt of proposals is that time on the automatic time stamp machine in the issuing office. Proposals received in the issuing office after the date and hour designated are automatically disqualified and will not be considered. The University is not responsible for delays in the delivery of mail by the U.S. Postal Service, private

couriers, or the intra-university mail system. It is the sole responsibility of the Contractor to insure that its proposal reaches the issuing office by the designated date and hour.

- O. INDEMNIFICATION: Contractor agrees to indemnify, defend and hold harmless the Commonwealth of Virginia, its officers, agents, and employees from any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the Contractor/any services of any kind or nature furnished by the Contractor, provided that such liability is not attributable to the sole negligence of the using agency or to failure of the using agency to use the materials, goods, or equipment in the manner already and permanently described by the Contractor on the materials, goods, or equipment delivered.
- P. NEGOTIATION WITH THE LOWEST CONTRACTOR: Not Applicable
- Q. ORDERING OPTION: Virginia Commonwealth University, may during the first 60 days after this contract is awarded, with the concurrence of the Contractor, place additional orders under the contract at the original unit price through the issuance of separate purchase orders. The aggregate of such additional orders shall not exceed 100% of the quantity originally stated in the contract.
- R. RENEWAL OF CONTRACT: The initial term of the contract shall be one (1) year. This contract may be renewed by the Commonwealth for four (4) successive one (1) year periods under the terms and conditions of the original contract.
- Price increases may be negotiated only at the time of renewal. Written notice of the Commonwealth's intention to renew should be provided approximately sixty (60) days prior to the expiration date of each contract period: If the Commonwealth elects to exercise the option to renew the contract for an additional one (1) year period, the contract price(s) for the additional one (1) year shall not exceed the contract price(s) of the previous contract period increased/decreased by more than the percentage increase/decrease of the Service category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
- S. SUBCONTRACTS: No portion of the work shall be subcontracted without prior written consent of the University. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.
- T. ELECTRONIC DATA INTERCHANGE: University Purchasing has a great interest in utilizing Electronic Data Interchange (EDI) to improve efficiency of operation in the transmission of purchasing related information. Contractors are encouraged to provide a statement indicating their current EDI capabilities and/or future plans to establish/improve their EDI capabilities.
- U. POLICY OF EQUAL EMPLOYMENT: Virginia Commonwealth University is an equal opportunity/affirmative action employer. Women, Minorities, persons with disabilities are encouraged to apply. The University encourages all vendors to establish and maintain a policy to insure equal opportunity employment. To that end, Contractors should submit along with their proposals, their policy of equal employment.

- V. COMMUNICATIONS: Communications regarding this Request for Proposals shall be formal from the date of issue for this RFP, until either a Contractor has been selected or University Purchasing rejects all proposals. Formal communications shall be directed to University Purchasing. Informal communications includes; but not limited to, request for information, comments or speculations, regarding this RFP to any University employee other than a Purchasing Department representative may result in the offending Contractor's proposal being rejected.
- W. EVA BUSINESS-TO-GOVERNMENT CONTRACTS AND ORDERS: The solicitation/contract will result in purchase order(s) with the eVA transaction fee specified below assessed for each order.
1. For orders issued July 1, 2011 thru December 31, 2013, the Vendor Transaction Fee is:
 - a) DSBSD-certified Small Businesses: 0.75%, Capped at \$500 per order.
 - b) Businesses that are not DSBSD-certified Small Businesses: 1%, Capped at \$1,500 per order.

The specified vendor transaction fee will be invoiced, by the Commonwealth of Virginia Department of General Services, approximately 30 days after the corresponding purchase order is issued and payable 30 days after the invoice date. Any adjustments (increases/decreases) will be handled through purchase order changes.

The eVA Internet electronic procurement solution, website portal www.eva.virginia.gov, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following: If this solicitation is for a term contract, failure to provide an electronic catalog (price list) or index page catalog for items awarded will be just cause for the Commonwealth to reject your bid/offer or terminate this contract for default. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from www.eva.virginia.gov. Contractors should email Catalog or Index Page information to eVA-catalog-manager@dgs.virginia.gov

- X. ELECTRONIC COPIES OF PROPOSALS: The successful Contractor may be required to provide the VCU Department of Procurement Services with a copy of the Contractor's entire original proposal (to include all attachments), and all subsequent correspondence (i.e., responses to requests for clarification and documents generated through the negotiation process) in an unsecured electronic format (i.e. email, disc - CD or DVD or flash drive). **VCU will post the Contractor's original proposal, and all subsequent correspondence on the VCU Office of Procurement Services Website, VCU shall not be responsible for the Contractor's failure to exclude proprietary information submitted in the unsecured electronic format).**
- Y. GRAMM-LEACH-BLILEY ACT: The Contractor shall comply with the Act by implementing and maintaining appropriate safeguards to protect and prevent unauthorized release of student, faculty and staff nonpublic information. Nonpublic information is defined as social security numbers, or financial transactions, bank, credit and tax information.

Z. QUANTITIES: Quantities set forth in this solicitation are estimates only, and the contractor shall supply at bid prices actual quantities as ordered, regardless of whether such total quantities are more or less than those shown

AA. REJECTION OF PROPOSALS & WAIVER OF MINOR INFORMALITIES/IRREGULARITIES:

VCU reserves the right to reject any or all Proposals in part or in total for any reason, to accept any Proposal if considered best for its interest, and to waive informalities and minor irregularities in Proposals received, commensurate with best public procurement practices.

BB. DETERMINATION OF RESPONSIBILITY:

The Contract will be awarded to the responsive and responsible Proposer whose Proposal, conforming to the solicitation, will be most advantageous to VCU, technical and financial factors considered. A responsible Proposer is one who affirmatively demonstrates to VCU that it has adequate financial resources and the requisite capacity, capability, and facilities to perform the Contract, has a satisfactory record of performance on other comparable projects, has a satisfactory record of integrity and business ethics, and is otherwise qualified and eligible to receive award under the solicitation and laws or regulations applicable to the procurement. VCU reserves the right to investigate the capabilities of Proposers, confirm any part of the information furnished by a Proposer, and require other evidence to determine that the Proposer is responsible.

CC. DEBARMENT STATUS:

By submitting their proposals, Proposers certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

DD. PROTEST:

Any Proposer who desires to protest the award or decision to award a contract shall submit the protest in writing to:

Director of Procurement Services
Virginia Commonwealth University
10 S. 6th Street, Suite 200
Richmond, VA 23219-3843

VCU will announce the award utilizing the Commonwealth of Virginia's e-Procurement system (eVA).

The protest must be received no later than ten (10) days after the award or the announcement of the decision to award, whichever occurs first.

However, if the protest of any actual or potential proposer depends in whole or in part upon information contained in public records pertaining to the procurement transaction that are subject to inspection under the Rules Governing Procurement of Goods, Services, Insurance, and Construction by a Public Institution of Higher Education of the Commonwealth of Virginia Governed by Subchapter 3 of the Restricted Higher Education Financial and Administrative Operations Act, Chapter 4.10 (§23-38.88 et seq) of Title 23 of the Code of Virginia, §34, then the time within which the protest shall be submitted shall expire ten (10) days after those records are available for inspection by such proposer under §34, or at such later time as provided in this section.

VCU Notices of Award(s) or Notices of Intent to Award may be accessed electronically at <http://www.eva.virginia.gov>.

No protest shall lie for a claim that the selected proposer is not a responsible proposer.

The written protest shall include the basis for the protest and relief sought.

The VCU Director of Procurement Services shall issue a decision in writing within ten (10) days of receipt stating the reasons for the action taken. This decision shall be final unless the proposer appeals within ten (10) days of receipt of the written decision by instituting legal action as provided in Section 54 of the Governing Rules.

Nothing in this paragraph shall be construed to permit an proposer to challenge the validity of the terms or conditions of the RFP.

"Days" as used in this paragraph refer to calendar days. If a deadline falls on a Saturday or Sunday, the next business day shall be considered to be the deadline.

RADIOACTIVE WASTE PROFILE FORM

Generator: Virginia Commonwealth University Phone: (804) 628-8134
 Address: Office of Environmental Health & Safety Fax: (804) 628-1157
 P.O. Box 880112
 City: Richmond
 State: Virginia
 Zip: 23298 Waste Location: Sanger Hall Waste Processing Center
 Contact Name: Beth Rosenberg

Drum or Item No.	Waste Type	Container Size	Weight	Description	Isotope	Activity mCi
1	1	55-gal.	185	Paper, plastic and glass compacted lab trash	H-3	3.115
					C-14	0.108
					Zn-65	0.007
2	7-Scint. Vials CAT I Exempt	55-gal.	181	Plastic and glass scintillation vials	H-3	0.425
					C-14	0.001
3	7-Scint. Vials CAT II	55-gal.	174	Plastic and glass scintillation vials	S-35	0.148
LSC1	3-Equipment	Beckman LS 8000	??	Liquid Scintillation Counter with internal source	Cs-137	0.017
LSC2	3-Equipment	Wallac Model 1214	??	Liquid Scintillation Counter with internal source	Ra-226	0.010
LSC3	3-Equipment	Packard Tri-Carb	??	Liquid Scintillation Counter with internal source	Ba-133	0.003
		55-gal		Empty drum 1		
		55-gal		Empty drum 2		

Waste Types: 1-Solid Lab Waste, 2-Sol, 3-Equipment, 4-Aqueous Liquid, 5-U/Th Compounds, 6-Animals, 7-Other

Authorized Signature: *Beth Rosenberg* Date: December 11, 2014
 Title: Radiation Safety Specialist

RADIOACTIVE WASTE PROFILE FORM

Generator: Virginia Commonwealth University	Phone: (804) 828-9134
Address: Office of Environmental Health & Safety P.O. Box 980112	Fax: (804) 828-1157
City: Richmond	Waste Location: Sanger Hall Waste Processing Center
State: Virginia	
Zip: 23298	
Contact Name: Beth Rosenberg	

Drum or Item No.	Waste Type	Container Size	Weight	Description	Isotope	Activity mCi
1	1	55-gal.	148	Paper, plastic and glass compacted lab trash	H-3	0.176
					C-14	0.042
2	1	55-gal.	188	Paper, plastic and glass noncompact lab trash	H-3	1.977
					Y-88	0.001
					Y-91	0.002
3	1	55-gal.	165	Paper, plastic and glass compacted lab trash	H-3	0.520
					C-14	0.005
4	7-Scint. Vials CAT I Exempt	55-gal.	205	Plastic and glass scintillation vials	H-3	1.155
					C-14	0.027
5	7-Scint. Vials CAT I Exempt	55-gal.	196	Plastic and glass scintillation vials	H-3	0.190
6	7-Scint. Vials CAT I Exempt	55-gal.	198	Plastic and glass scintillation vials	H-3	0.623
					C-14	0.048
7	7-Scint. Vials CAT II	55-gal.	202	Plastic and glass scintillation vials	S-35	0.050

Waste Types: 1-Solid Lab Waste, 2-Soil, 3-Equipment, 4-Aqueous Liquid, 5-UV/Th Compounds, 6-Animals, 7-Other

Authorized Signature: <i>Beth Rosenberg</i>	Date: April 8, 2013
Title: Radiation Safety Specialist	

ATTACHMENT 4 — SAMPLE MIXED WASTE PROFILE FORM (Page 1 of 1)

WASTE PROFILE

Perma-Fix Number Services: CCSI / MAEC / Perma-Fix of Florida / Perma-Fix Northwest

Profile Number

Generator Information:

EPA ID# VAD-68-173-878C

Generator Name Virginia Commonwealth University

Generator Address 1101 East Marshall Street

City/State/Zip Richmond, VA 23219

Telephone (804) 928-2831

Fax

Broker Information:

Electronic users: check here to copy Generator info. to home.

Broker/NGIS RGI, Inc.

Address 2204 Millers Road

City/State/Zip Lanham, MD 20707

Telephone (301) 951-2442

Fax (301) 987-8116

Check all that apply

Hazardous Waste - include LDR-UNC Constituents From: TSCA Regulated PCB Radioactive Waste Non-Hazardous Waste

Mercury >200 PPM Quaternary PCB Bulk Products Universal Waste

Elemental Mercury PCB Reproduction Waste Used Oil Filter

PCBs - specify: PCB Soluble Used Oil

Please provide a detailed description of the process that generated this waste. Attach additional sheets if needed. Note: for a line break, press tabulation.

Production Date RSDF 60456

Characterization Method
(check ONE only)

Laboratory Analysis MSDS Generator Knowledge

Physical Description:
(check all that apply)

Solid Liquid Sludge Debris Labeled (with contents/comp)

Other: _____

Volume: 4 units Solid Liquid Sludge Debris Other

Units: 55 gal Drum

Weight: 151 lbs

Weight Units: 55 gal Drum

Total Number of Containers: 1

Overpacked: Yes No

US DOT Hazardous Material: Yes No

DOT Hazard Class: 3 primary 7 subsidiary

Proper Shipping Name: Waste, UN1993, Flammable liquid, n.o.s., 3, (Limited quantity radioactive material)

- This waste stream is subject to the Land Disposal Restriction of 40 CFR 268.10. If checked, complete a Land Disposal Restriction Notification Form.
- This waste stream contains Benzene. If checked, complete the Benzene MSDS/MP Worksheet.
- This waste stream consists of off-spec used oil.
- This is a CERCLA waste.

For Broker Use Only

Identify the following:

The package used to ship this material meet the requirements of 40 CFR 173 Subpart B (Hazard). This material will be inspected for consistency with the proposed profile at the time of transportation.

[Signature] 12-17-14

Name Date

CHEMICAL PROPERTIES AND COMPOSITION:

Form of Fuel: Liquid 100 % (Non-HL, HL=HLN) Percent Soluble: 0 % (Non-HL, HL=HLN) Volatility: N/A Contaminates

pH Actual: N/A OR Range: _____ to _____ Specific Gravity Actual: N/A OR Range: _____ to _____

CERTIFICATION

I certify that all hazardous wastes are properly identified and listed on this profile. I understand that a surcharge may be imposed for any waste to which a reject or requires additional handling due to the material being inconsistent with the profile, improper or damaged containers, or improper shipping documents.

1. Any samples submitted for representative analysis in 40 CFR 261.10(b)(1) or (2) shall be obtained using an equivalent method.

2. I will advise Perma-Fix to obtain a sample from any waste shipment for purposes of verification.

Name Ruth Kowalsky Title Risk Safety Specialist Date 12-17-14

Perma-Fix Use Only

Accepted Accepted with the following conditions: _____

Rejected for the following reasons: _____

Designated Facility: DSS1 MAEC PF Florida PFNW

Perma-Fix has all of the necessary permits and licenses for the waste that has been characterized and identified by the approved profile and accepted by Perma-Fix.

Name _____ Title _____ Date _____

APPENDIX I

PARTICIPATION IN STATE PROCUREMENT TRANSACTIONS SMALL BUSINESSES AND BUSINESSES OWNED BY WOMEN AND MINORITIES

The following definitions will be used in completing the information contained in this Appendix.

Definitions

- **Small business** is an independently owned and operated business which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. Nothing in this definition prevents a program, agency, institution or subdivision from complying with the qualification criteria of a specific state program or federal guideline to be in compliance with a federal grant or program.
- **Women-owned business** is a business concern which is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more women, and whose management and daily business operations are controlled by one or more of such individuals.
- **Minority-owned business** is a business concern which is at least 51 percent owned by one or more minorities or in the case of a corporation, partnership or limited liability company or other entity, at least 51 percent of the equity ownership interest in which is owned by one or more minorities and whose management and daily business operations are controlled by one or more of such individuals.
- **Minority Individual:** "Minority" means a person who is a citizen of the United States or a legal resident alien and who satisfies one or more of the following definitions:
 - "Asian Americans" means all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Marianas, the Philippines, U. S. territory of the Pacific, India, Pakistan, Bangladesh and Sri Lanka and who are regarded as such by the community of which these persons claim to be a part.
 - "African Americans" means all persons having origins in any of the original peoples of Africa and who are regarded as such by the community of which these persons claim to be a part.
 - "Hispanic Americans" means all persons having origins in any of the Spanish speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who are regarded as such by the community of which these persons claim to be a part.
 - "Native Americans" means all persons having origins in any of the original peoples of North America and who are regarded as such by the community of which these persons claim to be a part or who are recognized by a tribal organization.
 - "Eskimos and Aleuts" means all persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia and who are regarded as such in the community of which these persons claim to be a part.

PARTICIPATION BY SMALL BUSINESSES, BUSINESSES OWNED BY WOMEN
BUSINESSES OWNED BY MINORITIES

This appendix should only be completed by firms that are not Virginia Department of Minority Business Enterprise (DMBE) certified small businesses.

Offeror certifies that it will involve Small Businesses, Women-Owned Businesses, and/or Minority-Owned Businesses (SWaM) in the performance of this contract either as part of a joint venture, as a partnership, as Subcontractors or as suppliers.

List the names of the SWaM Businesses your firm intends to use and identify the direct role of these firms in the performance of the contract. State whether the firm is a Small Business (SB), Women-Owned (WO), or Minority-Owned (MO).

<u>Name of Businesses:</u>	<u>SB, WO, MO:</u>	<u>Role in contract:</u>

Commitment for utilization of DMBE SWaM Businesses:

_____ % of total contract amount that will be performed by DMBE certified SWaM businesses.

Identify the individual responsible for submitting SWaM reporting information to VCU:

Name Printed: _____
Email: _____
Phone: _____
Firm: _____

Offeror understands and acknowledge that the percentages stated above represent a contractual commitment by the Offeror. Failure to achieve the percentage commitment will be considered a breach of contract and may result in contract default.

Acknowledged:
By (*Signature*): _____
Name Printed: _____
Title: _____
Email: _____

Note: Small, Minority and/or Women-owned business sub-contractors are required to become certified and maintain certification through the Virginia Department of Minority Business Enterprise (DMBE; <http://www.dmb.e.virginia.gov/swamcert.html>) to fulfill the Offeror's commitment for utilization.

APPENDIX II INVOICING AND PAYMENT

Invoicing:

The Contractor shall submit a fully itemized invoice to Virginia Commonwealth University, Accounts Payable and Support Services, P. O. Box 980327, Richmond, VA 23298-0327, that, at minimum, includes the following information: the Virginia Commonwealth University purchase order number; a description of the goods or services provided; quantities; unit prices; extended prices; and total prices. Payment will be issued in accordance with the payment method selected below and with the Commonwealth of Virginia Prompt Payment Legislation.

Upon request by VCU, the Contractor shall submit invoices electronically using the Ariba Network or other e-commerce channel utilized by VCU; and agrees to comply, within reason, with any future e-commerce initiatives including, but not limited to: procurement, procurement content, sourcing or any other electronic procurement and sourcing solutions.

Questions regarding this method of invoicing should be sent to: ecommerce@vcu.edu.

Payment:

VCU Procurement Services is automating the payment process to the greatest extent possible. Contractors are encouraged to accept payment electronically through the commercial card program. Please review the payment methods described below and select one for your firm. By selecting the payment method below, Contractor acknowledges that the selected payment method is **not specific to the contract resulting from this solicitation and will apply to all payments made to the Contractor** by Virginia Commonwealth University. For example, if the Contractor has an existing contract(s) and is currently receiving payment by paper check, and the Contractor is now electing to receive payment by the commercial card, **all payments** will be made using the commercial card once the commercial card payment process is implemented for the firm.

Payment Methods

1. Electronically through a Wells Fargo Visa commercial card: Payment will be made ten days (10) after receipt of a proper invoice for the amount of payment due, or ten (10) days after receipt of the goods or services, whichever is later.

It is the Contractor's responsibility to contact its banking institutions to determine any credit limit that may restrict the payment of invoices. It is the Contractor's responsibility to have its credit limit raised as necessary to facilitate the timely payment of all invoices. Invoices exceeding the Contractor's credit limit will be returned unpaid.

Failure to accept the commercial card after award of contract will be considered a contract compliance issue and will be addressed accordingly. In addition, invoices will be returned without payment until the Contractor can accept the payment through the commercial card.

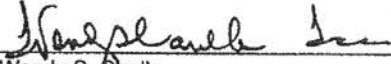
Questions regarding this method of payment should be sent to commcard@vcu.edu.

2. **ACH:** Electronic payment via automated clearing house (ACH) to the vendor provided bank account of record. Payment is processed thirty (30) days after receipt of a proper invoice for the amount of payment due, or thirty (30) days after receipt of the goods or services, whichever is later. Additional information about ACH payments is available at: <http://www.vcu.edu/treasury/VendorACH.htm>.

Contractor must indicate the method of payment selected:

Commercial Card Payment (Wells Fargo VISA)
 Automated Clearing House (ACH)

Invoicing and Payment Method Acknowledgement:

Signature:	
Name Printed:	Wendy S. Caulk
Title:	Treasurer
Name of Firm:	RSO, Inc.
Date:	September 4, 2015

Please identify the following contact information for the individual who will serve as the appropriate point of contact within your company to be contacted by VCU Accounts Payable to implement the electronic invoicing and payment processes:

Name of the individual:	Wendy S. Caulk (general correspondence wendyc@rsoinc.com)
Title:	Treasurer
Mailing address:	RSO, Inc. PO BOX 1450 Laurel, MD 20725-1450
Email address:	invoices@rsoinc.com - for payment notification
Phone number:	301-953-2482 x 316
Fax number:	301-498-3017

ATTACHMENT 1
SPECIFICATION DATA
RADIOACTIVE WASTE DISPOSAL SERVICES
RFP No.: 6528137SW

Offeror Instructions: The following specifications are intended to define the minimum level of the scope of services for quality, performance, and suitability for the intended purpose of the Radioactive Waste Disposal Services, and are meant to be met or exceed.

1. If the proposer meets the specification requirements as specified and defined in the Specification Data, the Offeror shall indicate "**Yes**" in the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
2. If the proposer deviates from the specifications requirements as specified in the Specification Data below, the Offeror shall indicate "**No**" on the appropriate specification line in the column labeled, as part of their proposal response to this Request for Proposal.
3. The proposer shall note and explain as to how the Offeror deviates from the Specification Data in a separate document to include in their proposal response to this Request for Proposal.

SPECIFICATIONS	DESCRIPTION	Proposal Comply with the Specifications?	
		YES	NO
REFERENCE		EXPLAIN	
A: General Requirements	<p>Provide all labor, supervision, equipment, tools, packaging containers, materials, supplies and incidentals, etc., necessary to:</p> <ol style="list-style-type: none"> 1. Package/Label; 2. Receive (i.e., handle/pick-up); 3. Transport; 4. Store; and 5. Treat/Dispose of the radioactive waste products as specified herein. 	Yes	
B: Contractor Administrator Requirements	<p>Immediately inform the VCU Contract Administrator or his/her designee, of any and all changes in the laws, rules, regulations, orders, ordinances, actions, and requests, issued by all applicable federal/state/local agencies and the waste processing facility, pertaining to:</p> <ol style="list-style-type: none"> 1. Packaging/Labeling; 2. Receiving (i.e., handling/pick-up); 3. Transportation; 4. Storage; and 5. Treatment/Disposal procedures for any radioactive waste products. 	Yes	
C: Packaging and Labeling	<p>Provide the VCU Contract Administrator or his/her designee, with all current packaging and labeling procedures for all waste types within five (5) business days after award of the contract:</p> <p>All packaging and labeling procedures, specified by the Contractor, should be in compliance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the packaging and labeling of the applicable type of low-level radioactive waste. In the event the Contractor wishes to change packaging or labeling procedures during the term of this contract, the Contractor</p>	Yes	

should:

1. Submit written notice of the requested change to the VCU Contract Administrator or his/her designee, for approval, at least **sixty (60) business days** prior to the effective date of such requested change.
2. Receive (i.e., handle/pick-up) all containers packaged and labeled in accordance with the previous procedures, at no additional cost to VCU.
3. If requested by VCU, package the radioactive waste products/ label each packaging container in accordance with the designation specified in the applicable current packaging procedures, and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests pertaining to the packaging and labeling of low-level radioactive waste.
4. Packaging: The Contractor should, upon request by VCU, furnish all:
 - a. Packaging containers: Packaging containers should include all materials required for the applicable type of radioactive waste product, to include, but not limited to (as applicable):
 - Drums (e.g. 30 gallon/55 gallon), to include, but not limited to: Closure rings, bolts, and drum liners;
 - Wax bottom cardboard boxes; and
 - Overpacks.
 - b. Required materials/ supplies, for the applicable type of radioactive waste product/packaging method, to include, but not limited to (as applicable):
 - Vermiculite or other accepted absorbent.

Note: VCU, in its sole discretion, reserves the right to utilize packaging containers/materials/supplies furnished by VCU; or to utilize packaging containers, materials, supplies furnished by the Contractor: Pricing should be in accordance with "ATTACHMENT 2," the "PRICE SCHEDULE."

	<p>5. Labeling:</p> <p>a. Label all packaging containers, upon request by VCU, at no additional cost to VCU; or the Contractor, upon request by VCU, should furnish VCU with all labels for the packaging containers, at no additional cost to VCU.</p> <p>b. Each label utilized/furnished by the Contractor, should accurately identify the:</p> <ul style="list-style-type: none"> ▪ Contents of each container; and the ▪ Proper shipping name for the applicable material on the certification statement (49 CFR 172.101). <p>Note: VCU, in its sole discretion, reserves the right to label the packaging containers with the labels furnished by the Contractor; or to request the Contractor to label the packaging containers:</p> <p>6. Containers- Material/Supplies and Labels:</p> <p>All packaging containers/ materials/supplies and labels furnished by the Contractor should be in compliance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agency, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the packaging and labeling of the applicable type of low-level radioactive waste.</p>		
<p>D: Receiving (Handling and Pickup) Procedures</p>	<p>1. Handling and Pickup Procedures:</p> <p>a. At the time of pick-up, verify/ensure that all radioactive waste products are packaged and labeled in a method currently approved by the United States Department of Transportation (USDOT) and by all other applicable federal/state/local agencies, and by the waste processing facility, for the applicable type of low-level radioactive waste.</p> <p>b. Receive (i.e., handle/pick-up) all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the receipt (handling/pick-up) of low-level radioactive waste of all applicable federal/state/local agencies, waste processing</p>	<p>Yes</p>	

	<p>facilities; and the Southeast Waste Compact Commission (SWCC).</p> <p>2. Schedule:</p> <p>a. Pick-up the radioactive waste products Monday through Friday, during normal business hours, defined as 8:00AM to 4:30PM.</p> <p>b. Mutually establish a pick-up schedule with the VCU Contract Administrator, Beth Rosenberg (or her designee).</p> <p>3. Possession: Take possession of the radioactive waste products at the designated VCU pick-up point(s).</p> <p>4. Pick-Up Documentation:</p> <p>a. Be solely responsible for properly completing all related documentation prior to pick-up, including, but not limited to:</p> <ul style="list-style-type: none"> ▪ Waste profiles; ▪ NRC manifests; ▪ EPA manifests; and ▪ Land disposal forms, based upon the information provided by VCU. ▪ Note: VCU, in its sole discretion, reserves the right to complete all related documentation. <p>b. "Notice of Receipt": Provide the VCU Contract Administrator or his/her designee), with a "Notice of Receipt" for all radioactive waste picked-up from VCU, within twenty (20) calendar days of picking up the radioactive waste from VCU.</p>		
<p>E: Transportation Requirements Procedures</p>	<p>1. Transportation Requirements Procedures:</p> <p>a. Transport all radioactive waste products in accordance with all current applicable United States Department of Transportation (USDOT) and with all other current applicable federal/state/local agencies, and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the transportation of the applicable type of low-level radioactive waste, to include, but not limited to the:</p>	<p>Yes</p>	

	<ul style="list-style-type: none"> ▪ Type of transportation vehicle utilized; ▪ Type of transportation method employed; ▪ Transportation route security plan requirements: <p>b. The Contractor should maintain a copy of the en route security plan in the vehicle and the Vehicle driver documentation requirements.</p> <p>c. The Contractor/ vehicle driver should maintain a copy of the:</p> <ul style="list-style-type: none"> ▪ Vehicle driver(s)' certification of DOT training; and a copy of the ▪ Driver(s)' commercial driver's license, in the vehicle. <p>2. Route: Follow the shortest and/or most expedient route to transport the radioactive waste products.</p>		
F. Storage Requirements	<p>Store all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the storage of low-level radioactive waste of:</p> <p>All applicable federal/state/local agencies, waste processing facilities; and the Southeast Waste Compact Commission (SWCC).</p>	Yes	
G. Facility Requirements	<p>Store the radioactive waste products in a facility that is currently approved by all applicable federal/state/local agencies; and the Southeast Waste Compact Commission (SWCC).</p>	Yes	
H. Treatment and Disposal Requirements	<p>1. Treat/dispose all radioactive waste products in accordance with all current applicable laws, rules, regulations, orders, ordinances, actions, and requests, pertaining to the treatment/disposal of low-level radioactive waste of:</p> <ul style="list-style-type: none"> ▪ All applicable federal/state/local agencies, waste processing facilities; and the ▪ Southeast Waste Compact Commission (SWCC). <p>2. Treatment Requirements: Perform the solidification for Uranyl Acetate/Uranyl Nitrate and Uranium Chloride/Thorium Chloride radioactive waste products.</p>	Yes	

*See RSO, Inc. proposal, page 8 (5.h.)
 Implementation Milestone for industry
 standard processing time frames
 and certificates.

3. Facility Requirements:
- a. Treat/dispose of the radioactive waste products at a waste processing facility that is currently approved/licensed (as applicable) by all applicable federal/state/local agencies to treat/dispose of the applicable radioactive waste products; and the Southeast Waste Compact Commission (SWCC).
 - b. Notify the VCU Contract Administrator or his/her designee, at least **sixty (60) business days** prior to a change to a different waste processing facility.
4. Documentation:
- a. Reports: Volume Reduction Methods: Submit a written report to the VCU Contract Administrator or his/her designee, within **thirty (30) business days** of disposal, that contains the following information for all radioactive waste products that are treated/disposed of by volume reduction methods (i.e., incineration or super compaction): quantity; activity; and the disposal date;
 - * b. "Certificate of Disposal"/"Certificate of Destruction": Provide the VCU Contract Administrator or his/her designee, with a "Certificate of Disposal" or "Certificate of Destruction," as applicable, within **180 business days** of transporting the radioactive waste products from VCU:
 - c. The "Certificate of Disposal" or "Certificate of Destruction" should specify the container identification numbers disposed, treatment/disposal method, and the date of destruction.

<p>I. Contractor Requirements</p>	<p>Be licensed during the term of this contract, to perform all of the radioactive waste disposal services for all radioactive waste products that meet the applicable composition as specified herein by the United States Nuclear Regulatory Commission ("NRC"); or by an Agreement State.</p>	<p>Yes</p>	
<p>J. Contractor Personnel Requirements</p>	<p>1. All Contractor personnel performing services under this contract (e.g., vehicle drivers, etc.) should be knowledgeable of, qualified, capable and properly trained in all current, to include, but not limited to:</p>	<p>Yes</p>	

	<ul style="list-style-type: none"> ▪ Packaging/Labeling; ▪ Receiving (i.e., handling/pick-up); ▪ Transportation; ▪ Storage; and ▪ Treatment/Disposal procedures. <p>2. Training Requirements:</p> <p>The Contractor should ensure that all Contractor personnel (e.g., vehicle drivers, etc.) are trained in accordance with the current requirements set forth in CFR 49, Subpart H.</p> <p>3. Radiation Monitoring Requirements:</p> <p>The Contractor should ensure that all Contractor personnel (e.g., vehicle drivers, etc.) are monitored for radiation exposure in accordance with all current contractor policies/procedures; and all applicable federal/state/local agency and the waste processing facility's laws, rules, regulations, orders, ordinances, actions, and requests pertaining to low-level radioactive waste products.</p> <p>4. Assigned Employees:</p> <ul style="list-style-type: none"> a. VCU reserves the right to observe the Contractors' personnel at any time, while services are being provided/performed on-site at VCU: b. If, in the sole opinion of VCU, an employee of the Contractor is determined not to be qualified, competent, or acceptable for any other reason, the Contractor should not assign that individual for further service at VCU. <p>5. Account Manager:</p> <ul style="list-style-type: none"> a. Assign an "Account Manager" for the VCU account; the "Account Manager" should assist VCU with resolving problems (e.g., service issues, invoice, contract renewals, etc.): <ul style="list-style-type: none"> ▪ The "Account Manager" should be accessible via: <ul style="list-style-type: none"> ▪ Telephone: ▪ A toll-free telephone number, if the telephone number is not a local 		
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	<p>telephone number; and</p> <ul style="list-style-type: none"> ▪ E-mail. <p>b. In the event there are any changes to the "Account Manager's" contact information, the Contractor should provide VCU with the updated information by the time the changes are effective.</p>		
<p>K. VCU Obligations</p>	<ol style="list-style-type: none"> 1. Labeling: In the event VCU elects to package/label the radioactive waste products, VCU will label (as applicable) the radioactive waste products in accordance with Contractor's packaging/labeling instructions. 2. Site Charges/ Taxes: <ul style="list-style-type: none"> ▪ VCU will pay for exact increases only, for: <ul style="list-style-type: none"> ▪ Waste processing facility charges; ▪ Southeast Waste Compact Commission (SWCC) surcharges; and ▪ State/local taxes. 3. Note: The Contractor should submit evidence of direct cost increases (e.g., a letter from the disposal site, SWCC, and/or the applicable state/local agency) to the VCU Contract Administrator or his/her designee. 	<p>Yes</p>	

ATTACHMENT C / PRICE SCHEDULE / RFP #: 000000CM
ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
(Page 1 of 4)

A. TOTAL FIXED PRICING:

Offerors shall submit pricing in the following format:

1. Standard Disposal Methods / Hypothetical Price Schedule:

a. Quantities:

- (1) The quantities identified in "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)" are estimates only (based upon historical annual requirements).
- (2) The Contractor should provide radioactive waste disposal services for the actual quantities ordered, at the contract price(s), regardless of whether such total quantities are more or less than those shown (also refer to Section X, the "SPECIAL TERMS AND CONDITIONS," subsection "Q").

b. Pricing:

- (1) Offerors shall identify / complete each "UNIT PRICE," "TOTAL EXTENDED PRICE" and the "TOTAL SUM" field / space in "ATTACHMENT 2," for subsection:
 - (a) "A.1.c.(1)(a)" through "A.1.c(1)(i)" / "VCU FURNISHED / LABELED" packaging containers / materials / supplies; and
 - (b) "A.1.c.(2)(a)" through "A.1.c.(2)(i)" / "CONTRACTOR FURNISHED / LABELED" packaging containers / materials / supplies.

Note: VCU reserves the right to award the contract based upon using VCU furnished (refer to "ATTACHMENT 2," the "PRICE SCHEDULE," subsection "A.1.c.(1)"; "VCU FURNISHED / LABELED"); or Contractor furnished (refer to "ATTACHMENT 2," subsection "A.1.c.(2)"; "CONTRACTOR FURNISHED / LABELED"), packaging containers / materials / supplies, whichever is determined to be in the best interest of VCU, as solely determined by VCU.

- (2) Each "UNIT PRICE," "TOTAL EXTENDED PRICE" and "TOTAL SUM" (refer to "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(i)" / "A.1.c.(2)(a)" through "A.1.c.(2)(i)") must be shown (to include decimal points); in case of arithmetic errors, the "UNIT PRICE" will govern.
- (3) Each "UNIT PRICE" (refer to "ATTACHMENT 2," subsection "A.1.c.(1)(a)" through "A.1.c(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)") shall reflect the total fixed price per container / overpack, for the disposal of the applicable radioactive waste products specified in, and in response to, this RFP, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

ATTACHMENT C / PRICE SCHEDULE / RFP #: 000000CM
ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
 (Page 2 of 4)

c. Price Schedule:

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR)- TOTAL FIXED PRICING				(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING			
		UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE	UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE
(a)	Dry, Solid Material / UOM = per (lb) / per container - compacted	\$ 6.15	X	250 lbs x 8 Containers	= \$ 12,300.00	\$ 6.37	X	250 lbs x 8 Containers	= \$ 12,740.00
(b)	Double-Walled Animal Carcasses / UOM = per (lb) / Per Container for incineration	\$ 18.46	X	75 lb x 2 Overpacks	= \$ 2,769.00	\$ 18.84	X	75 lb x 2 Overpacks	= \$ 2,826.00
(c)	Category I (Deregulated/Exempt) - C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half-life / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$ 806.85	X	8 Containers	= \$ 6,454.80	\$ 879.85	X	8 Containers	= \$ 7,038.80
(d)	Category II (Regulated Isotopes) 30 - 109 day half-life / UOM = per 55-gallon container; 7.5 cu. ft. per container:	\$ 1,393.95	X	4 Containers	= \$ 5,575.80	\$ 1,466.95	X	4 Containers	= \$ 5,867.80
(e)	Category III (Regulated >109 Day) - C-14 and/or H-3 with specific activities >0.05 uCi/ml and/or other isotopes with >109 day half-life. / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$ 3,476.61	X	2 Containers	= \$ 6,953.22	\$ 3,549.61	X	2 Containers	= \$ 7,099.22
(f)	Regulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$ 3,536.35	X	1 Overpack	= \$ 3,536.35	\$ 3,661.35	X	1 Overpack	= \$ 3,661.35

ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
 (Page 3 of 4)

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR)- TOTAL FIXED PRICING				(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING			
		UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE	UNIT PRICE	X	ANNUAL QUANTITY	= TOTAL EXTENDED PRICE
(g)	Derugulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$806.85	X	1 Overpack	= \$806.85	\$984.85	X	1 Overpack	= \$984.85
(h)	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc. / UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers = 222.5 cu.ft.):	\$0.86	X	25 Containers	= \$2,150.00	\$1.46	X	25 Containers	= \$3,650.00
(i)	TOTAL SUM (the "TOTAL EXTENDED PRICE" for "(a)" through the "TOTAL EXTENDED PRICE" for "(h)"):				\$40,546.02				\$43,868.02

2. CI-36 – Activity Surcharge:

- a. Offerors shall submit a price schedule of all "UNIT PRICES" for all applicable surcharges for the disposal of CI-36. (i.e. any "CI-36 activity surcharge; also refer to Section VIII, the "PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS.
- b. Each "UNIT PRICE" shall reflect the **total fixed price** for the applicable surcharge, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

ATTACHMENT 2 / PRICE SCHEDULE
RFP6528137SW Radioactive Waste Disposal Services
(Page 4 of 4)

3. Alternative Methods of Disposal:

- a. Offerors shall submit a price schedule of all **"UNIT PRICES"** (to include all surcharges) for all applicable alternative methods of disposal (e.g., incineration or thermal treatment of frozen animal carcasses / decayed solids; decay-in-storage, etc.); also refer to **Section VIII, the "PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS**, for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each **"UNIT PRICE"** shall reflect the **total fixed price** for the applicable alternative method of disposal, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

4. Disposal of Sealed Sources:

- a. Offerors shall submit a price schedule of all **"UNIT PRICES"** (to include all surcharges) for all applicable disposal methods of sealed sources for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each **"UNIT PRICE"** shall reflect the **total fixed price** for the applicable disposal method, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED:**
 - (1) The Contractor should, upon request by VCU, provide VCU with a **total fixed price**, on a case-by-case basis for the disposal of sealed sources; the total fixed price for sealed sources should be based upon (and should **not** exceed) the Contractor's current contract unit price schedule for the:
 - (a) "Standard Disposal Methods" identified in section **"ATTACHMENT 2-2,"** subsection **"1.A.(1)"** through **"1.A.(9)"** / **"1.B.(1)** through **"1.B.(9)"**;
 - (b) "Alternative Methods of Disposal" (refer to **"ATTACHMENT 2-1,"** subsection **"A.1.c.(2)"**), as applicable, or for the
 - (c) "Disposal of Sealed Sources" (refer to **"ATTACHMENT 2-1,"** subsection **"A.1.d.(2)."**

B. PERFORMANCE:

"Performance" shall be defined as the **FIRM** number of calendar days after receipt of order (ARO), that your company can begin providing / performing the Radioactive Waste Disposal Services specified in, and in response to, this RFP; this timeframe may be a factor in making the award:

14 Calendar Days ARO



August 14, 2015

ADDENDUM NO.: 1 TO ALL OFFERORS:

Reference – Request for Proposals: RFP No.:6528137SW
Commodity Title: Radioactive Waste Disposal Services
Issued Date: August 14, 2015
Proposal Due Date: September 7, 2015
Proposal Conference Date: August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

Attachment 1 Specification Data is hereby revised as of August 14, 2015. This revision replaces and removes Attachment 1 Specification Data submitted on August 13, 2015. The new date of August 14, 2015 will appear on Attachment 1 Specification Data.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not constitute your signature on the original proposal document. The original proposal document must also be signed.

Kind Regards,

Sandra D. White, VCO
Purchasing Manager
Service Category

RSO, Inc.
Name of Firm
David E. Wilkin, Manager RMS
Signature/Title
9/4/15
Date



August 27, 2015

ADDENDUM NO.: 2 TO ALL OFFERORS:

Reference - Request for Proposals: RFP No.:6528137SW
Commodity Title: Radioactive Waste Disposal Services
Issued Date: August 14, 2015
Proposal Due Date: September 7, 2015 at 11:00 a.m.
Proposal Conference Date: August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

1. Will the proposal due date be extended?

VCU Answer: Yes, the proposal due date is September 15, 2015 at 11:00 a.m.

2. What is the last day for questions?

VCU Answer: The last day for questions is August 31, 2015 at 12 noon.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not constitute your signature on the original proposal document. The original proposal document must also be signed.

Kind Regards,

Sandra D. White, VCO
Purchasing Manager
Service Category

RSO, Inc.

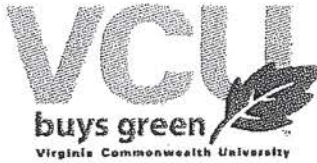
Name of Firm

David S. White, Manager RMS

Signature/Title

9/4/15

Date



September 2, 2015

ADDENDUM NO.: 3 TO ALL OFFERORS:

Reference - Request for Proposals: RFP No.:6528137SW
Commodity Title: Radioactive Waste Disposal Services
Issued Date: August 14, 2015
Proposal Due Date: September 15, 2015 at 11:00 a.m.
Proposal Conference Date: August 26, 2015 at 10:00 a.m.

The above is hereby changed to read:

1. On p13. g: Should the question read "...copy of licenses, operating permits or other authorization that allow your firm to provide Radioactive Waste Disposal services." (Instead of Debt Collection Services)?

VCU Answer: Yes.

2. Can we please get a 1 week extension to 9/14/15?

VCU Answer: The proposal due date is extended until September 15, 2015 at 11:00 a.m.

3. What size animals?

VCU Answer: Most frequently mice and rats; however, we do have the possibility of sheep and non-human primates.

4. Do we have liquids in liquids drum and do we have vials with liquid in drums

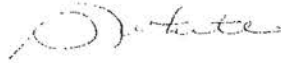
VCU Answer: Yes

5. Can you provide us with Material Safety Data Sheet (MSDS)?

VCU Answer: VCU will provide chemical characterization for liquids per pickup.

NOTE: A signed acknowledgment of this addendum should be received by this office either prior to the proposal due date and hour or attached to your proposal. Signature of this addendum does not constitute your signature on the original proposal document. The original proposal document should also be signed.

Kind Regards,



Sandra D. White, VCO
Purchasing Manager
Service Category

RSO, INC.
Name of Firm

Sandra D. White, VCO
Signature/Title

9/11/15
Date

RSO, Inc.

Laurel, Maryland

DSBSD Certification # 649589

Virginia Commonwealth University Radioactive Waste Disposal Services
RFP# 6528137SW

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RSO, Inc.
Laurel, Maryland
DSBSD Certification # 649589

**Virginia Commonwealth University Radioactive Waste Disposal Services
RFP# 6528137SW**

Experience and Qualifications of RSO, Inc.

Note: RFP paragraph number and subletter are presented for reference.

(2.a.) Letter of Introduction

Letter of introduction provided as cover letter.

(2.b.) Statement of Needs

Virginia Commonwealth University (VCU) contracts to provide waste management services. The VCU academic research laboratories generate low-level radioactive wastes and mixed (radioactive & hazardous) wastes. VCU is soliciting outside contractors to provide support to manage the radioactive and mixed wastes for disposal. The purpose of this proposal is to present a comprehensive plan to provide for radioactive waste services.

Services requested include supplying packaging materials and labels, shipment preparation and collection of wastes for transfer to authorized processing/ disposal facilities, shipping, maintaining compliance with shipping and disposal requirements, and reporting disposition of waste shipped. VCU may request additional support on a case by case basis. For example Emergency Response Services to support a cleanup effort.

(2.c.) RSO, Inc. Business Structure

RSO, Inc. (RSO) is a Department of Small Business and Supplier Diversity (DSBSD) certified business. RSO is a wholly owned business with no parent or subsidiaries. Our corporate information data sheet is provided in Attachment C.

(2.d.) Company Experience

RSO has provided radioactive waste disposal services to institutions for higher learning for over 40 years. Other institutions serviced by RSO include:

- George Mason University
- Georgetown University
- Johns Hopkins University
- The University of Maryland
- The University of Delaware
- Towson University

(2e.) Benefits

RSO provides a reliable and compliant cost effective service to our customers. RSO has successfully provided this service to VCU and completely understands the requirements and level of service requested in this RFP.

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(2.f.) Personnel Experience and Qualifications

The following individuals will provide the goods and services to VCU. These full time RSO personnel are currently assigned to the existing VCU disposal contract.

Project Manager

The Project Manager is a senior management level position reporting directly to RSO's President. This position is responsible for overall contract objectives, quality of performance, and the integration of the appropriate RSO personnel and departments to the contract effort. The Project Manager is to ensure that the various tasks performed are done so in a safe, efficient, and timely manner. Technical assistance with the VCU Project Manager occurs at this level. RSO will assign the following Project Manager to this project.

Primary: David E. Wellner, Manager, Radioactive Materials Services and Senior Broker (Resume enclosed in Attachment D)

Radioactive Service Technician(s) Operations/Technical Level Employee

The Radioactive Service Technicians used for this work will be trained to the specific VCU shipping procedures. The technician will be responsible for preparing shipping papers, labeling and marking of containers, loading, DOT contamination surveys, coordinating shipments, receiving and transporting wastes from VCU. The Radiation Service Technician will report to the RSO Project Manager.

Primary: David F. Frazier, Radioactive Materials Technician/Driver (Resume enclosed in Attachment D)

Radioactive Service Technician Qualifications

- Experience in the handling, processing and disposal of radioactive materials.
- Extensive training and experience in the basic principles of hazardous materials safety and sound safety practices in the handling and containment of radioactive materials.
- Experience in packaging, marking, labeling, surveying, and manifesting of radioactive materials and training to meet the requirements of the DOT.
- Knowledge of survey instrumentation.
- Experience in implementing emergency procedures in the event of a spill or an accident; experience should encompass emergencies in public and secured areas.
- Experience operator of commercial vehicles hauling radioactive and hazardous wastes.

Secondary: Christina A. Hirschmann, Senior Broker and Radioactive Materials Technician (Resume enclosed in Attachment D)

Radioactive Service Technician Qualifications

- Experience in the handling, processing and disposal of radioactive materials.
- Extensive training and experience in the basic principles of hazardous materials safety and sound safety practices in the handling and containment of radioactive materials.

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- Experience in packaging, marking, labeling, surveying, and manifesting of radioactive materials and training to meet the requirements of the DOT.
- Knowledge of survey instrumentation.
- Experience in implementing emergency procedures in the event of a spill or an accident; experience should encompass emergencies in public and secured areas.
- Experience in radioactive and hazardous waste inventory management including tracking and reporting shipment status, certificates of disposal, and inventory tracking.

(2.g.) RSO License and Permits

RSO maintains the following permits and licenses for the services to be provided in this proposal.

- Radioactive Services License #MD-33-021-01
- Radioactive Waste Services License #MD-33-021-02
- Maryland Controlled Hazardous Waste Hauler Permit #HWH-352
- US Department of Transportation Hazardous Materials Certificate #061314550096WX
- EPA Generator Identification #MDD 06-927-9669

License, permits, and insurance copies provided in Attachment A.

RSO, Inc. Capabilities

(3.a.) Radioactive Materials License

RSO, Inc. license is provided in Attachment A.

RSO, Inc. Subcontractor licenses are provided in Attachment B.

(3.b.) Financial Conditions

An overview of RSO, Inc.'s financial status relevant to the company's financial stability and solvency is provided in the following documents enclosed in Attachment C.

- RSO Financial Statements
- RSO Bank Reference
- RSO Credit Reference Sheet

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(3.c.) Schedule

RSO has the ability to start work immediately upon award. RSO is the current contractor to VCU for these services. There would be no transition impacted on the agencies using the current contract.

(3.d.) Geographic Location

- RSO, Inc. is located at 5204 Minnick Rd. Laurel, MD 20707

Subcontractor Locations

- Energy Solutions, LLC., Oakridge, TN
- Perma Fix of Florida, Inc. Gainesville, FL
- Energy Solutions, LLC, Clive, UT
- Curtis Bay Energy, Baltimore, MD

(3.e.) RSO Uniform

RSO personnel wear company supplied uniforms and personnel protective equipment (PPE). The uniform includes khaki long pants with a navy blue polo style shirt embroidered with RSO, Inc. PPE includes safety shoes, gloves, and safety glasses. Each person also wears an RSO identification badge with employee photograph. Photo of company uniform provided in Attachment E.

(3.f.) RSO Quality Control Procedures

RSO has an extensive Quality Assurance Program which covers all aspects of our operations.

(3.g.) RSO Training

RSO maintains a training database which documents each employees specific training requirements, refresher due dates, and types of certifications. All RSO employees participate in RSO's Radiation Safety Training and Hazmat Employee Training according to specific job functions. Training is performed within the organization and externally using vendors such as Dade Moeller Radiation Safety Academy, DGI Training Center, and HazTrain, Inc. Radioactive waste technicians and radioactive waste brokers complete the following minimum training.

- Radioactive Materials Training in accordance with US DOT, 49 CFR, Part 172, Subpart H.
- Radiation Safety & Security Training
- RSO, Inc. Hazmat Employee Training

Additional training and certifications may include.

- 40 Hour Hazwoper Training OSHA, 29CFR 1910.120
- Special Material Handling and Specification Packaging
- Forklift Safety Operator

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- Respirator Use and Fit Tests

(3.h.) Equipment in Support of Contract

- 3ea. DOT Hazmat collection trucks, two are lift gate equipped.
- Various handling equipment (forklift, hand trucks, drum dollies, etc.)
- PPE including gloves, safety shoes, safety glasses.
- >10,000 Various DOT signs/labels in stock (RSO Product Sales)
- >200 Various shipping containers in stock (drums, super sacks, boxes)
- Various other stock including liners, absorbents, solidification agents.
- ~15 radiation survey meters dedicated to radioactive waste collections.

RSO, Inc. Proposed Fee

Costs and fees associated with providing and performing the radioactive waste disposal pricing are identified in Attachment F.

Plan and Methodologies

(5.a.) Work Plan

RSO will transfer wastes to authorized processing and disposal facilities. RSO will collect waste in RSO owned and operated vehicles.

Waste collections are performed according to a mutually agreeable schedule and usually occur within 10-15 working days of request from VCU. RSO will supply VCU with a collection request inventory form. Upon receipt of the inventory form, RSO will schedule a mutually agreeable collection date and time. Inventory for collection will be reviewed prior to collection for any special DOT limits or shipping requirements. An inventory review will also be completed for compliance and acceptance at the various processing and disposal facilities.

RSO will transfer the various waste types to the following processing and disposal facilities. The dry solid radioactive waste and animal waste will be shipped to Energy Solutions Group, LLC., Oak Ridge, TN for compaction/incineration and burial at Energy Solutions, LLC, Clive UT (ES). Uranyl and thorium wastes will be shipped to EC for burial. Decayed waste will be shipped to Curtis Bay Energy in Baltimore, MD for incineration. The scintillation vials and bulk liquids will be shipped directly to Perma Fix of Florida for fluid extraction and incineration at DSSI in Oakridge, TN.

Manifesting will be completed on the required Nuclear Regulatory Commission Forms 540 and 541 using RSO's portable computerized manifesting system. Hazardous LSV waste will also be documented on a hazardous waste manifest. Transportation to the processor facilities will be performed in RSO owned and operated vehicles. All RSO technician/drivers maintain the following training and certifications.

- Maryland Controlled Hazardous Substance Vehicle Operator Certified
- "Hazmat Worker" trained per 49 CFR

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- Radioactive Material Transportation & Function Specific Training required by 49 CFR
- Commercial Driver License with Hazmat Endorsement and Medical Examiners Certificate

(5.b.) Types of Facilities Currently Serviced for Radioactive Waste Disposal Services

RSO provides radioactive waste disposal services for the following types of facilities. A current customer name is provided for each.

- Colleges and Universities (University of Maryland)
- Biomedical Manufactures and Research Companies (Dupont Chemical)
- Industrial Manufactures (Northrop Grumman)
- Federal & State Government (FBI, USDA, MD State Laboratory)

(5.c.) Personnel

RSO's current number of employees is 15. The listing below provides full-time personnel devoted to radioactive waste disposal. Several employees are trained and qualified to perform multiple listed functions.

- 3ea. Packaging / labeling employees
- 4ea. DOT Hazmat vehicle drivers
- 3ea. Treatment / disposal employees
- 1ea. Supervisory personnel
- 3ea. Non-supervisory personnel

(5.d.) Process for Providing / Performing Services

See Work Plane (5. a.)

(5.e.) RSO Standard Disposal Methods

Waste Type	Process Method	Final Disposition
Dry Solid Waste (compacted drums)	Compaction	Shallow Land Burial
Liquid Scintillation Vials and Bulk Liquids	Incineration	n/a
Animal Carcasses	Incineration	Shallow Land Burial
Decayed Waste	Incineration	Shallow Land Burial

(5.f.) RSO Alternate Disposal Methods

1. RSO can accept bulk liquids in 30 gallon steel drums without over packing into a 55 gallon drum. This method of packaging eliminates the volume charges which are based on the outer container volume. This also reduces the amount of supplies required for over packing. Secondary containment of single walled

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shipping containers is provided by placing the drums on a spill proof containment pallets which are provided by RSO during shipping.

2. Dry solid waste (DSW) disposal charges are based on the gross weight of the container. VCU may benefit from shipping DSW for incineration in boxes instead of compaction in steel drums. This method of disposal would reduce disposal charges and supply costs. Burial site liability is also decreased by incineration because less generator volume is shipped to the burial site after processing. Incineration reduces radioactive waste burial volumes about 100:1 and compaction reduces volumes about 5:1. Incineration is not available for DSW containing large amounts of non-incinerable items ex. glass and metal.
3. RSO maintains and operates a fully licensed and bonded Decay in Storage Program at our Laurel, MD facility. The program enables RSO to provide "turn-key" off-site decay in storage management. The program can accept isotopes with less than 88 day half -lives. RSO tracks each package through the decay process and provides incineration services after the survey for release. Final Certificates of Disposal/Destruction are issued for each package. This service may benefit VCU if on site storage of decay waste becomes unavailable.
4. Liquid scintillation vials may be packaged in 30 gallon drums if volume is limited. This may reduce overall costs of disposing of longer lived isotopes which have been segregated from deregulated isotopes.

(5.g.) Sealed Source Disposal

Sealed sources vary by type, isotope, activity, and physical size. Specific shipping requirements and restrictions apply to each type of source. For these reasons the sources are reviewed and priced for disposal on a case by case basis. RSO provides a Sealed Source Questionnaire Form for customer to submit for specific source information for review.

(5.h.) Implementation Milestones

RSO schedules service on a mutually agreeable schedule and usually performs service within 15-20 working days of request. RSO and radioactive processing facilities operate with a one year possession limit. However in most cases all waste for processing (solids, animals, bulk liquids) is completed and disposed of within 6 months with Disposal Certificates issued thereafter. Due to permitting requirements mixed waste (liquids scintillation vials) are shipped directly to the processing facility with Disposal Certificates issued in approximately 3 months. RSO can offer pricing for express sole use shipment services if needed.

(5.i.) Radioactive Waste Disposal Requirements for VCU

- Scheduling: VCU should contact RSO as early as possible to schedule a collection. This will ensure that RSO meets the desired collection schedule. A copy of the inventory for collection should be forwarded to RSO prior to the desired collection date. This allows RSO to review waste for compliance and begin the process of preparing shipping documents.

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- Special Inventory: RSO will require VCU to provide the specific inventory information prior to collection. Specific wastes types not included in the price schedule may require additional profiling and/or special approvals. Example wastes types include sealed sources, mixed wastes, and high activity wastes.

(6.) References are provided in Attachment G.

RSO is the current radioactive waste contractor for VCU. This service has been successfully performed during our contracting periods. Please consult with the VCU Radiation Safety Department for comments regarding our performance.

(7.) RSO, Inc. is a DSBSD certified small business.

(8.) Proposed Fee: See RFP Attachment 2 – Pricing Schedule

(9.) Exceptions:

- a. VCU Attachment C Item # f & g. Bulk liquids have no listed hazardous waste codes. Bulk liquids are assumed to be hazardous liquid scintillation fluids (toluene, xylene, and or pseudocumene) for incineration. Assumes H-3 or C-14 are less than 10 mCi each.
- b. Pricing for Item f. was provide for the inner 30 gallon drum only.
- c. Pricing for other hazardous bulk liquids and aqueous liquids will be provided on a case by case basis per profile for isotope, activity, and fuel value.
- d. Packaging supplies will be delivered during scheduled waste collections or a separate shipping charge will apply.
- e. Pricing is based on the waste volumes and weights listed. Volumes or weights exceeding listed amounts will be prorated. Weight pricing is per gross container weight. Volume pricing is per outer container size..
- f. All isotopes and activities must meet processing and disposal facility limits.
- g. Other wastes such as sealed sources, uranium/thorium compounds, and other mixed wastes will be priced for disposal on a case by case basis.
- h. Pricing is subject to processing facility and burial site price increases. RSO will provide evidence of any such increases to VCU.

Other Considerations

In addition to radioactive waste services, RSO provide other important support services to Radiation Safety Programs including:

- Certified Health Physics consulting and licensee audits.
- Survey meter calibration and repair.
- Facility decommissioning services and laboratory closure.
- Sealed Source leak testing.
- Licensed temporary storage and consolidation of radioactive material.

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- Relocation or transfer radioactive material.
- Offsite warehouse Decay in Storage Services with contracted incineration.
- Provide 24 Hour Emergency Response Service.
- Rental and Sales of radiation survey equipment and dosimetry.

RSO, Inc.

Attachment A



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Pursuant to the Maryland Radiation Act, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

1. Name: RSO Inc.	3. License No.: MD-33-021-02
2. Address: 5206 Minnick Road Laurel, Maryland 20707	4. Amendment No.: 73 Renewal Code 03223
	5. Expiration Date: January 31, 2021

6. Radioactive material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of activity which licensee may possess at any one time
A. Any radioactive material with atomic numbers from 1-83	A. Any	A. 100 curies
B. Iridium-192	B. Sealed sources	B. 800 curies
C. Source material	C. Any	C. 999 kilograms
D. Special nuclear material	D. Any	D. 200 grams
E. Any radioactive material with atomic numbers from 84-98, except source material and special nuclear material	E. Any	E. 10 millicuries
F. Americium-241	F. Sealed sources	F. 500 millicuries
G. Polonium-210	G. Sealed sources	G. 100 millicuries
H. Radium-226	H. Sealed sources	H. 100 milligrams
I. Any radioisotope with atomic of 83 or less, with a half life of 88 days or less	I. Any	I. 10 curies
J. Any	J. Any	J. As per item 9J
K. Cobalt-57	K. Sealed sources	K. 500 millicuries total possession; no source to exceed 15 millicuries
L. Cesium-137	L. Sealed sources	L. 10 millicuries each; total possession 5 curies
M. Barium-133	M. Sealed sources	M. 100 millicuries total possession; no source to exceed 10 millicuries

9. Authorized Use(s):
A,C-H. To pick up, receive and store pre-packaged licensed material from persons and companies authorized to possess and dispose of same. Storage time will not exceed 1 year for packages to be transferred to other processors or to licensed burial sites. RSO, Inc. will serve as a broker for the processing or disposal of radioactive waste. Brokerage services include transporting or transferring licensed material to licensed processors, burial site, or returning the licensed material to the original generator after processing.



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RADIOACTIVE MATERIAL LICENSE

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- B. To receive and store packages containing Iridium-192, incidental to shipping. To open and inspect inner packaging, and to ship said packages to licensed facilities designated by Nucletron Corporation, Maryland License MD-27-035-01.
 - I. To provide decay-in-storage services for persons and companies authorized to dispose of licensed material by that method. This service will be limited to licensed material having a half-life of 88 days or less, with an on-site storage time of no longer than 2.5 years. After the appropriate storage period, the waste will be returned to the original generator for final monitoring and disposal. RSO, Inc. may perform final monitoring and disposal.
 - J. Licensee will package and prepare for transport, licensed material, sealed sources and devices containing licensed material, uninstall services, and handle and secure portable gauges at field locations, perform decontamination and decommissioning activities, provide emergency response to isolate, identify, package and transport licensed material found in municipal trash and recycle facilities. All operations will be performed at client's facility and other temporary job sites. Licensee is authorized to possess equipment contaminated with residual amounts of activity incidental to providing services listed herein. Notification will be provided to the Agency prior to commencement of work at client site or at temporary job sites.
 - K.-M. Possession, storage and transfer to other licensed facilities.
10. Radioactive material shall be used only at 5204 Minnick Road, Laurel, Maryland 20707, and temporary job sites throughout Maryland and licensed facilities throughout Maryland. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address.
- 11A. The radiation protection program shall be under the supervision of Paul Madairy.
- 11B. Radioactive material shall be used by, or under the supervision of:
- Gregory D. Smith, CHP
 - David E. Wellner
 - David Frazier
 - Christina Hirschmann
 - Dorsey Austin
 - Richard Emmons
 - Paul Madairy
 - Harry Schwartzer
- 12A. The licensee shall comply with all appropriate provisions of COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation," and shall possess a copy of these regulations.
- 12B. All contamination, both in controlled and uncontrolled areas, shall be cleaned to at least 220 dpm/ 100 cm². This condition supercedes any application statements.
13. Leak Testing of sealed sources shall be conducted in accordance with COMAR 26.12.01.01 § D.401.
14. Sealed sources containing radioactive material shall not be opened.



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15. Except for Plutonium contained in a medical device designed for individual application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages, the design of which the Nuclear Regulatory Commission has specifically approved for transport of plutonium by air.
- 16A. The licensee shall not open packages containing radioactive material, except those held for decay in storage.
- 16B. The licensee shall not possess any package containing radioactive material for a period greater than two and one-half years from the date of the receipt of the package.
17. The licensee will be authorized on a case-by-case basis to provide radiation safety services to the inspection, removal, handling and packaging of sealed sources.
18. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
19. Food and beverage containers shall not be discarded in radioactive or normal trash containers in licensee's areas utilizing radioactive materials.
- 20A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.
- 20B. Violation of any term, condition, or regulation could subject the licensee to administrative or civil penalty or criminal prosecution, as specified in Title 8, Radiation, of the Article Environment of the Annotated Code of Maryland.
21. The licensee shall not transfer ownership and/or control of this license to any person or entity without providing required information regarding the transfer for the Agency's review and without receiving written authorization for the transfer by the Agency.
22. The licensee's decommissioning funding plan with letters and attachments dated September 13, 2013, were reviewed and determined to be adequate by the Department of the Environment, in accordance with COMAR 26.12.01.01 C29.



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RADIOACTIVE MATERIAL LICENSE

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23. The licensee shall conduct licensed activities in accordance with the September 13, 2013 Decommissioning Funding Plan (DFP) submitted to the Agency pursuant to COMAR 26.12.01.01C.29(d).
- (a) At intervals not to exceed forty-two (42) months, the licensee shall re-evaluate the DFP and resubmit the plan to the Agency, with adjustments as necessary, to account for changes in costs and the extent of contamination, and also allowing for a 25% contingency. If following the above evaluation, the amount of financial assurance is adjusted downward, the licensee may not change its financial instrument until approved, in writing, by the Agency. The resubmitted DFP must update the information submitted with the original or prior approved plan, and must specifically reconsider the effect of the following events on decommissioning costs:
- (i) Spills of radioactive material producing additional residual radioactivity in onsite subsurface material;
 - (ii) Waste inventory increasing above the amount previously estimated;
 - (iii) Waste disposal costs increasing above the amount previously estimated;
 - (iv) Facility modifications;
 - (v) Changes in authorized possession limits;
 - (vi) Actual remediation costs that exceed the previous cost estimate;
 - (vii) Onsite disposal; and
 - (viii) Use of a settling pond.
- (b) Any future licensee submittal of a financial instrument to the Agency shall include the licensee's name, license number, and the name, address, and other contact information of the issuer, and; if a trust is used, the trustee. When any of the foregoing information changes, the licensee shall, within 30 days, submit, to the Agency, a financial instrument reflecting such changes. The financial instrument submitted must be a signed original or signed original duplicate, except where a copy of the signed original is specifically permitted.



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- (c) The licensee shall use financial assurance funds only for decommissioning activities and shall monitor the balance of funds held to account for market variations. The licensee shall replenish the funds, and report such actions to the Agency, as follows:
- (i) If, at the end of a calendar quarter, the fund balance is below the amount necessary to cover the cost of decommissioning, but is not below 75 percent of the cost, the licensee must increase the balance to cover the cost, and must do so within 30 days after the end of the calendar quarter.
 - (ii) If, at any time, the fund balance falls below 75 percent of the amount necessary to cover the cost of decommissioning, the licensee must increase the balance to cover the cost, and must do so within 30 days of the occurrence.
 - (iii) Within 30 days of taking the actions required by the above, the licensee must provide a written report of such actions to the Program Manager, Radiological Health Program, Air and Radiation Management Administration, Maryland Department of the Environment, and report the new balance of the fund.
- (d) Any surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Agency, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration. Or the licensee must provide a replacement acceptable to the Agency within 30 days after receipt of notification of cancellation.
- (e) The licensee shall insure that the surety method or insurance remains in effect until the Agency has terminated the license.

24. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material authorized by this license in accordance with statements representations, and procedures contained in:
- Application dated February 19, 2013, with attachments.
 - Letter dated May 25, 2013, as a response to deficiency letter.
 - Electronic mail submitting up-dated Decommissioning Funding Plan. Copy is in secured file.
 - Facsimile dated December 17, 2013, authorizing the packaging of sealed sources from Becton Dickinson, Sparks, Maryland 21152.
 - Up-dated Letter of Credit dated December 30, 2013. Copy in secured file.

COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.



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- 25A. The licensee shall comply with the requirements described in the Maryland Department of the Environment Radiological Health Program letter dated November 10, 2005, and attached document entitled "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern." The licensee shall complete implementation of the said requirements on the first date that the radionuclides in quantities of concern are possessed.
- 25B. Pursuant to COMAR 26.12.01.01 Section C.30 (b), the licensee shall comply with the requirements described in NRC Order EA-07-305 with attachments dated December 5, 2007 entitled "Fingerprinting and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material." The requirements listed in the NRC Order shall be implemented as part of the trustworthiness and reliability program of the Increased Controls requirements.
- ❖ By (90 days after the date of this license amendment) of the effective date of this license condition, the licensee shall provide under oath or affirmation, a certification that the Trustworthiness and Reliability Official is deemed trustworthy and reliable by the licensee as required in paragraph B.2. of the U.S. Nuclear Regulatory Commission (NRC) Order EA-07-305, published in the Federal Register on December 13, 2007 [72 FR 70901]
 - ❖ All fingerprints obtained by the licensee pursuant to this requirement must be submitted to the NRC for transmission to the U.S. Federal Bureau of Investigation (FBI). Additionally, the licensee's submission of fingerprints shall also be accompanied by a certification, under oath or affirmation, of the Trustworthiness and Reliability Official as required by paragraph B.2. of NRC Order EA-07-305
 - ❖ The licensee shall complete the implementation of the fingerprinting requirements by (date 180 days post the date of this license amendment). The licensee shall notify the Agency when they have achieved full compliance with the requirements described in the NRC Order. The notification shall be made within twenty-five (25) days after full compliance has been achieved.
 - ❖ The licensee shall notify the Agency within 24 hours if the results from a criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.



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25C. To ensure nationwide implementation of the National Source Tracking System (NSTS), consistent with the startup of the NSTS computer database as imposed by 10 CFR Part 20.

* The licensee must comply with the initial inventory reporting requirement in 10 CFR 20.2207(h) for nationally tracked sources by the dates imposed in that paragraph. The licensee must also comply with the reporting requirements for transactions involving nationally tracked sources in 10 CFR § 20.2207. This section includes the requirement to report any manufacture, transfer, receipt, disassembly, or disposal of a nationally tracked source, otherwise allowed by this license, by the close of the next business day after the transaction. A nationally tracked source, as defined in 10 CFR § 20.1003, refers to a sealed source containing a quantity equal to or greater than Category 1 or Category 2 levels of any radioactive material listed in Appendix E to 10 CFR Part 20 - "Nationally Tracked Source Thresholds."

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher, Program Manager IV
Radiological Health Program
Air and Radiation Management Administration

January 9, 2014

CAN

Car 1/9/2014
BFD
1/14/14



CERTIFICATE OF LIABILITY INSURANCE

RSO-1 OP ID: KW

DATE (MM/DD/YYYY)
06/11/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER The Jacobs Company, Inc. 7164 Columbia Gateway Drive Columbia, MD 21046-1448 John L. Voigt, ARM, CIC		Phone: 410-995-6611 Fax: 410-381-2105	CONTACT NAME: Donna Stephens PHONE (A/C, No, Ext): 410-910-8363 FAX (A/C, No): 410-381-2105 E-MAIL ADDRESS: dstephens@jacobscompany.com
INSURED RSO, Inc. P.O. Box 1450 Laurel, MD 20725-1450		INSURER(S) AFFORDING COVERAGE INSURER A : Chesapeake Employers Insurance NAIC # 11039 INSURER B : Nautilus Insurance Company INSURER C : Great Divide Insurance Co. INSURER D : INSURER E : INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Blanket Addl Insd GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			ECP200278113 ONGOING&COMPLETED OPS	06/11/2015	06/11/2016	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
C	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS			BAP153275413	06/11/2015	06/11/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			FFX200545012	06/11/2015	06/11/2016	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 FOLLOWS FORM
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N N/A			2100003RT	06/27/2015	06/27/2016	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liab			ECP200278113	06/11/2015	06/11/2016	Occ Limit 2,000,000
B	Pollution Liab			ECP200278113	06/11/2015	06/11/2016	Agg Limit 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

E: Insurance Verification

CERTIFICATE HOLDER

RSOIN-0

 RSO, Inc.
 Attn: Christina Hirschmann
 P.O. Box 1450
 Laurel, MD 20725-1450
CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Donna Stephens

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This is to acknowledge that you have filed a 2003 Hazardous Waste Report in accordance with the Resource Conservation and Recovery Act (RCRA).

This notice confirms the information change(s) **CORRECTED MAILING ADDRESS** as noted on your RCRA Subtitle C Site Identification Form as a Subsequent Notification or in your letter received by this Office on **SEPTEMBER 27, 2004**.

Your request has been processed and noted in the appropriate databases and files

EPA ID NUMBER:

MDD 069 279 669

DATE PROCESSED:

OCTOBER 5, 2004

INSTALLATION NAME & MAILING ADDRESS:

RSO INC
ATTN: CHRISTINA CALOGERO
PO BOX 1450
LAUREL MD 20725-1450

INSTALLATION LOCATION ADDRESS:

5204 MINNICK ROAD
LAUREL MD 20707

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION



HAZARDOUS MATERIALS
CERTIFICATE OF REGISTRATION
FOR REGISTRATION YEAR(S) 2014-2016

Registrant: RSO INC
Attn: DAVID E WELLNER
5204 MINNICK ROAD
LAUREL, MD 20707

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 061314 550 096WX **Issued:** 06/13/2014 **Expires:** 06/30/2016
HM Company ID: 000768

Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

- (1) A copy of the registration statement filed with PHMSA; and
- (2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

RSO, Inc.

Attachment B

Energy Solutions Services, Inc.

Oak Ridge, TN



DALW

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 DIVISION OF RADIOLOGICAL HEALTH
 WILLIAM R. SNODGRASS TENNESSEE TOWER, 15th FLOOR
 312 ROSA L. PARKS AVENUE, NASHVILLE, TENNESSEE 37243

RADIOACTIVE MATERIAL LICENSE

Amendment 184

Pursuant to Tennessee Department of Environment and Conservation Regulations, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

LICENSEE		3. License number	R-73008-D24
1. Name	EnergySolutions Services, Inc.	4. Expiration date	April 30, 2024
2. Address	1560 Bear Creek Road Oak Ridge, TN 37830	5. File no.	R- 73008
6. Radioactive Material (Element and Mass Number)	8. Chemical and/or physical form	9. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.	
See Supplementary Sheets			
10. Authorized Use			
See Supplementary Sheets			

CONDITIONS

11. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

See Supplementary Sheets

Date of Issuance: March 19, 2015

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For the Commissioner
 Tennessee Department of Environment and Conservation

By: Charles Arnott

Division of Radiological Health
 Charles Arnott
 Health Physicist



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License Number R-73008-D24

6. Radioactive Material (Element and Mass Number)	8. Chemical and/or Physical Form	9. Maximum Radioactivity and/or Quantity of Material Which Licensee May Possess at Any One Time
A. Mixed activation and fission products with atomic numbers 3-83 inclusive (not Carbon 14 or Iron 55)	A. Any form as suitable for transport under U.S. DOT Regulations	A. 5000 Curies +
B. Hydrogen 3	B. Same as 8.A.	B. 400 Curies +
C. Carbon 14	C. Same as 8.A.	C. 200 Curies +
D. Iron 55	D. Same as 8.A.	D. 5000 Curies +
E. Polonium 210	E. Same as 8.A.	E. 10 Curies +
F. Radium 226	F. Same as 8.A.	F. 20 Curies +
G. Thorium 232	G. Same as 8.A.	G. 20 Curies +
H. Uranium – depleted and natural	H. Same as 8.A.	H. 350 Curies +
I. Uranium (not Uranium 233, Uranium 235, or Uranium 238)	I. Same as 8.A.	I. 2 Curies +

+ Combined possession limit for EnergSolutions licenses R-73008 and R-73016 at the Bear Creek site



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J. Uranium 233	J. Same as 8.A.	J. 200 grams * +
K. Uranium enriched in Uranium 235	K. Same as 8.A.	K. 350 grams * + of contained U-235
L. Plutonium	L. Same as 8.A.	L. 200 grams * +
M. Americium 241	M. Same as 8.A.	M. 10 Curies +
N. Transuranics (not Plutonium or Americium 241)	N. Same as 8.A.	N. 2.5 Curies +
O. Radioactive materials with atomic numbers 84-91 inclusive (not Polonium 210, Radium 226, or Thorium 232)	O. Same as 8.A.	O. 2.5 Curies +
P. Any radioactive material (except special nuclear)	P. Sealed sources (Model numbers listed in NRC Registry of Sealed Sources and Devices), surface-deposited disc and plane sources, and volumetric reference sources	P. No single source to exceed 5 millicuries. Total not to exceed 10 millicuries.

* For each kind of special nuclear material determine the ratio between the quantity of that special nuclear material and the quantity specified here for the same kind of special nuclear material. The sums of such ratios for all kinds of special nuclear material in combination shall not exceed "1" (i.e. unity).

+ Combined possession limit for EnergySolutions licenses R-73008 and R-73016 at the Bear Creek site.



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License Number R-73008-D24

- | | | |
|---------------|--|---|
| Q. Cesium 137 | Q. Sealed sources
(Model numbers listed on page 2 of NRC's Registry of Sealed Sources and Devices, Numbered CA 598D107S, dated August 22, 1995), J. L. Shepherd & Associates Type 6810 Capsule Serial #132, and New England Nuclear Type G-316B Capsule, Serial #KR-2751) | Q. One (1) J. L. Shepherd source not to exceed 400 Curies

One (1) New England Nuclear source not to exceed 140 millicuries |
| R. Cesium 137 | R. Sealed source
(Model numbers listed on page 2 of NRC's Registry of Sealed Sources and Devices, Numbered CA 598D106S dated September 29, 1998), J. L. Shepherd & Associates Type 6810 Capsule, Serial #Z-39 | R. One (1) source not to exceed 30 millicuries |
| S. Cesium 137 | S. Sealed source
(Model numbers listed on page 2 of NRC's Registry of Sealed Sources and Devices, Numbered CA 598D107S dated August 22, 1995), J. L. Shepherd & Associates Type A0096-5 S.N. 81Cs-s55) | S. One (1) source not to exceed 400 Curies |
| T. Cesium 137 | T. Sealed source
(Model numbers listed on page 2 of NRC's Registry of Sealed Sources and Devices, | T. One (1) source not to exceed 2 Curies |



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Safety Evaluation of Device,
 Numbered CA 598D106S
 dated September 29, 1998),
 J. L. Shepherd & Associates
 Type VDHP Capsule, S.N. CSV-105

U. Cesium 137

U. Sealed source
 (Model numbers listed
 on page 2 of NRC's Registry of
 of Sealed Sources and Devices,
 Safety Evaluation of Device,
 Numbered CA 598D112S
 dated November 15, 1993),
 J. L. Shepherd & Associates
 Type X.8 Capsule, S.N. ES-5

U. One (1) source not
 to exceed 20
 millicuries

10. Authorized Use

- A. through O. Receipt, possession, storage, unpacking, processing, compaction, incineration, decontamination, release for unrestricted use, repacking, and transfer of radioactive waste when packaged in accordance with U.S. Department of Transportation requirements for interstate commerce in accordance with documents referenced in conditions of this license
- P. Instrumentation standardization and calibration sources
- Q. For use in J. L. Shepherd & Associates Model 89 calibrator for the purpose of calibration of radiation detection equipment
- R. For use in J. L. Shepherd and Associates Model 28-5A low range beam calibrator for the purpose of calibration of portable radiation detection equipment and calibration of pocket and electronic dosimeters
- S. For use in a J. L. Shepherd and Associates Model 89 calibrator for the purpose of calibration of radiation detection equipment



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- T. For use in a J. L. Shepherd & Associates Model 28-6A calibrator for the purpose of calibration of radiation detection equipment and calibration of pocket and electronic dosimeters.
- U. For use in J. L. Shepherd and Associates Model 423 dosimeter calibrator/irradiator for the purpose of calibration of pocket and electronic dosimeters.

Conditions

- 12. The licensee shall comply with applicable provisions of 0400-20-04, 0400-20-05, and 0400-20-10 of "State Regulations for Protection Against Radiation."
- 13. Radioactive material authorized by this license shall be used and stored at the EnergySolutions Services, Inc. Bear Creek Facility, 1560 Bear Creek Road, Oak Ridge, TN.
- 14. A. Radioactive material authorized by this license shall be used by, or under the supervision of, the following authorized users as specified:
 - Incinerator Facility - Brian Parsons, Darrell Hutton, Rex Ensley, David Poole, David King, Daryl Burnworth, Leslie Russell, Keith Woods, Kyle Davis, Billy Henderson, Jr., Douglas Bryant, Nevin Scarboro, Justin Givens, Michael Jones, Justin Goodman, or Michael Court
 - Central Volume Reduction Facility (CVRF) - Brian Parsons, Darrell Hutton, Jack Clark, Brian Crabtree, Chuck Cooney, Bobby Collins, Rhonda Jackson, Seressa Thomas, or Carl Lehman
 - Site Logistics (storage, tracking, inventory) - Brian Mayes, Bruce Stephenson, Fred Schulz, Brad Melton, or Nick Arden
 - Bear Creek East (BCE) - Jeff Humphreys, Darrell Hutton, Jeff Dickinson, Mike Prysmont, Anthony Riggs, Mike Crouch, Mike Pauli, Mike Yonce, or John Barncord

B. Authorized user presence during operations is defined below:



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1. An authorized user shall be present on site during incinerator operation or Ultra Compactor use. An incinerator is considered to be in operation when burning fuel gas, oil, or waste, or when thermocouples T1, T2, or T3 indicate greater than or equal to 600 degrees C.
 2. An authorized user shall be available for telephone consultation during periods when other authorized activities are being conducted in the Incinerator area, Sort A or B warehouse, LVRF and associated areas, CVRF area or warehouse and associated areas.
 3. A Radiation Safety Technician shall be on site during all work performed in Radiologically Controlled Areas associated with this license.
- C. The Radiation Safety Officer for this license is Duane R. Quayle.
15. A. The licensee shall develop and maintain a written radiation protection manual that ensures the implementation of the radiation protection program in accordance with "State Regulations for Protection Against Radiation" (SRPAR), ALARA, and documents referenced in conditions of this license. Changes to this manual require prior written approval from the Department.
 - B. In addition, the licensee shall develop and implement written standard operating procedures to ensure all activities involving the handling and/or use of radioactive materials authorized by this license are carried out in a manner consistent with SRPAR, ALARA, the licensee's radiation protection manual, and the documents referenced in conditions of this license.
 - C. These procedures may be modified without prior approval of the Department when deemed appropriate and documented by the Radiation Safety Officer. However, adherence to the current procedures as written shall be considered a condition of this license. The written procedures required by this condition shall be available for inspection by the Department. A copy of the current procedures shall be forwarded to the Department upon request.
16. The licensee is authorized to operate the Instrument Services Facility (ISF) in Building B of the Bear Creek East (BCE) site which includes supply, maintenance, calibration, and repair



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- of radiation detection equipment and pocket and electronic dosimeters including for external customers in accordance with statements, representations, and procedures contained in documents referenced in conditions of this license.
17. The gaseous effluent from incineration shall not exceed the annual average radionuclide limits specified for air in SRPAR 0400-20-05-.61, RHS 8-30, Table II, Col. 1.
 18. The licensee in making disposal of radioactive wastes to the sanitary sewerage system shall do so in conformity with 0400-20-05-.122 of "State Regulations for Protection Against Radiation."
 19. The licensee is authorized to release asphalt/concrete from areas previously used for radioactive material storage in accordance with statements, representations, and procedures contained in the *EnergySolutions* Tennessee Radiation Safety Guide (RSG-1). Asphalt/concrete released in accordance with this condition shall not be reintroduced to the general public for use as fill or recycling.
 - 20.A. No radioactive material (excluding calibration and standardization sources) or radioactive waste (radioactive material that has no further use that is to be dispositioned for disposal) may be possessed under this license (to also include waste generated under the authority of this license) from the time of receipt acceptance until its transfer from the facility, for a period of time greater than three hundred sixty five (365) days. Exceptions to this constraint are listed as follows:
 1. Equipment, specifically licensed or otherwise authorized, and stored on-site for future use: (1) at a location authorized by a *EnergySolutions* Services Tennessee Radioactive Material License or (2) at a location where such equipment is authorized by the agency having jurisdiction.
 2. Up to 20,000 cubic feet of radioactive waste may be stored for an unlimited period of time. Radioactive waste stored under this provision shall not include TRU (waste containing concentrations greater than 100 nCi/gm of transuranics) or mixed waste (radioactive waste which exhibits the characteristics outlined in 40 CFR Part 261 Subpart C or which contain hazardous wastes listed in 40 CFR Part 261 Subpart D). The licensee shall maintain records of the receipt and storage of this material such that its volume and location are readily identifiable.



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- B. No radioactive material or radioactive waste may be stored so as to exceed the following stacking limits:

<u>Container Type</u>	<u>Stacking Limit</u>
1. Drums	3 high
2. B-25 Boxes	3 high
3. B-12 Boxes	5 high
4. Sea-Land Cont.	2 high
5. Any other strong tight container.	10 feet nominal

- C. This condition also includes "waste radioactive material" generated under the authority of this license.
21. Radioactive material, contaminated equipment, and empty radioactive material containers may be stored in accordance with statements representations, and procedures contained in documents referenced in conditions of this license, provided that radiation levels for unrestricted areas are not exceeded. This material must be stored in either locked DOT intermodal containers as described in Title 49 Code of Federal Regulations (CFR), Part 171.8 or DOT approved strong tight containers. In addition to these requirements the following criteria and restrictions must be adhered to whenever radioactive materials are stored:
1. Containers used for outside storage of radioactive materials must be capable of withstanding environmental conditions.
 2. Radiation levels from stored empty containers shall not exceed an average of 0.5 mR/hr, and hot spot activity shall not exceed 2 mR/hr.
 3. Outside storage of containers with radioactive waste and/or DOT Empty containers is only permitted in paved (asphalt or concrete) areas. Storage on grass, dirt, or gravel of containers with radioactive waste and/or DOT Empty containers is specifically prohibited.
 4. Soil samples must be collected and analyzed at least quarterly along the edges of outside asphalt or concrete pads where radioactive materials are stored and along the perimeter



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fence to ensure that there is no buildup of radioactive contamination. Data from these samples must be maintained for inspection by the Department.

5. Each designated outside storage area shall be equipped with identifiable markers (sign postings) at each corner to clearly identify the boundary. In addition, the space between these markers shall be painted on the surface of the asphalt/concrete or otherwise marked to further identify the storage areas.
6. *EnergySolutions* Empty containers (loose surface contamination levels less than 1000 dpm/100 cm² beta/gamma and less than 100 dpm/100 cm² alpha external and internal) and Green Is Clean Empty containers are permitted to be stored on any surface (e.g. paved, grass, dirt, or gravel) within any area that is routinely monitored by the environmental sampling program for radioactivity within the licensed property.

The combined authorizations for storage under this license and R-73016-A15 shall be in accordance with the Bear Creek Operations Radioactive Material/Waste Container Storage Plan REV 10.

22. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination are not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:
 - A. Radioactive waste material shall not be stored with non-radioactive waste.
 - B. A written record of all radioactive waste material shall be maintained until it has been determined by a suitable survey or radioassay that it has decayed to background levels or until it has been shipped to an authorized recipient in accordance with applicable regulations. Accountability of radioactive waste material prepared for shipment but not yet shipped from the licensee's premises shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.



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- C. For material which has decayed to background levels as determined by radioassay or external level as measured with appropriately calibrated instruments, records shall indicate that the material was determined to be no longer radioactive and will indicate the methods and results of the survey or analysis.
- D. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that this material has been received.
- E. Transfer of radioactive waste to a land disposal facility or a licensed waste handler shall be done in accordance with 0400-20-05-.125 of "State Regulations for Protection Against Radiation."
- F. All records and written confirmations required by this condition shall be maintained for inspection by the Department.

The requirements of this condition are in addition to any other requirements for the handling and/or disposal of radioactive material contained in this license and "State Regulations for Protection Against Radiation."

- 23. The licensee shall not accept either radioactive waste and/or items contaminated or potentially contaminated with licensable quantities of radioactive material or radioactive materials or items from licensable activities for repackaging, processing, refurbishing, storage pending disposal or disposal unless the shipper of such waste possesses a valid license for delivery issued pursuant to 0400-20-10-.32 of "State Regulations for Protection Against Radiation."
- 24. Written assurances must be furnished by the facility shipping the radioactive material indicating that the facility may accept return of the material processed or unprocessed. In addition, for states outside the Southeast Compact the state or appropriate Compact must be a signatory to the Interregional Access Agreement for Waste Management or assurances shall be obtained from the appropriate state governor's office, the state radiation control program, and the appropriate Compact official, if any.
- 25. The licensee shall establish in every contractual obligation relating to radioactive materials the ability to return radioactive materials, processed or unprocessed, to the prior licensed or exempt possessor.



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26. A. Beta and/or gamma sealed sources containing more than 100 microcuries, and alpha sealed sources containing more than 10 microcuries, authorized by this license shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to transfer, the sealed source shall not be put into use until tested.
- B. The licensee is authorized to perform leak testing of sealed sources and analytical services for EnergySolutions facilities, and for hire, in accordance with statements, representations, and procedures contained documents referenced in conditions of this license. Customers shall be provided with leak test results in microcuries.
- C. The tests shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample, or in the case of radium, the escape of radon at the rate of 0.001 microcurie per 24 hours. The test sample shall be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.
- D. If the test reveals the presence of 0.005 microcurie or more of removable contamination, or in the case of radium, the escape of radon at the rate of 0.001 microcurie or more per 24 hours, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Division of Radiological Health, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee, 37243, describing the equipment involved, the test results, and the corrective action taken.
27. The licensee shall not open or remove sealed sources containing radioactive material from their respective source holders.
28. Maintenance and repair of instrument calibrators shall be performed in accordance with the manufacturer's instructions.
29. To prevent tampering or removal by unauthorized personnel, each calibration device containing radioactive material authorized by this license shall be secured in a locked storage container or area when not being used.



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DIVISION OF RADIOLOGICAL HEALTH
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312 ROSA L. PARKS AVENUE, NASHVILLE, TENNESSEE 37243

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30. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources and/or devices received and possessed under this license. Records of inventories shall be maintained for inspection by the Department.
31. The licensee is authorized to receive, possess, and use any radioactive material distributed under a general license, issued by the U. S. Nuclear Regulatory Commission, or another Agreement State, without being specifically referenced in Items 6, 8, 9 and 10 of this license. Notwithstanding any other conditions of this license, the general licensee may possess and use radioactive material received under the provisions of 0400-20-10 of "State Regulations for Protection Against Radiation" in accordance with the requirements provided at the time of the transfer of the radioactive material under the terms of the general license.
32. The following evaluations shall be performed for all process ventilation systems:
 - 1) Air balance within the RCA at least semi-annually, and following any ventilation system or process changes which could potentially alter the effectiveness of the system,
 - 2) Particulate removal efficiency of the main filtration system HEPA filters by DOP or comparable testing in accordance with pertinent ANSI standards immediately following installation of new HEPA filters or at least semi-annually.
33. In addition to other requirements of this license or of Chapter 0400-20-05-.60 of "State Regulations for Protection Against Radiation," the licensee shall conduct operations so that radiation levels in unrestricted areas would not cause an individual, assuming an occupancy of one (1), to receive a total effective dose equivalent in excess of 500 millirems in one calendar year. These radiation levels shall be appropriately monitored by the licensee, and records of such monitoring shall be maintained for inspection by the Department. For calculational purposes of this condition, the licensee shall base its anticipated exposure to a member of the public upon the sum of the maximally exposed TLD (or equivalent dosimeter) and the highest air concentration derived using the latest available pertinent data.
34. The total annual maintenance fee amount due for this license is \$72,000.00.
35. The licensee is authorized to utilize elemental partitioning factors presented in Table C3 of Draft NUREG-1783 "Assessment of Radioactivity in Sewage Sludge: Modeling to Assess



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- Radiation Doses” to adjust the tritium, carbon, iodine, and selenium radioisotopes tracked to the hearth ash from the incinerator in accordance with statements, representations, and procedures contained in letter dated August 9, 2004, with attachments.
36. In accordance with statements, representations, and procedures contained in letter dated August 16, 2004, the licensee is authorized to simultaneously incinerate depleted uranium in proportions that will result in a depleted uranium ash (<0.711% enriched in the isotope Uranium 235). Notwithstanding the statement in the letter dated August 16, 2004, concerning the discontinuance of confirmatory sampling, the licensee shall perform confirmatory sampling to verify the downblended concentration in order to account for the disposition of incinerated uranium.
 37. The licensee is authorized to incinerate non-explosive gaseous radioactive material by direct injection of these radiogases into the incinerator in accordance with statements, representations, and procedures contained in letter dated June 7, 2005.
 38. The licensee is authorized to institute the contractual mechanisms described in letter dated November 15, 2005, for international customers to demonstrate compliance with the ability to return radioactive materials, processed or unprocessed, to the prior licensed or exempt possessor.
 39. The licensee is authorized to process compressed gases and liquids contained in contaminated vessels in accordance with statements, representations, and procedures contained in letter dated February 21, 2006, with attachments.
 40. The licensee is authorized to modify the Waste Attribution Section of the radioactive material license application to reflect changes in incinerator ash attribution and tracking in accordance with statements, representations, and procedures contained in letters dated August 9, 2004, with attachments, January 4, 2005, August 2, 2005, with attachments, and April 20, 2006, with attachment, document entitled “Incinerator Ash Attribution: Process Review” dated September 20, 2005, and e-mail (from Philip Gianutsos) dated April 12, 2006, with attachment.
 41. The licensee is authorized to implement a recycling/reuse process that uses waste ion exchange resins received from customers in accordance with statements, representations, and procedures contained in letter dated November 10, 2006.



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42. The licensee is authorized to survey and release bulk tankers following shipment of liquids in accordance with statements, representations, and procedures contained in letter dated November 17, 2006.
43. The licensee shall comply with the requirements described in Order EA-07-305 (the Order). The licensee shall complete implementation of said requirements by November 10, 2008. The licensee shall notify the Division of Radiological Health when they have achieved full compliance with the requirements described in the Order. The notification shall be made within twenty-five (25) days after full compliance has been achieved. This notification shall include a certification that the Trustworthiness and Reliability (T&R) Official (and any subsequent T&R Official) is themselves deemed trustworthy and reliable by the Licensee as required in paragraph B.2. of the Order. The licensee shall notify the Division of Radiological Health within 24 hours if the results from a criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.
44. The licensee must comply with the reporting requirements for transactions involving nationally tracked sources in accordance with 0400-20-05-.163 of "State Regulations for Protection Against Radiation."
45. The licensee is authorized to install, test, and operate a production process as described in attachment to letter dated June 11, 2009, for the production of usable reagents and waste treatment. This condition also grants authorization to use the output of the process for treatment of low level radioactive wastes that require treatment for leachable metals, neutralization of contaminated acids, and related applications. These authorizations shall be conducted in accordance with statements, representations, and procedures contained in letter dated June 11, 2009, with attachments.
46. The licensee is authorized to install and operate a continuously fed liquid drying unit for domestic and international high solid aqueous liquid waste streams in accordance with statements, representations, and procedures contained in letters dated March 7, 2011, with attachments, June 28, 2011, and February 21, 2013.
47. No provision of this license relieves the licensee from compliance with other Federal, State, and local laws, ordinances, and regulations applicable to the licensee's activities.



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48. A. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in the following:
- Application dated February 14, 2014, with attachments
 - Document entitled "Incinerator Ash Attribution: Process Review" dated September 20, 2005
 - E-mail (from Philip Gianutsos) dated April 12, 2006, with attachments
 - Letters dated August 9, 2004, with attachments, August 16, 2004, January 4, 2005, June 7, 2005, August 2, 2005, with attachments, November 15, 2005, February 21, 2006, with attachments, April 20, 2006, with attachment, November 10, 2006, November 17, 2006, June 11, 2009, with attachments, March 7, 2011, with attachments, June 28, 2011, February 21, 2013, with attachments, January 21, 2014, with attachments, February 11, 2014, with attachments, August 25, 2014, (two letters with this date, both with attachments), and **March 3, 2015, with attached EnergySolutions Tennessee Radiation Safety Guide (RSG-1), Revision 10.**
- B. The licensee shall comply with the requirements for Agreement State "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern." The licensee shall complete implementation of said requirements by the first day that radionuclides in quantities of concern are possessed at or above the limits specified in "Table 1: Radionuclides of Concern." The licensee shall notify the Division of Radiological Health in writing when it has completed the requirements of this condition.

Energy Solutions, LLC

(Energy Solutions)

Salt Lake City, UT



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF RADIATION CONTROL
Rusty Lundberg
Director

DEC 03 2012

November 29, 2012

Sean McCandless, Director of Compliance and Permitting
EnergySolutions, LLC
423 West 300 South, Suite 200
Salt Lake City, Utah 84101

RE: Radioactive Material License Number UT 2300249

Dear Mr. McCandless:

This is to acknowledge receipt of your application dated October 25, 2012 (CD12-0277) for renewal of the radioactive material license identified above. Your application was filed for renewal more than 90 days prior to the expiration and it meets the requirements established in the Utah Radiation Control Rules. The license will not expire before final action has been taken.

Enclosed is a revised first page of the license indicating the license is under timely renewal. Any correspondence regarding the renewal application should reference your license number. Should you have any questions concerning this letter, please feel free to call me at 801-536-4250.

Sincerely,

John Hultquist, LLW/Uranium Mill Program Manager
Division of Radiation Control

LICENSE AMENDMENT

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF RADIATION CONTROL
RADIOACTIVE MATERIAL LICENSE**

Pursuant to Utah Code Ann. Title 19, Chapter 3 and the Radiation Control Rules, Utah Administrative Code R313, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material designated below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This licensee is subject to all applicable rules, and orders now or hereafter in effect and to any conditions specified below.

 - LICENSEE) 3. License Number UT 2300249
) Amendment # 14
 1. Name: EnergySolutions, LLC (EnergySolutions)) *****
) 4. Expiration Date
 2. Address: 423 West 300 South) January 25, 2013 (under timely
 Suite 200) renewal)
 Salt Lake City, UT 84101) *****
) License Category - 4-a

6.	Radioactive material (element and mass number)	7.	Chemical and/or physical form	8.	Maximum quantity licensee may possess at any one time
A.	Any Radioactive Material including Special Nuclear Material specified in License Condition 13 A through J.	A.	Notwithstanding Conditions 9 (Authorized Use), 16 (Prohibitions and Waste Requirements); and 56 (containerized waste), typically large volume, bulky or containerized, soil or debris. Debris can include both decommissioning (cleanup) and routinely generated operational waste including but not limited to radiologically contaminated paper, piping, rocks, glass, metal, concrete, wood, bricks, resins, sludge, tailings, slag, residues, personal protective equipment (PPE) that conforms to the size limitations in currently approved QA/QC Manual.	A.	20,000 Curies***
B.	Special Nuclear Material	B.	See 7.A of this license	B.	As specified in License Condition 13.A through J.



LICENSE AMENDMENT

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF RADIATION CONTROL
RADIOACTIVE MATERIAL LICENSE

Pursuant to Utah Code Ann. Title 19, Chapter 3 and the Radiation Control Rules, Utah Administrative Code R313, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material designated below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This licensee is subject to all applicable rules, and orders now or hereafter in effect and to any conditions specified below.

 LICENSEE) 3. License Number UT 2300249
) Amendment # 20
 1. Name: EnergySolutions, LLC (EnergySolutions))*****
) 4. Expiration Date
 2. Address: 299 South Main Street) January 25, 2013
 Suite 1700) (under timely renewal)
 Salt Lake City, UT 84111)*****
) License Category – 4-a

6.	Radioactive material (element and mass number)	7.	Chemical and/or physical form	8.	Maximum quantity licensee may possess at any one time
A.	Any Radioactive Material including Special Nuclear Material specified in License Condition 13 A through J.	A.	Notwithstanding Conditions 9 (Authorized Use), 16 (Prohibitions and Waste Requirements), and 56 (containerized waste), typically large volume, bulky or containerized, soil or debris. Debris can include both decommissioning (cleanup) and routinely generated operational waste including but not limited to radiologically contaminated paper, piping, rocks, glass, metal, concrete, wood, bricks, resins, sludge, tailings, slag, residues, personal protective equipment (PPE) that conforms to the size limitations in currently approved QA/QC Manual.	A.	20,000 Curies***
B.	Special Nuclear Material	B.	See 7.A of this license	B.	As specified in License Condition 13.A through J.

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 SUPPLEMENTARY SHEET

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6. Radioactive material (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
		(1,000 Ci) total except as specified by Condition 15
C. Cesium-137	C. Sealed Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	C. Not to exceed 11 millicuries per source; Not to exceed 6 sources total
D. Americium-241	D. Sealed Neutron Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	D. Not to exceed 51 millicuries per source; Not to exceed 6 sources total.
E. Americium-241 Americium-243 Neptunium-237 Plutonium-236 Plutonium-239 Plutonium-242 Thorium-229 Thorium-230 Uranium-232 Uranium-238 Curium-244 Hydrogen-3 Carbon-14 Iron-55 Nickel-59 Nickel-63 Technetium-99	E. Liquid	E. Not to exceed 5 microcuries total activity per isotope; Not to exceed 16 sources total.
F. Strontium-90/Yttrium-90	F. Liquid	F. Not to exceed 5 microcuries total activity
G. Americium-241	G. Sealed Source(s) registered pursuant to R313-22-210 or an	G. Not to exceed 5 microcuries total

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6.	Radioactive material (element and mass number)	7.	Chemical and/or physical form	8.	Maximum quantity licensee may possess at any one time
			equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation		activity
H.	Thorium-230	H.	Sealed Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	H.	Not to exceed 48.6 microcuries total activity
I.	Plutonium-239	I.	Sealed Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	I.	Not to exceed 21.9 microcuries total activity
J.	Strontium-90/Yttrium-90 and Americium-241	J.	Sealed Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	J.	Not to exceed 8.1 millicuries per source; Not to exceed 6 sources total.
K.	Am-241, Cd-109, Co-57, Te-123m, Cr-51, Sn-113, Sr-85, Cs-137, Co-60, Y-88, Th-230, Na-22, Mn-54, Eu-155 and Pb-210	K.	Calibration or Reference Source(s)	K.	Not to exceed 5 microcuries per isotope; Not to exceed 25 sources total.
L.	Uranium-234, Uranium-235, Uranium-238, Americium-241, and Plutonium-239	L.	Calibration or Reference Source(s)	L.	Not to exceed 20 nanocuries per isotope
M.	Cobalt-60 and Cesium-137	M.	Calibration or Reference Combined Source(s)	M.	Not to exceed 0.4 microcuries per source; Not to exceed 6 sources total.
N.	Reserved	N.	Reserved	N.	Reserved
O.	Americium-241 and Europium-152	O.	Calibration or Reference Combined Sources	O.	Not to exceed 2 microcuries per source; Not to exceed 4 sources total.

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6.	Radioactive material (element and mass number)	7.	Chemical and/or physical form	8.	Maximum quantity licensee may possess at any one time
P.	Cesium-137	P.	Sealed Source(s) registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation	P.	Not to exceed 12 millicuries per source; Not to exceed 3 sources total.

***Applies to undisposed maximum quantity at the Class A West disposal cell and the Mixed Waste landfill cell.

9. AUTHORIZED USE

- A. Licensee may receive, store, and dispose by land burial, radioactive material as naturally occurring and accelerator produced material (NARM) and low-level radioactive waste. Prior to receiving an initial, low-level radioactive waste shipment for disposal from a generator, the Licensee shall obtain documentation which demonstrates that the low-level radioactive wastes have been approved for export to the Licensee. Approval is required from the low-level radioactive waste compact of origin (including the Northwest Compact), or for states unaffiliated with a low-level radioactive waste compact, the state of origin, to the extent a state can exercise such approval.
- B. In accordance with Utah Code Annotated 19-3-105, the Licensee may not receive Class B or Class C low-level radioactive waste without first receiving approval from the Director of the Utah Division of Radiation Control (Director) and also receiving approval from the Governor and the Legislature.
- C. The Licensee shall fulfill and maintain compliance with all conditions and shall meet all compliance schedules stipulated in the Ground Water Quality Discharge Permit, number UGW 450005 (hereafter GWQ Permit), issued by the Director of the Utah Division of Radiation Control.
- D. The Licensee may receive and store up to twenty (20) empty radioactive waste transportation casks under the following conditions:
 - The casks are dedicated to the transportation of low level radioactive wastes.
 - Storage of the casks is confined to the Restricted Area within the area specified in License Condition 10, except when staged for return to commerce within 7 days.
 - Internal contamination is kept minimal as practical but will not exceed the contamination limits specified for Department of Transportation, Class 7 Hazardous Material, Radioactive Material, Excepted Package-Empty Packaging, UN2908.
 - During storage, casks are to be secured in accordance with their Department of

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Transportation or Nuclear Regulatory Commission approved design specifications.

- E. The Licensee may dispose of a volume of Class A Low-Level Radioactive Waste (LLRW) and Naturally Occurring and Accelerator Produced Radioactive Materials (NARM) in the Class A West disposal cell described in License Condition 40 not exceeding 8,724,097 cubic yards, and in the Mixed Waste Landfill Cell not exceeding 1,354,092 cubic yards. Together, the total aggregate volume of waste disposed of in the Class A West disposal cell and the Mixed Waste Landfill Cell shall not exceed 10.08 million cubic yards. Class A waste LLRW is defined in Utah Radiation Control Rule R313-15-1009 and NARM at R313-12-3.
- F. Effective January 1, 2002, the Licensee shall not accept, possess, store or dispose of any radioactive waste delivered to the disposal site by any conveyance, unless the associated Shipping Documents have a valid Generator Site Access Permit number, issued by the Utah Division of Radiation Control, affixed.
- G. The Licensee may receive and treat radioactively contaminated aqueous liquids and liquid mercury as characterized in the waste profile at the mixed waste facilities only, the waste must be Class A LLRW at receipt. Treated aqueous liquids may be disposed at the Mixed Waste Facility or the LLRW Facility, in accordance with Exhibit 3 of the Waste Characterization Plan. Treated (amalgamated) liquid mercury shall be disposed at the Mixed Waste Facility only.
- H. Reserved
- I. Licensed material in Items 6.C and 6.D, sealed source(s) contained in compatible portable gauging devices (registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation) for measuring properties of materials.
- J. Licensed material in Items 6.E through 6.O, for operational checks and efficiency determinations of radiation detection instrumentation.
- K. Reserved
- L. Licensed material in Item 6.P, sealed source(s) contained in MGP Instruments, Inc. Model IRD-2000 dosimeter calibrators/irradiators for tests and source checks of electronic dosimeters.

SITE LOCATION

- 10. A. The Licensee may receive, store and dispose of licensed material at the Licensee's facility located in Section 32 of Township 1 South and Range 11 West, Tooele County, Utah.

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- B. Section 32, Township 1 South and Range 11 West, Tooele County, Utah, is defined by the following points of reference:

Southwest Section Corner:	Latitude 40° 40' 51.890" N
	Longitude 113° 7' 28.580" W
Elevation	4269.76 feet above mean sea level (amsl)
Southeast Section Corner	Latitude 40° 40' 51.879" N
	Longitude 113° 6' 20.011" W
Elevation	4277.27 feet-amsl
Northwest Section Corner	Latitude 40° 41' 44.098" N
	Longitude 113° 7' 28.654" W
Elevation	4273.06 feet-amsl
Northeast Section Corner	Latitude 40° 41' 44.086" N
	Longitude 113° 6' 20.109" W
Elevation	4280.83 feet-amsl

- C. The Southwest Section Corner marker of Section 32 shall be the Point of Beginning (POB).
- D. The Licensee shall cause a survey to be conducted by a Utah licensed land surveyor to identify the section corners of Section 32, Township 1 South, and Range 11 West, Tooele County, Utah (as defined in Condition 10.B). Licensee shall place monuments with brass caps at the identified section corner locations. Monuments shall be permanent and constructed in a manner that will protect them from being disturbed.
- E. Authorized Use of Sealed Sources
- i. Licensed material in Items 6.C and 6.D used as authorized in 9.I, and licensed materials in Items 6.E through 6.P used as authorized in 9.J and identified as sealed sources may be used and stored on all property owned by the Licensee at their Clive facility. The property is located in Sections 29, 32 and in parts of Sections 28 and 33 in Township 1 South, Range 11 West and parts of Sections 4, 5 and 6 in Township 2 South, Range 11 West SLBM, Tooele County, Utah.
 - ii. Licensed material not authorized for use specified in License Conditions 9.I and 9.J or not defined as sealed sources in License Condition 9.J shall be used and stored only at the Licensee's facilities referenced in Condition 10.B.
11. The open cell area within the Class A West disposal embankment, where waste disposal/placement has occurred or may occur, but the cover system has not been completed shall be limited to 3,650,000 square feet. Uncovered radioactive waste shall be limited to a surface area of 1,020,000 square feet.

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12. Pursuant to UAC R313-12-55(1), the Licensee is granted an exemption to UAC R313-25-9, as it relates to land ownership and assumption of ownership.

SPECIAL NUCLEAR MATERIAL

- 13 In accordance with the Order issued by the U.S. Nuclear Regulatory Commission dated January 14, 2003, Docket No. 040-8989, License No. SMC-1559, EnergySolutions may possess Special Nuclear Material (SNM) within the restricted area of the EnergySolutions facility as described in Condition 10 provided that:

- A. Concentrations of SNM in individual waste containers must not exceed the values listed in Table 13-A at time of receipt:

Table 13-A

<u>Column 1</u> Radionuclide	<u>Column 2</u> Maximum Concentration (pCi/g)	<u>Column 3</u> Measurement Uncertainty (pCi/g)
U-235 ^a	1,900	285
U-235 ^b	1,190	179
U-235 ^c	26	10
U-235 ^d	680	102
U-233	75,000	11,250
Pu-236	500	75
Pu-238	10,000	1,500
Pu-239	10,000	1,500
Pu-240	10,000	1,500
Pu-241	350,000	50,000
Pu-242	10,000	1,500
Pu-243	500	75
Pu-244	500	75

a - for uranium below 10 percent enrichment and a maximum of 20 percent of the weight of the waste of materials listed in License Condition 13.B

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- b - for uranium at or above 10 percent enrichment and a maximum of 20 percent of the weight of the waste of materials listed in License Condition 13.B
- c - for uranium at any enrichment with unlimited quantities of materials listed in License Condition 13.B and License Condition 13.C
- d - for uranium at any enrichment with sum of materials listed in License Condition 13.B and License Condition 13.C not exceeding 45 percent of the weight of the waste

* The measurement uncertainty values in Column 3 above represent the maximum one-sigma uncertainty associated with the measurement of the concentration of the particular radionuclide.

The SNM must be homogeneously distributed throughout the waste. If the SNM is not homogeneously distributed, then the limiting concentrations must not be exceeded on average in any contiguous mass of 600 kilograms.

- B. Except as allowed by notes a, b, c, and d in Condition 13.A, waste must not contain "pure forms" of chemicals containing carbon, fluorine, magnesium, or bismuth in bulk quantities (e.g., a pallet of drums, a B-25 box). By "pure forms," it is meant that mixtures of the above elements such as magnesium oxide, magnesium carbonate, magnesium fluoride, bismuth oxide, etc. do not contain other elements. These chemicals would be added to the waste stream during processing, such as at fuel facilities or treatment such as at mixed waste treatment facilities. The presence of the above materials will be determined by the generator, based on process knowledge or testing.
- C. Except as allowed by notes c and d in Condition 13.A, waste accepted must not contain total quantities of beryllium, hydrogenous material enriched in deuterium, or graphite above one percent of the total weight of the waste. The presence of the above materials will be determined by the generator, based on process knowledge, physical observations, or testing.
- D. Waste packages must not contain highly water soluble forms of uranium greater than 350 grams of uranium-235 or 200 grams of uranium-233. The sum of the fractions rule will apply for mixtures of U-233 and U-235. Highly soluble forms of uranium include, but are not limited to: uranium sulfate, uranyl acetate, uranyl chloride, uranyl formate, uranyl fluoride, uranyl nitrate, uranyl potassium carbonate, and uranyl sulfate. The presence of the above materials will be determined by the generator, based on process knowledge or testing.
- E. Mixed waste processing of waste containing SNM will be limited to stabilization (mixing waste with reagents), micro-encapsulation, macro-encapsulation using low-density and high density polyethylene, macroencapsulation using cementitious mix (Macro Mix), and thermal desorption.

When waste is processed using the thermal desorption process, EnergySolutions shall confirm the SNM concentration following processing and prior to returning the waste to temporary storage.

Liquid waste may be stabilized provided the SNM concentration does not exceed the SNM concentration limits in License Condition 13.A. For containers of liquid waste with more than 600

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kilograms of waste, the total activity (pCi) of SNM shall not exceed the SNM concentration in License Condition 13.A times 600 kilograms of waste. Waste containing free liquids and the solids shall be mixed prior to treatment. Any solids shall be maintained in a suspended state during transfer and treatment.

F. EnergySolutions shall require generators to provide the following information for each waste stream:

Before Receipt

1. Waste Description. The description must detail how the waste was generated, list the physical forms in the waste, and identify uranium chemical composition.
2. Waste Characterization Summary. The data must include a general description of how the waste was characterized (including the volumetric extent of the waste, and the number, location, type, and results of any analytical testing), the range of SNM concentration ranges, and the analytical results with error values used to develop the concentration ranges.
3. Uniformity Description. A description of the process by which the waste was generated showing that the spatial distribution of SNM must be uniform, or other information supporting spatial distribution.
4. Manifest Concentration. The generator must describe the methods to be used to determine the concentrations on the manifests. These methods could include direct measurement and the use of scaling factors. The generator must describe the uncertainty associated with sampling and testing used to obtain the manifest concentrations.

EnergySolutions shall review the above information and, if adequate, approve in writing this pre-shipment waste characterization and assurance plan before permitting the shipment of a waste stream. This will include statements that EnergySolutions has a written copy of all the information required above, that the characterization information is adequate and consistent with the waste description, and that the information is sufficient to demonstrate compliance with Conditions 13.F.1 through 13.F.4. Where generator process knowledge is used to demonstrate compliance with Conditions 13.A, 13.B, 13.C, or 13.D, EnergySolutions shall review this information and determine when testing is required to provide additional information in assuring compliance with the conditions. EnergySolutions shall retain this information as required by the State of Utah to permit independent review.

At Receipt

EnergySolutions shall require generators of SNM waste to provide a written certification with each waste manifest that states the SNM concentrations reported on the manifest do not exceed the limits in Condition 13.A, that the measurement uncertainty does not exceed the uncertainty value in Condition 13.A, and that the waste meets Conditions 13.B through 13.D.

- G. Sampling and radiological testing of waste containing SNM must be performed in accordance with the following: One sample for each of the first ten shipments of a waste stream; or one sample for each of the first 100 cubic yards of waste up to 1,000 cubic yards of a waste stream; and one sample for each additional 500 cubic yards of waste following the first ten shipments or following the first 1,000 cubic

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yards of a waste stream. Sampling and radiological testing of debris waste containing SNM can be waived if the SNM concentration is lower than one tenth of the applicable limit in License Condition 13.A.

- H. EnergySolutions shall notify the NRC, Region IV office within 24 hours if any of the above conditions are violated, including if a batch during a treatment process exceeds the SNM concentration in License Condition 13.A. A written notification of the event must be provided within 7 days.
- I. EnergySolutions shall obtain NRC approval prior to changing any activities associated with the above conditions.
- J. Notwithstanding License Condition 13.A through 13.I, for the Containerized Waste Facility described in License Condition 40, the following limits for possession of SNM apply to the total combined quantities of SNM at the Containerized Waste Facility:

Consistent with the definition of special nuclear material given in UAC R313-12-3, the maximum quantity of special nuclear material which the EnergySolutions may possess at any one time, shall not exceed: 350 grams of U-235, 200 grams of U-233, and 200 grams Pu, or any combination of them in accordance with the following formula:

$$\frac{(\text{Grams U-235})}{350} + \frac{(\text{Grams U-233})}{200} + \frac{(\text{Grams Pu})}{200} \leq 1$$

"Possession" and "Disposal" are defined in License Conditions 63 and 64 respectively.

MIXED WASTE

- 14. A. The Licensee may receive for treatment, storage, and disposal any radioactive waste as authorized by this license that is also determined to be hazardous (commonly referred to as mixed waste) as permitted by the State-issued Part B Permit, under EPA ID Number UTD982598898, issued and modified by the Director of the Utah Division of Solid and Hazardous Waste.
- B. The Licensee may dispose of treated mixed waste in the Class A West disposal cell if it meets the criteria described in Exhibit 3 of the Waste Characterization Plan.
- C. All other mixed wastes shall be disposed in the Mixed Waste Landfill Cell only.

WASTE TREATMENT AND PROCESSING

- 15. A. Prior to receipt of any low level radioactive or mixed wastes requiring treatment before disposal, the Licensee shall, based on knowledge of the technology to be used for treatment/processing of each particular radioactive or mixed waste, calculate and document that the resultant processed waste is neither Class B nor Class C waste.

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- B Reserved
- C. Following treatment at the Mixed Waste facility the Licensee shall classify the resultant processed waste in accordance with UAC R313-15-1009.
- D. The Licensee shall manifest treated waste from the Mixed Waste facility for disposal in accordance with UAC R313-15-1006.

PROHIBITIONS AND WASTE ACCEPTANCE REQUIREMENTS

16. A. Sealed sources as defined in Utah Administrative Code (UAC) R313-12 shall not be accepted for disposal.
- B. In accordance with UAC R313-15-1009(2)(a)(v), waste shall not be readily capable of detonation or of explosive decomposition or reaction at normal pressures and temperatures, or of explosive reaction with water.
 - C. In accordance with UAC R313-15-1009(2)(a)(vi), waste shall not contain, or be capable of generating, quantities of toxic gases, vapors, or fumes harmful to persons transporting, handling, or disposing of the waste.
 - D. In accordance with UAC R313-15-1009(2)(a)(vii), waste shall not be pyrophoric.
 - E. Waste containing untreated biological, pathogenic, or infectious material including radiologically contaminated laboratory research animals is prohibited
 - F. Liquid Waste Restrictions
 - i. Except for liquid mercury and minimal quantities as described in Condition 17 and in the Waste Characterization Plan, receipt of non-aqueous liquid waste is prohibited unless specifically approved by the Director.
 - ii. Treated liquid radioactive waste shall be disposed at the Mixed Waste Facility or the LLRW Facilities in accordance with Exhibit 3 of the Waste Characterization Plan.
 - iii. Only Utah Division of Radiation Control approved solidification or absorption agents as listed in the State-issued Part B Permit are authorized for liquid waste treatment.
 - iv. Liquid radioactive waste shall be solidified or absorbed in a manner such that no liquid component is disposed.
 - v. Only containers authorized by the U. S. Department of Transportation as specified in the regulations (49 CFR parts 100 thru 180) for transporting liquid radioactive materials shall be accepted for all liquid radioactive wastes, regardless of radioactivity concentrations.
 - G. In accordance with UAC R313-15-1009(2)(a)(viii), gaseous waste received for disposal in the Containerized Waste Facility shall be packaged at an absolute pressure that does not exceed 1.5 atmospheres at a temperature of 20 degrees Celsius and the total activity of any container shall not

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exceed 100 curies (3.7×10^{12} Bequerels).

- H. In accordance with UAC R313-15-1009(2)(a)(ii), waste received for disposal in the Containerized Waste Facility shall not be packaged in cardboard or fiberboard containers.
- I. The Licensee shall not accept for disposal any neutron source (e.g., polonium-210, americium-241, radium-226 in combination with beryllium or other target).
- J. Incinerator ash shall be treated, in preparation for disposal, in a manner that renders it non-dispersible in air.
- K. Radioactive waste containing chelating agents greater than 0.1 percent by weight shall be disposed of in the Mixed Waste Landfill Cell.
- L. The Licensee shall not accept containerized radioactive waste unless each waste package has been:
 - i. Classified in accordance with R313-15-1009, "Classification and Characteristics of Low-Level Radioactive Waste." In addition, the Licensee shall require that all radioactive waste received for disposal meet the requirements specified in the Nuclear Regulatory Commission, "Branch Technical Position on Concentration Averaging and Encapsulation", as amended.
 - ii. Marked as either Class A Stable or Class A Unstable as defined in the most recent version of the "Low-Level Waste Licensing Branch Technical Position on Radioactive Waste Classification." originally issued May, 1983 by the U.S. Nuclear Regulatory Commission.
 - iii. Marked with a unique package identification number, clearly visible on the package, that can be correlated with the manifest for the waste shipment in which the package arrives at the facility.
- M. The Licensee may accept containerized Class A LLRW in the following waste packages for disposal in the Containerized Waste Facility of the Class A West disposal cell:
 - i. DOT "strong, tight" containers in accordance with 49 CFR 173 and meeting the following void space criteria: void spaces within the waste and between the waste and its packaging shall be reduced to the extent practicable, but in no case shall less than 85 percent of the capacity of the container be filled.
 - ii. High-Integrity Containers (HICs) exceeding the void space criteria provided in License Condition 16.M.i, shall be approved by the Director.
 - iii. DOT "strong, tight" containers in accordance with 49 CFR 173 exceeding the void space criteria provided in License Condition 16.M.i and large components shall be placed as approved by the Director.
 - iv. Oversized DOT containers (larger than 215 cubic feet) meeting the void space criteria provided in License Condition 16.M.i shall be placed in accordance with the currently approved LLRW Construction QA/QC Manual.

MANAGEMENT OF FREE LIQUIDS

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17. A. In accordance with UAC R313-15-1009(2)(a)(iv), solid waste received for disposal shall contain as little free standing and non-corrosive liquid as reasonably achievable, but shall contain no more free liquids than one percent of the volume of the waste.
- B. Solid waste received and containing unexpected aqueous free liquid in excess of 1% by volume shall have the liquid removed and placed in the evaporation ponds or the liquid solidified prior to management.
- C. Unexpected non-aqueous free liquids less than 1% of the volume of the waste within the container shall be solidified prior to disposal.
- D. Should shipment(s) arrive with greater than 1% unexpected free liquids (total of aqueous and non-aqueous), the Licensee shall notify the Division of Radiation Control within 24 hours that the shipment(s) failed the requirements for acceptance and manage in accordance with the Waste Characterization Plan.

RADIATION SAFETY

18. The Licensee shall comply with the provisions of UAC R313-18, "Notices, Instructions and Reports to Workers by Licensees or Registrants—Inspections"; and UAC R313-15, "Standards for Protection Against Radiation."
19. The Licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of UAC R313-19-100, "Transportation."
20. Written procedures incorporating operating instructions and appropriate safety precautions for licensed activities shall be maintained and available at the location specified in License Condition 10.A. The written procedures established shall include the activities of the radiation safety and environmental monitoring programs, the employee training program, operational procedures, analytical procedures, and instrument calibration. At least annually, the Licensee shall review all procedures to determine their continued applicability.
21. The Licensee's Radiation Safety Officer (RSO) shall review and approve written procedures as stated in License Condition 20 and subsequent changes to the procedures related to waste disposal operations.

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ROUTINE MONITORING AND CONTAMINATION SURVEYS FOR NEW LICENSEES:

22. The Licensee shall conduct contamination surveys in accordance with Table 22-A:

TABLE 22-A

Type	Location	Frequency
A. Gamma Radiation Levels	1. Perimeter of Restricted Area(s)	1. Weekly
	2. Office Area (s)	
	2.a. [27] Decon Access Control Building	2.a. Weekly*
	2.b. [33] Mixed Waste Access Building	2.b. Weekly*
	2.c. [1] Accessible areas of the LLRW Building	2.c. Weekly
	2.d. [1] Inaccessible area of the LLRW Building	2.d. Weekly*
	2.e. [7] LLRW Operations Building	2.e. Weekly
	2.f. [100] Administration Building	2.f. Quarterly
	3. Eating/Change Area(s)	
	3.a. [27] Decon Access Control Building	3.a. Weekly*
	3.b. [33] Mixed Waste Access Building	3.b. Weekly*
	3.c. [1] Accessible areas of the LLRW Building	3.c. Weekly
	3.d. [1] Inaccessible area of the LLRW Building	3.d. Weekly*
	3.e. [7] LLRW Operations Building	3.e. Weekly
	3.f. [100] Administration Building	3.f. Quarterly
	4. Transport Vehicles	4. Upon vehicle arrival at site and before departure.
	5. Mixed Waste Facility	5. Weekly
	6. Decontamination facilities	

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Type	Location	Frequency
	6.a. [30] Boxwash	6.a. Weekly*
	6.b. [23] Rotary Rail Wash	6.b. Weekly
	6.c. Mixed Waste Decon Pad	6.c. Weekly*
	6.d. [20] Track 4 Rail Wash	6.d. Weekly
	6.e. [21] Intermodal Wash Facility	6.e. Weekly
B. Contamination Wipes	1. Eating Area(s)/Change Area(s)	
	1.a. [27] Decon Access Control Building	1.a. Weekly*
	1.b. [33] Mixed Waste Access Building	1.b. Weekly*
	1.c. [1] Accessible areas of the LLRW Building	1.c. Weekly
	1.d. [1] Inaccessible area of the LLRW Building	1.d. Weekly*
	1.e. [7] LLRW Operations Building	1.e. Weekly
	1.f. [100] Administration Building	1.f. Quarterly
	2. Reserved	
	3. Office Areas(s)	3.
	3.a. [27] Decon Access Control Building	3.a. Weekly*
	3.b. [33] Mixed Waste Access Building	3.b. Weekly*
	3.c. [1] Accessible areas of the LLRW Building	3.c. Weekly
	3.d. [1] Inaccessible area of the LLRW Building	3.d. Weekly*
	3.e. [7] LLRW Operations Building	3.e. Weekly
	3.f. [100] Administration Building	3.f. Quarterly
	4. Reserved	4. Reserved

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Type	Location	Frequency
	5. Equipment/Vehicles	5. Once before release
	6. Decontamination facilities	
	6.a. [30] Boxwash	6.a. Weekly*
	6.b. [23] Rotary Rail Wash	6.b. Weekly
	6.c. Mixed Waste Decon Pad	6.c. Weekly*
	6.d. [20] Track 4 Rail Wash	6.d. Weekly
	6.e. [21] Intermodal Wash Facility	6.e. Weekly
	7. Mixed Waste Facility	7. Weekly
	8. [24] Shredder Facility and control room	8. Weekly
	9. [23] Rotary Dump and control room	9. Weekly
C. Employee/Personnel	1. Skin & Personal clothing	1. Prior to exiting restricted area
D. Gamma Exposure	1. [100] Administration Bldg.(s)	1. Quarterly
E. Radon Concentration	1. [100] Administration Bldg.(s)	1. Quarterly

* When in operation/use, the survey shall be done weekly. When not in operation/use, the survey shall be done monthly. Operational status shall be documented weekly. Non-operational status is defined as no human entry other than routine health physics survey or security confirmation.

[#] Building numbers in parentheses are taken from Exhibit II-6 to the Contingency Plan provided as Attachment II-7 to the State-issued Part B Permit.

23. The Licensee shall determine internal exposure of employees under its bioassay program, in accordance with UAC R313-15-204.
24. The Licensee shall implement a respiratory protection program that is in accordance with UAC R313-15-703.
25. The Licensee shall calibrate air sampling equipment at intervals not to exceed six months.
26. The operational environmental monitoring program shall be conducted in accordance with the Environmental Monitoring Plan (dated January 5, 2012, or the most recent approved amendment to that plan).

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27. Vehicles, containers, facilities, materials, equipment or other items for unrestricted use shall not be released from the Licensee's control if contamination exceeds the limits found in Table 27-A. When not released from Licensee's control for unrestricted use, conveyances released for commercial transport of radioactive waste or materials shall comply with the requirements and applicable contamination limits set forth in 49 CFR 173 and the requirements of 10 CFR 71.5.

TABLE 27-A

Nuclide ^a	Column 1 Average ^{b,c,f}	Column 2 Maximum ^{b,d,f}	Column 3 Removable ^{b,e,f}
U-nat, U-235, U-238, and associated decay products	5,000 dpm alpha/ 100cm ²	15,000 dpm alpha/ 100cm ²	1,000 dpm alpha/ 100cm ²
Transuranics, Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125, I-129	100 dpm/100cm ²	300 dpm/100cm ²	20 dpm/100cm ²
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1,000 dpm/100cm ²	3,000 dpm/100cm ²	200 dpm/100cm ²
Beta-gamma emitters (nuclides with decay modes other than alpha emissions or spontaneous fission) except Sr-90 and other noted above.	5,000 dpm beta, gamma/100cm ²	15,000 dpm beta- gamma/100cm ²	1,000 dpm beta- gamma/100cm ²

- Where surface contamination on both alpha and beta-gamma emitting nuclides exists, the limits established for alpha and beta-gamma emitting nuclides should apply independently.
- As used in this table, dpm (disintegration's per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
- Measurements of average contamination should not be averaged over more than one square meter. For objects of less surface area, the average should be derived for each such object.
- The maximum contamination level applies to an area of not more than 100 cm².
- The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping the area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.
- The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters shall not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.

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28. The Licensee shall submit the following to the Director for review and approval pending resolution of all issues as judged by the Director:
- A. The Licensee shall submit a corrective action plan for the Cover Test Cell for Director approval by no later than July 23, 2008. The corrective action plan shall identify all means necessary to collect valid data to verify actual performance of the cover system. Said plan shall include Cover Test Cell design, construction, instrumentation, monitoring, reporting, and comparison of actual performance to projected performance. The Cover Test Cell corrective action plan shall include:
- i. Performance goals to meet the objective of verifying modeled cover system performance.
 - ii. Methodologies and plans that provide quantitative and qualitative results capable of satisfying the objective.
 - iii. Design, construction, and operational plans to implement the methodologies and plans.
 - iv. Quality control and quality assurance requirements of work to be performed. Quality control and quality assurance specifications and procedures shall state specific actions and processes the Licensee will use to ensure compliance with designs and specifications, monitoring, reporting, ensure data validity, timely detect data deficiencies, enhance accuracy of data interpretation, and ensure correctness of results prior to being submitted to the Division.
 - v. In the event that the plan results in new instrumentation or construction, the Licensee shall complete all such activities within 30-days of Director approval. Within 30-days of completion of said construction, the Licensee shall submit an As-Built report for Director approval.
- B. The Licensee shall submit an annual report for Director approval by March 1 of each calendar year. This annual report shall detail the Licensee's progress in implementing the corrective action plan, provide the data collected in the past year, analyze the data, and interpret the meaning of the data relative to the overall objective of the corrective action plan.

REPORTING

29. The Licensee shall submit the following reports to the Director:
- A. Quarterly results from the Environmental Monitoring Program, as amended. The report(s) shall be submitted within 90 days after the expiration of each calendar quarter. Calendar Quarter shall mean:

First Quarter	January, February, and March
Second Quarter	April, May, and June
Third Quarter	July, August, and September
Fourth Quarter	October, November, and December

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- B. A quarterly summary report detailing the radioisotopes, activities, weighted average concentrations, volume, and tonnage for waste received during the calendar quarter. The report of volume (cubic feet and cubic yards) and tonnage (tons) shall be partitioned according to waste type: Low Level Radioactive Waste (LLRW), LLRW with PCBs, Mixed Waste (MW), MW with PCBs, MW Treatment, NORM, Containerized Class A, uranium/thorium mill tailings (i.e. 11e.(2) wastes), and waste generated prior to congress passing the Uranium Mill Tailings Radiation Control Act in 1978. The report(s) shall be submitted within 30 days after the expiration of each calendar quarter. Calendar Quarter shall mean:

First Quarter	January, February, and March
Second Quarter	April, May, and June
Third Quarter	July, August, and September
Fourth Quarter	October, November, and December

- C. Reserved
- D. For the Mixed Waste Landfill Cell, the Licensee shall ensure that the maximum acceptable activities, used as source terms in the groundwater performance modeling are not exceeded after facility closure. Therefore, the Licensee shall notify the Director, at the earliest knowledge, that the following nuclides are scheduled for disposal: berkelium-247 and chlorine-36.
- E. For the Class A West disposal cell, the Licensee shall ensure that the maximum acceptable activities used as source terms in the groundwater performance modeling are not exceeded after facility closure. Therefore, the Licensee shall notify the Director, at the earliest knowledge, that the following nuclides are scheduled for disposal: berkelium-247, calcium-41, chlorine-36, iodine-129, rhenium-187, and Technetium-99.
- F. An annual report shall be submitted by March 31st and shall report the cumulative void space (expressed as a percent of waste volume) disposed of in the Containerized Waste Facility for the previous year.
30. Except as provided by this condition, the Licensee shall maintain the results of sampling, analyses, surveys, and instrument calibration, reports on inspections, and audits, employee training records as well as any related review, investigations and corrective actions, for five (5) years. The Licensee shall maintain personnel exposure records in accordance with UAC R313-15-201.

STAFFING/QUALIFICATIONS

31. Radiation Safety operations for bulk, containerized and mixed waste, portable gauging device(s), radioactive source(s), and dosimeter calibrator(s)/irradiator(s) shall be conducted by or under the supervision of Thomas A. Brown, RSO.
32. A. The Licensee's staff shall meet the qualifications as described in Appendix I (rev. 27, April 15, 2015).

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- B. Licensed material in License Conditions 6.C and 6.D. shall be used by, or under the supervision and in the physical presence of, the RSO or individuals who have been trained in the Licensee's standard operating and emergency procedures and have satisfactorily completed at least one of the following:
 - i. The device manufacturer's training course for safe use and handling of portable gauging devices containing licensed material; or
 - ii. A portable gauge training program conducted in accordance with the provisions of a specific license issued by the Director, an Agreement State or the U.S. Nuclear Regulatory Commission.
- C. Licensed material in License Conditions 6.E through 6.P shall be used by, or under the supervision of, the RSO, or individuals designated in writing by the RSO.
- D. The Licensee shall maintain the organizational independence of the programs that monitor and enforce employee safety, environmental protection, and public safety from programs responsible for production and profitability and other influences or priorities that might compromise quality and radiation safety.
- E. The Licensee shall establish a method for any employee or contractor to anonymously submit questions, concerns, ideas, or other comments regarding employee safety, environmental protection, and public safety to the Corporate Radiation Safety Officer (CRSO). The method shall include documentation of all comments submitted, the Applicant's response to each comment, and a method for communicating the Licensee's response to employees and contractors.

CONSTRUCTION ACTIVITIES

- 33. The Licensee shall obtain prior written approval from the Director prior to construction of significant facilities. Significant facilities shall include, but are not limited to waste, stormwater, and wastewater related handling, storage, and transfer projects.
 - 34. The Licensee shall address and resolve all concerns the Division has identified regarding clay mining activities in areas adjacent to Section 32, as provided in a February 16, 2007 Division letter to the Licensee, including a February 9, 2007 Round 1 Interrogatory by the URS Corporation (URS 39400018.3090). The Licensee shall deliver detailed analyses, explanations, descriptions, and appropriate justification to the Division no later than July 1, 2008. If the Director determines that unacceptable adverse conditions exist or might develop or evolve, the Licensee shall submit for approval a remedial action plan within 30 days of written notice of the determination by the Director. The remedial action plan will address, among other topics, description of proposed activities, justification that the proposed activities will be adequate to protect the facilities in Section 32 from possible impacts of clay mining, and engineering design, specifications, and construction of proposed remedial actions.
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- 35. A. In accordance with UAC R313-25-8, effective June 1, 2010 the Licensee shall not dispose of significant quantities of concentrated depleted uranium prior to the approval by the Director of the performance assessment required in R313-25-8.

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- B. Performance assessment: A performance assessment, in general conformance with the approach used by the Nuclear Regulatory Commission (NRC) in SECY-08-0147, shall be submitted for Director review and approval no later than June 1, 2011. The performance assessment shall be revised as needed to reflect ongoing guidance and rulemaking from NRC. For purposes of this performance assessment, the compliance period will be a minimum of 10,000 years. Additional simulations will be performed for a minimum 1,000,000-year time frame for qualitative analysis.
- C. Revised disposal embankment design: If the performance assessment specified in paragraph 35.B indicates that changes to disposal operations and cover design are necessary to ensure compliance with the requirements of 10 CFR Part 61 or Utah Administrative Code R313, EnergySolutions will provide a revised design that does meet those requirements, for all wastes that have been and are reasonably anticipated to be disposed of at the facility within 180 days of Director approval of the performance assessment.
- D. Remediation: If following the completion of DRC's review of the performance assessment described in paragraph 35.B, the disposal of DU as performed after the date of this license condition would not have met the requirements of the performance assessment, the facility will undertake remediation to ensure that the performance standards are met, or if that is not possible, shall remove the DU and transport it off-site to a licensed facility.
- E. Surety: The Licensee shall fund the surety for the remediation, in License Condition 35.D. Within 30-days of the effective date of this license condition, the licensee shall submit for Director review and approval, the surety cost estimates for remediation of existing Savannah River DU waste disposal and planned, similar large quantity DU waste disposal.
36. A. The West Rail Spur and Unloading facility shall be operated as a transfer station for Surface Contaminated Objects (SCO) and large components, (waste storage is prohibited). These objects may be set on the gravel pad for 24 hours to facilitate unloading and transferring to the Class A West disposal cell.
- B. The West Rail Spur and Unloading facility shall be operated as a transfer station for conveyances to be unloaded at the Containerized Waste Facility (unloading of waste packages is prohibited).
37. All ion exchange resins shall be disposed of as follows:
- A. Solidified using solidification agents approved by the Director and disposed of in the Containerized Waste Facility; or
- B. Packaged in High-Integrity Containers (HIC) approved by the Director, carbon-steel liners, unapproved HICs, or poly HICs meeting the void space criteria described in License Condition 16.M.i and disposed of in the Containerized Waste Facility; or
- C. Packaged in High-Integrity Containers (HIC) approved by the Director, carbon-steel liners, unapproved

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HICs, or poly HICs not meeting the void space criteria described in License Condition 16.M.i and disposed of as approved by the Division under License Condition 16.M.ii or 16.M.iii in the Containerized Waste Facility; or

- D. Disposed of in accordance with the requirements of the Construction Quality Assurance/Quality Control Manual.
38. The Licensee shall construct the Class A West disposal Cell identified in the Ground Water Quality Discharge Permit No. UGW450005 and in accordance with approved engineering design drawings "Series 10014".
39. Waste placement and backfilling within the Containerized Waste Facility shall be conducted in accordance with the following:
- A. The Containerized Waste Facility shall conform to the characteristics defined, analyzed, and described in the Engineering Justification Report "Class A Disposal Cell Containerized Waste Facility" (dated April 12, 2001); Engineering Justification Report, Addendum "Fifteen Percent Void Space Criteria" (Revision 1 dated October 10, 2001); and the AMEC letter to Envirocare of Utah, Inc. "Placement of Drums and B-25 Containers with 15 Percent Voids; Envirocare Class A - Containerized Waste Facility Near Clive, Utah" (dated October 2, 2001). Waste containers that have void space in excess of 15 percent shall be filled to the top of the container opening using Controlled Low Strength Material (CLSM) in accordance with the Construction QA/QC manual. The Licensee is exempt from the CLSM cold weather requirements and the 48 hour notification for void remediation only at the CWF Facility.
- B. Waste container configurations, backfill materials and associated placement activities, shall be those approved by the Director following specifications contained in the Work Element: Containerized Waste Facility-Waste Placement Test Pad and the Work Element Containerized Waste Facility- Waste Placement Sections of the currently approved LLRW Construction Quality Assurance/Quality Control Manual.
- C. Waste delivered in a shielded transportation cask shall remain in the cask until the waste is approved for disposal and the disposal location is prepared for the shipment. Waste received for disposal in the Containerized Waste Facility shall not be handled, stored or transferred within the contaminated portion of the Restricted Area without the approval of the RSO.
- D. The Containerized Waste Facility shall be operated as a contamination-free portion of the Restricted Area until containerized waste disposal operations are completed. Bulk waste may then be used to complete the filling of the cell.
- E. Interim storage is applicable only to the Containerized Waste Facility. Packages containing radioactive material shall not be stored for a period of longer than 30 days from the date of receipt. Retention of waste materials above ground pending disposal up to 3 working days does not constitute storage.

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Areas surrounding packages in storage shall be managed in accordance with the most current version of EnergySolutions' Standard Operating Procedure (SOP) CL-RS-PR-150, *Posting Requirements for Radiological Hazards*.

- F. Disposal of non-containerized decomposable or compressible waste at the Containerized Waste Facility is prohibited. Such waste shall be disposed of as debris in bulk waste portions of the Class A West disposal embankment, in accordance with debris placement requirements of the currently approved LLRW and 11e.(2) CQA/QC Manual.
40. The LARW and Class A West Disposal Cells, shall be defined by the areas enclosed by the points of reference in the Ground Water Quality Discharge Permit No. UGW450005. The Containerized Waste Facility within the Class A West disposal cell shall be separated from the non-containerized area by a 6-foot chain link fence on the berm around the Containerized Waste Facility perimeter area.
41. On or before August 1, 2012, the Licensee shall submit, for Director's review and approval, a detailed plan for a study of the clayey soils to be used in the radon barrier of the CAW embankment cover. The objective of this study is to determine the amount of strain that the soils can withstand without cracking when subjected to both axial lengthening and bending as would be experienced when the clay settles differentially as part of the cover system. Within nine months of Director's approval of the study plan, the Licensee shall execute the study and submit a report with results of the study. Based on results of the study and the Director's review, the Director may require the Licensee to modify the embankment and cover design.
42. On or before December 21, 2012, the Licensee shall submit a revised cover design (including at least descriptions, design calculations, drawings, and specifications) and an assessment addressing performance of the revised Class A West cover design and transport of potential releases from the proposed Class A West disposal unit.
43. Construction of the clay liner for the Class A West (CAW) embankment between the Class A (CA) and Class A North (CAN) embankments, or receipt of waste volumes exceeding the total waste capacity of the CA and CAN embankments (minus the volumes generated during facility decommissioning) is prohibited until the Licensee funds the financial surety for decommissioning of the CAW embankment as designed and approved.
44. The Licensee shall fulfill all requirements and maintain compliance with all conditions in the LLRW CQA/QC Manual and engineering drawings currently approved by the Director.
45. All engineering related soil tests conducted by the Licensee to demonstrate compliance with Condition 44 shall be performed by a laboratory certified and accredited by the AASHTO Materials Reference Laboratory (AMRL). Said certification/accreditation shall apply to clay liner, clay radon barrier, soil filter layers, sacrificial soils, and riprap materials, or other soil or man-made materials as directed by the Director. Said certification shall include all engineering test methods required by License Condition 44, or as directed by the Director. Certification is not required for the DRC approved sealed single ring infiltrometer permeability

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test contained in Appendix B to the LLRW and 11e(2) CQA/QC Manual.

46. Reserved
47. The Licensee shall not initiate disposal operations in newly excavated or newly tied-in areas until the Division has inspected and the Director has approved the cell/embankment liner.

CONSTRUCTION DRAWINGS.

48. A. The Licensee shall provide a comprehensive set of drawings for the entire Clive site. The drawings shall correctly: (1) locate all structures, utilities, fences, ponds, drainage features railroad tracks, roads, storage facilities, loading and off-loading facilities, disposal embankments, all environmental monitoring locations including instruments/devices, and any other appurtenances related to the operation, maintenance and closure of the disposal facility; and (2) provide survey control including elevations in sufficient detail to fully describe the site. The drawings shall be developed in accordance with the standards of professional care. A drawing index shall be included that identifies drawings by discrete number. Each drawing shall include a revision block that documents the latest changes or modifications by date and includes the initials of the responsible reviewer for QA/QC tracking purposes.
- B. Drawings showing approved future designs shall be marked as "Final Drawings." Final drawings or drawings developed for construction shall be sealed by a Utah registered professional engineer. The drawings shall be developed in accordance with the standards of professional care.
- C. Within 30 days of completion of any project that requires approval by the Director, a set of "As-Built" drawings shall be submitted for review. The drawings shall indicate as-built conditions as they existed no earlier than 30 days prior to the submittal. Drawings of finished construction shall be marked as "As-Built" in the final entry in the revision block.

SITE OPERATING PROCEDURES

49. Shipments containing free liquid in excess of 1% shall be absorbed, evaporated, or the liquids removed only at facilities with approved secondary containment or the rail rollover facility.
50. A. On-site generated waste shall be managed according to its radiological, physical and chemical characteristics. Solid phase material shall be disposed in either the Class A West Cell, Mixed Waste Cell, or the 11e.(2) Cell. Waste water from decontamination facilities will be put in the evaporation ponds or sprayed on disposal cells for purposes of dust and engineering controls.
- B. Site equipment that has reached the end of its useful life, is not operational and does not meet the removable contamination limits of License Condition 27, Table 27-A, shall be disposed in the LLRW Class A West Cell within 90 days as debris in accordance with requirements of the LLRW Construction Quality Assurance/Quality Control Manual or stored on approved facilities for storage, transfer, and sampling of bulk waste.

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- C. Facility vehicles transferring or unloading waste shall not be left unattended.
51. The following shall be implemented for LLRW and 11e.(2) Waste segregation purposes:
- A. LLRW and 11e.(2) waste shall not be managed simultaneously at the Rail rollover facility, Shredder Facility, Rotary Dump Facility, or Rail Digging facility;
 - B. Any vehicle or facility used to manage waste for disposal within the 11e.(2) disposal embankment, must be clearly labeled to designate 11e.(2) management. The labels shall be visible from both sides of a vehicle/facility designated for 11e.(2) waste management.
 - C. Equipment, vehicles and facilities, which are used for management of LLRW will be cleaned of any material before being used for 11e.(2) waste management activities. Equipment, vehicles and facilities shall be cleaned of all waste material to a limit of 500 grams per square foot prior to being used for other waste types.
52. Waste shipments or transportation packages received shall meet the following contamination control requirements for removable contamination
- * Less than 240 dpm/100cm² alpha
 - * Less than 2,400 dpm/100cm² Beta-gamma
- If a shipment or transportation package does not meet the above contamination requirements, the Licensee shall take actions to reduce the risk for spread of contamination.
53. A. Quarterly, the Licensee shall clean the facility roads, or more frequently when needed. The material collected from cleaning the roads shall be disposed within an approved disposal embankment for Class A waste.
- B. The Licensee shall apply on a biweekly basis (once every two weeks) between the first day of May and the last day of September a polymer-based stabilizer in accordance with the manufacturer's instructions on all exposed contaminated cell areas and areas of waste within the Class A West disposal embankment which have been disturbed in the previous two weeks. Except when sufficient precipitation has fallen within two weeks to create ground surface conditions beyond the manufacturer's recommended specifications (the polymer-based stabilizer specifications shall be provided to the Director prior to any application thereof), the Licensee shall notify the Director's engineering staff via email when enough precipitation has fallen that is beyond manufacturer's recommended specifications and the polymer solution will not be applied.

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- C. The Licensee shall minimize the dust created during the process of placing and moving waste, through the use of water. Water or other engineering controls shall be placed on roads and in areas which work is being performed.
- D. The Licensee shall cease loading, hauling, and dumping of un-containerized waste whenever the 5-minute average wind velocities exceed 35 miles per hour. When both the 5-minute average and 5-minute maximum wind velocities are less than 35 mph as observed on the meteorological station, management of un-containerized waste may resume.
54. The Licensee shall fulfill and maintain compliance with all conditions and requirements in the Site Radiological Security Plan (Revision 4, October 6, 2011).
55. A. For the Class A West disposal cell, the Licensee shall ensure that the average concentrations of selected radionuclides do not exceed the limits stated in Table 55A.

Table 55A. Limiting Radionuclide Concentrations in Waste Disposed of in Class A West Disposal Cell.		
Radionuclide	Maximum Average Radionuclide Concentration ¹ in Waste Disposed of Under Top Slope (pCi/g)	Maximum Average Radionuclide Concentration ¹ in Waste Disposed of Under Side Slope (pCi/g)
berkelium-247	0.0065	0.00388
calcium-41	35,300	34.1
chlorine-36	15.9	9.72
iodine-129	---	21.9
rhenium-187	---	19,100
technetium-99	---	1,720

1. Maximum average radionuclide concentration for a radionuclide is determined as the quotient of the Total Activity (in picocuries) of that radionuclide disposed of under the respective slope and the Total Mass disposed of under the respective slope for the Active Cell (in grams) + Completed Cell (in grams).

- B. For the Mixed Waste disposal cell, the Licensee shall ensure that the actual cumulative activity of chlorine-36 does not exceed 8.75 picocuries per gram in accordance with the following formula:

$$\frac{\text{Total Activity of chlorine-36 Received (picocuries)}}{\text{Total Mass of Active Cell (grams) + Completed Cell (grams)}} \leq 8.75 \text{ picocuries per gram}$$

- C. For the Mixed Waste disposal cell, the Licensee shall ensure that the actual cumulative activity of berkelium-247 does not exceed 0.00314 picocuries per gram in accordance with the following formula:

$$\frac{\text{Total Activity of berkelium-247 Received (picocuries)}}{\text{Total Mass of Active Cell (grams) + Completed Cell (grams)}} \leq 0.00314 \text{ picocuries per gram}$$

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Total Mass of Active Cell (grams) + Completed Cell (grams)

56. Containerized Class A waste shall be certified by the generator to meet the Waste Acceptance Criteria in accordance with the Waste Characterization Plan described in License Condition 58.
57. A. The Licensee shall move rail shipments into the Restricted Area within seven (7) days of arrival. The shipments may be returned to the carrier when management of the waste is not possible within the seven (7) day period, unless additional time is approved by the Director of the Utah Division of Radiation Control.
- B. Empty outbound railcars shall be picked up by the local rail service within fourteen (14) days of release from the Restricted Area, unless additional time is approved by the Director of the Utah Division of Radiation Control.
- C. Railcars that have been decontaminated and surveyed both internally and externally and found meet the limits found in Table 27-A do not have to be picked up by local rail service within fourteen (14) days.
- D. The Licensee may perform the following activities on incoming shipments on rail lines outside of Section 32, not including the main line adjacent to Section 32:
1. Visual Inspection
 2. Radiation level surveys
 3. Affix labels
58. The Licensee shall fulfill and maintain compliance with all conditions and requirements in the LLRW Waste Characterization Plan (dated October 8, 2009).
59. Reserved.
60. Wind dispersed Dry Active Waste (DAW) located outside of the Contaminated Restricted Area is prohibited.
61. Truck, railcar, and other equipment washdown (decontamination) facilities, including evaporation ponds, shall be controlled with fences or other approved barriers to prevent intrusion.
62. All burial embankments and waste storage areas, including immediately adjacent drainage structures, shall be controlled areas, surrounded by a six-foot chain link fence. Upon site closure, all permanent fences shall be six feet high chain link topped with three strand barbed wire, tip tension wire, and twisted selvedge.
63. Radioactive and mixed wastes within Section 32 and all rail spurs controlled by the Licensee around the Licensee's Disposal Facility are possessed by the Licensee. Waste conveyed to the facility by truck is in transport as long as the commercial carrier driver and vehicle remain at the Clive disposal facility. The Licensee does not possess such waste for purposes of determining compliance with surety requirements and SNM quantity limits, except that the Licensee does, however, possess any waste containing SNM that is not

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disposed of on the day it is delivered to the facility.

64. "Disposal" is the locating of radioactive waste into a lift of the disposal embankment. Disposal does not include the storage of waste in containers on a lift when the container will ultimately be emptied, the staging of containerized waste in the disposal embankment; or waste as "In Cell Bulk Disposal."

MANIFEST/SHIPPING REQUIREMENTS

65. The Licensee shall comply with UAC R313-15-1006 and UAC R313-25-33(8), Requirements for Low-Level Waste Transfer for Disposal at Land Disposal Facilities and Manifests.
66. The Licensee shall not accept radioactive waste for storage and disposal unless the Licensee has received from the shipper a completed manifest that complies with UAC R313-15-1006 and UAC R313-25-33(8).
67. The Licensee shall maintain copies of complete manifests or equivalent documentation required under Conditions 65 and 66 until the Director authorizes their disposition.
68. The Licensee shall verbally notify the Director within 24 hours followed by written notification within 7 days of any waste shipment that arrives at the Licensee's property and does not comply with applicable rules or license conditions. Specifically, notifications required under this license condition shall be made for shipments that:
- A. contain wastes prohibited under Utah Code Annotated 19-3-103.7,
 - B. contain prohibited wastes and do not meet waste acceptance requirements found in License Condition 16,
 - C. do not conform to Generator Site Access requirements found in UAC R313-26-4(5), and
 - D. contains free liquids or leaking shipment discrepancies.

All other shipment discrepancies (i.e. DOT and waste manifest) shall be noted on the waste manifest and the waste manifest retained on site for Division review.

69. The Licensee shall require anyone who transfers radioactive waste to the facility to comply with the requirements in UAC R313-15-1006.
70. The Licensee shall acknowledge receipt of the waste within one (1) week of waste receipt by returning a signed copy of the manifest or equivalent document to the shipper. The shipper to be notified is the Licensee who last possessed the waste and transferred the waste to the Licensee. The returned copy of the manifest or equivalent documentation shall indicate any discrepancies between materials listed on the manifest and materials received.
71. The Licensee shall notify the shipper (e.g., the generator, the collector, or processor) and the Division when any shipment or part of a shipment has not arrived within 60 days after receiving the advance manifest.

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72. The Licensee shall maintain a record for each shipment of waste disposed of at the site. At a minimum, the record shall include:
- A. The date of disposal of the waste;
 - B. The location of the waste in the disposal site;
 - C. The condition of the waste packages received;
 - D. Any discrepancy between the waste listed on the shipment manifest or shipping papers and the waste received in the shipment;
 - E. A description of any evidence of leaking or damaged packages or radiation or contamination in excess of applicable regulatory limits; and
 - F. A description of any repackaging of wastes in any shipment.

FINANCIAL ASSURANCE/CLOSURE

73. The Licensee shall at all times maintain a Surety that satisfies the requirements of UAC R313-25-31 in an amount adequate to fund the decommissioning and reclamation of Licensees' grounds, equipment and facilities by an independent contractor. The Licensee shall annually review the amount and basis of the surety and submit a written report of its findings by December 1 each year for Director approval. At a minimum, this annual report shall meet the following requirements:
- A. Summary of Changes – the annual report shall include a written summary of any change in the cost estimate previously approved by the Director, including, but not limited to:
 - i. A description of any modification, addition, or deletion of any direct cost or post-closure monitoring and maintenance (PCMM) cost line item, including supporting justification, calculations and basis;
 - ii. Any change to the unique reference number (cost line item) assigned approved by the Director for any direct or PCMM cost line item;
 - iii. Updates to the cost estimate for decommissioning the CAW embankment to ensure the cost estimate remains current in the event that the Director determines the CA and CAN embankments must be closed as a single embankment using the approved design of the CAW embankment. The cost estimate must meet the requirements of License Condition 73; and,
 - iv. Updates to the cost estimates for closing and decommissioning the CA and CAN embankments as separate embankments using the approved designs for each embankment. The surety shall be based on the approved cost estimate for the CA and CAN embankments until the Director determines it is no longer feasible for the CA and CAN embankments to be closed separately. At that time, the surety shall be based on the approved cost estimate provided for License Condition 73.A.iii. The update to the cost estimate for the CA and CAN embankments must include funding to move excess materials that have been placed outside of the approved CA design to the CAN embankment, as well as all other costs associated with closing the CA and CAN embankments separately. The cost

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estimate must meet the requirements of License Condition 73.

- B. Indirect Costs shall be based on the sum of all direct costs in accordance with the following values:

Surety Reference No.	Description	Percentage
300	Working Conditions	5.5%
301	Mobilization/ Demobilization	4.0%
302	Contingency	15.0%
303	Engineering and Redesign	2.25%
304	Overhead and Profit	19.0%
305	Management Fee and Legal Expenses	4.0%
306	DEQ Oversight	4.0%

- C. RS Means Guide estimates of direct construction costs provided in the annual report shall be derived from or based on the most recent edition of the RS Means Guide for Heavy Construction.
- D. Report Certification – the annual report shall be prepared under the direct supervision of and certified by a Professional Engineer or Professional Geologist currently licensed by the State of Utah with at least five (5) years of construction cost estimation experience. The annual report shall be developed in accordance with the standards of professional care.
- E. Electronic Format – the Licensee shall provide the report in both paper and electronic formats, as directed by the Director.
- F. Within 60-days of Director approval of said annual report, the Licensee shall submit written evidence that the surety has been adequately funded.
- G. The Licensee shall prepare and maintain current a gravel resource evaluation report on-site that quantifies the gravel reserves remaining in the Grayback Hills Gravel Pit located in Section 24 of T. 1 N., R. 12 W (SLBM). Such report shall be prepared and certified on or before December 1 of each year by a professional engineer or professional geologist currently registered in the State of Utah.
74. One (1) year prior to the anticipated closure of the site, the Licensee shall submit for review and approval by

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the Director a site decontamination and decommissioning plan. As part of this plan, the Licensee shall demonstrate by measurements and/or modeling that concentrations of radioactive materials which may be released to the general environment, after site closure, will not result in an annual dose exceeding 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public.

75. In accordance with UAC R313-25-33(6), the Licensee shall submit a copy of its financial statement for the previous year, within 30 days of its completion and certification.
76. The Licensee shall at all times maintain a Surety for perpetual care, using an instrument that satisfies the requirements of UAC R313-22 and R313-25. The Surety shall be in the amount last approved by the Radiation Control Board, as provided in Utah Code Ann. 19-1-307(2), as adequate to fund perpetual care, less the amount contributed to the Radioactive Waste Perpetual Care and Maintenance Account created under Utah Code Ann. 19-3-106.2.

SPECIAL HANDLING

77. Except while waste packages are being handled in the active areas of the Containerized Waste Facility, external gamma radiation levels shall be posted in accordance with the most current version of EnergySolutions' SOP CL-RS-PR-150, *Posting requirements for Radiological Hazards*.
78. The Licensee shall observe the following controls on waste handling at the Containerized Waste Facility:
 - A. Before unloading any waste container whose external gamma radiation at the surface exceeds 10 R/hr, an ALARA review shall be performed and documented and a pre-job briefing shall be conducted.
 - B. As part of the ALARA review, the Licensee shall determine and record (1) estimates of the radiation dose rates for the waste container, disposal unit working face, and any other potentially significant radiation sources; (2) expected durations of exposures to and distances from each radiation source; and (3) expected doses to each person involved in the actual disposal operation.
 - C. Before unloading any waste container whose external gamma radiation at the surface exceeds 200 R/hr, a practice run shall be conducted. The practice run shall involve shielding, container(s) filled with non-radioactive material, and handling equipment that are similar to those involved with the actual shipment. Similarity includes similar rigging and physical characteristics (e.g., weight, dimensions, and attachments). Those personnel who will participate in receiving, processing, handling, and disposing of the actual waste will participate in the practice run, using actual procedures. The Licensee shall notify the Division 24 hours in advance of conducting the practice runs.
 - D. On a case-by-case basis, the Director may exempt the Licensee from conducting the required practice run, considering the results of earlier practice runs and actual experience handling waste containers with high radiation levels.
79. Reserved.

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80. The Licensee shall notify in writing the Director at the earliest possible date, but no later than 10 days before scheduled receipt of each shipment with contact radiation levels in excess of 200 R/hr. The notification shall include the anticipated dates of receipt and plan for disposal in the Containerized Waste Facility.
81. The RSO or other qualified person designated by the RSO shall be present for and shall observe the receipt, processing, handling, and disposal of each waste package with contact radiation levels in excess of 200 R/hr.
82. The Licensee shall dispose of only closed containers in the Containerized Waste Facility. The Licensee shall not dispose of any breached waste container in the Containerized Waste Facility without first repairing the breached container or overpacking it in an undamaged container. The Licensee is authorized to open packages at its facility only to:
 - A. Repair or repackaged breached containers.
 - B. Inspect for compliance with conditions of this license.
 - C. Confirm package contents and fill voids in packages/containers that have greater than 15% void space.
 - D. Accomplish other purposes as approved by the Director.
83. The Licensee shall handle and emplace LLRW packages in the Containerized Waste Facility such that packaging integrity is maintained during handling, emplacement, and subsequent backfilling. Waste packages deposited in the Containerized Waste Facility shall be protected from any adverse effects of operations which may damage them.

SEALED SOURCES AND/OR DEVICES

84. A.
 - i. Sealed sources 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 equivalent regulations of an Agreement State.
 - ii. 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 equivalent regulations of an Agreement State prior to the transfer, a sealed source received from another person shall not be put into use until tested.
 - iii. 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 3 years without being tested for leakage and/or contamination.
 - iv. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 μ Ci) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005

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μCi) or more of removable contamination, a report shall be filed with the Director in accordance with R313-15-1208, and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Utah Radiation Control Rules. The report shall be filed within 5 days of the date the leak test result is known with the Division of Radiation Control, P.O. Box 144850, Salt Lake City, Utah 84114-4850. The report shall specify the source involved, the test results, and corrective action taken.

- v. (a) The Licensee is authorized to collect leak test samples in accordance with Condition 85.D of this license, the Licensee's renewal application (dated March 1, 2001), and the Licensee's Memo (dated March 11, 2002).
- (b) The analysis of leak test samples shall only be performed by individuals who meet the qualifications of a Radiation Safety Technician I or II, as defined by this license. The analysis of leak test samples shall be performed in accordance with the Licensee's renewal application (dated March 1, 2001), and the Licensee's Memo (dated March 11, 2002). Alternatively, tests for leakage and/or contamination, including sample collection and analysis, may be performed by other persons specifically licensed by the Director, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such services.
- vi. Records of leak test results shall be kept in units of Becquerels or microcuries and shall be maintained for inspection by representatives of the Director.

- B. Sealed sources or source rods, containing licensed material shall not be opened or sources removed from source holders, devices, or detached from source rods by the Licensee, except as specifically licensed by the Director, an Agreement State, or the U.S. Nuclear Regulatory Commission to perform such services.
- C. The Licensee shall conduct a physical inventory every six months to account for all sealed sources and/or devices received and possessed under this license. The records of inventories shall be maintained for three years from the date of the inventory for inspection by the Division, and shall include the quantities and kinds of radioactive material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.

PORTABLE GAUGING DEVICES:

- 85. A. Each portable gauging device shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage or when not under the direct surveillance of an authorized user.
- B. Each portable gauging device shall be kept under the constant surveillance (direct surveillance) of individuals trained in accordance with Condition 32.B of this license, when the device is not in secured storage, as required by UAC R313-15-801(1)(2) and R313-19-34(9).
- C. Reserved.

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- D. Any cleaning and/or maintenance of portable gauging device(s) or the collection of leak test samples, performed by the Licensee, shall only be performed with the radioactive source/source rod in the safe shielded position.
- E. All cleaning and/or maintenance of portable gauging device(s), performed by the Licensee shall only be performed in accordance with Condition D of this license condition, and the manufacturer's instructions and recommendations.
- F. Any cleaning, maintenance, or repair of portable gauging device(s) that requires removal of the sources/source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Director, an Agreement State, or the U.S. Nuclear Regulatory Commission to perform such services.

DOSIMETER CALIBRATOR(S)/IRRADIATOR(S):

- 86. A. The LDM-2000 reader shall only be connected to a maximum of two IRD-2000 irradiator modules.
- B. Devices(s) shall only be:
 - i. installed in areas where device(s) can be secured and limited to individuals authorized to use device(s) pursuant to Condition A of this license condition and Condition 32.C of this license.
 - ii. used by individuals who meet the qualifications of a Radiation Safety Technician I or II, as defined by this license.
 - iii. used in accordance with the manufacturer's operating manual and certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by equivalent regulations of an Agreement State. The Licensee shall follow the manufacturer's recommendations for preventative maintenance and operational testing.
- C. Maintenance and servicing of device(s) shall only be performed by the manufacturer or persons specifically licensed by the Director, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such services.
- D. The Licensee shall not perform calibration(s) for non-MGP Instrument dosimeters.

INCREASED CONTROL CONDITIONS

87. Reserved

88. Reserved

CLOSEOUT CONDITIONS

- 89. Except as specifically provided otherwise in this license, the Licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Utah Radiation Control Rules, Utah Administrative Code R313 shall govern unless the statements, representations, and procedures in the Licensee's application and correspondence are

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more restrictive than the rules.

- A. License renewal application, Revision 2, dated June 20, 2005.
- B. The following documents refer to revisions made in Amendment 22:
- (1) Letter CD04-0481, dated October 27, 2004, Amendment and Modification Request – Class A North Embankment.
 - (2) Letter CD04-0548, dated December 23, 2004, Revised Class A North Disposal Embankment License Amendment Request.
 - (3) URS Review of Revised Class A North Embankment Amendment Request, dated December 29, 2004.
 - (4) Letter CD05-0024, dated January 17, 2005, Class A North Disposal Embankment License Amendment Request Revision 2.
 - (5) Letter CD05-0265, dated May 20, 2005, Revision of Appendix R, Environmental Monitoring and Surveillance Plan.
 - (6) Letter CD05-0266, dated May 25, 2005, Surety Calculations for the Class A North Disposal Cell.
 - (7) Memo: Treesa Parker to John Hultquist, dated May 25, 2005, proposed revisions to RML for Amendment 22
 - (8) Email: Treesa Parker to Christine Hiaring, dated June 1, 2005, License Amendment 22 Minor Changes for Consistency.
- C. The following documents refer to revisions made in Amendment 22A:
- (1) Division letter dated November 14, 2005.
- D. The following documents refer to revisions made in Amendment 22B:
- (1) Letter CD05-0333, dated June 30, 2005, RML no. UT 2300249 Request for approval of revisions to Appendix I, Organization, and amendment of License Condition 32.A.
 - (2) Memorandum dated August 2, 2005, Subject; Review of Appendix I
 - (3) Letter CD05-0398, dated August 16, 2005, Request for approval of revisions to Appendix I, Organization and amendment of license condition 31.A,B,C, and 32.A.
 - (4) Letter CD05-0507, October 26, 2005, Additional information regarding proposed revisions to Appendix I, Organization and amendment of license condition 31.A,B,C, and 32.A.
 - (5) Letter CD05-0453, dated September 19, 2005 Request for amendment of License Condition 9.10 RML UT2300478; Organization.
 - (6) Letter dated November 22, 2005, Request for information regarding request to revise Appendix I of the 11e(2) License Application and Amendment of L.C. 9.10.
 - (7) Letter dated October 11, 2005, Re: Request for Information: Revision to Appendix I and amendment 31A. B. C. and 32.A. dated August 16, 2005 (CD05-0398).
 - (8) Memorandum, dated October 3, 2005, Subject; Appendix I, revisions to RML UT2300249 conditions 31 A, B, C, and 32 A.
 - (9) Letter CD05-0411, dated August 23, 2005, Payment of administrative cost for Appendix I amendment request dated August 16, 2005.

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- (10) Letter CD05-0472, dated September 30, 2005, License condition 39.E amendment
- (11) Email dated August 10, 2005, Subject: Draft amendment for LC 39.E and attached August 10, 2005, License Condition 39 E. amendment "draft".
- (12) Email dated September 16, 2005, Subject: RE: FW: Draft amendment for LC 39.E.
- (13) Letter CD05-0285, dated June 1, 2005, Envirocare containerized waste facility concrete overpacks corrective action plan.
- (14) Letter dated June 2, 2005, filling waste package voids at the containerized waste facility using controlled low strength material (CLSM)
- (15) Letter CD05-0326, dated June 27, 2005, Re: Letter to Mr. Dane Finerfrock, dated April 13, 2005, CD05-0181.
- (16) Letter CD05-0366, dated July 26, 2005, Re: Letter to Dane Finerfrock, dated June 27, 2005, CD05-0326.
- (17) Letter CD06-0011, dated January 12, 2006, Request to amend License Condition No. 2, Address.
- (18) Letter CD06-0043, dated February 3, 2006, Request to amend License Condition No. 1, Company Name.
- (19) Letter dated February 6, 2006, evidence of name change with the Utah Department of Commerce.
- (20) Email dated October 6, 2005, Subject: License condition 39.E.
- (21) Memorandum from Woodrow W. Campbell through Loren Morton and Dane Finerfrock to Envirocare File, dated January 13, 2006 regarding AMRL Soils Lab Certification for the Envirocare Soils Lab.
- (22) Email dated February 15, 2006, from Loren Morton to Dan Shrum, Subject: License Amendment for Condition 73.
- (23) Email dated December 23, 2005, from Loren Morton to Dane Finerfrock, Subject: Proposed Changes to License Condition 73 - Annual Surety Evaluation Report.
- (24) Letter dated February 22, 2006, Subject: Revise void remediation procedure OPC-6.0.

E. The following documents refer to revisions made in Amendment 22C:

- (1) Letter CD05-0435, dated September 8, 2005, Request to amend RML UT 2300249: Condition 58, Waste Characterization Plan.
- (2) Letter CD05-0557, dated December 5, 2005, RML UT 2300249; Condition 58 Waste Characterization Plan --Revised License Amendment Request.
- (3) Letter CD06-0072, dated February 27, 2006, Radioactive Material License UT 2300249: Condition 58 Waste Characterization Plan -- Revised License Amendment Request.
- (4) Email dated February 24, 2006, from Boyd Imai to Sean McCandless Re: Waste Characterization Plan.
- (5) Letter CD06-0059, dated February 15, 2006, Radioactive Material License UT 2300249 --Self Identified Noncompliance.
- (6) Letter dated March 17, 2006, from the DRC regarding the February 15, 2006, letter of noncompliance.
- (7) Letter CD06-0055) dated February 9, 2006, Request to Amend RML UT 2300249 to show addition of Liquid Radioactive Sources to License Condition 6.E.
- (8) Letter (CD06-0092) dated March 8, 2006, RML UT 2300249; Request for administrative

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amendment. Conditions 21.A and B and Condition 81.

F. The following documents refer to revisions made in Amendment 22E:

- (1) CD06-0389, "Request to amend Radioactive Materials License No. UT 23000249 and 11e.(2) Radioactive Materials License No. UT 23000478 – Request for approval revised Appendix I, *Organization*," October 6, 2006.
- (2) Shredder Facility
 - a. CD05-0448, "Radioactive Materials License No. UT 2300249 (RML) and Groundwater Quality Discharge Permit UGW450005 (GWQDP). Request to Construct Shredding Facility," September 15, 2005.
 - b. CD05-0532, "Request to Construct Shredding Facility – Revised Design and Interrogatory Response," November 14, 2005.
 - c. CD05-0556, "Request to Construct Shredding Facility – Additional Information," December 2, 2005.
 - d. CD06-0036, "Request to Construct Shredding Facility – Response to Round 2 Interrogatories", February 1, 2006.
 - e. CD06-0098, "Request to Construct Shredding Facility – Response to Round 3 Interrogatory," March 10, 2006.
 - f. ASTM F-1417, "ASTM Method F 1417-92," March 29, 2006.
 - g. CD06-0188, "Request to Construct Shredder Facility – Response to Round 4 Interrogatory," May 9, 2006.
 - h. CD06-0211, "Request to Construct Shredder Facility – Response to Round 4B Interrogatory," May 25, 2006.
 - i. CD06-0234, "Requests to Construct Shredder and Rotary Dump Facilities – Revised Wastewater Management Process," June 19, 2006.
 - j. "EnergySolutions LLC Low-Level Radioactive Waste Closure & Post-Closure Trust License UT 2300249 Trust #16673400," June 29, 2006.
 - k. CD-0346, "Interim Wastewater Management Plan for the Shredder Facility – Response to August 18, 2006, Request for Additional Information," August 31, 2006.
 - l. CD06-0388, "Radioactive Material License UT 2300429 and Groundwater Quality Discharge Permit (GWDP) No UGW450005 Shredder Facility – Request to Operate," October 5, 2006.
 - m. CD06-0407, "Comment on Proposed Amendment of Radioactive Material License UT 2300249 and Groundwater Quality Discharge Permit (GWDP) No UGW450005, October 18, 2006.
 - n. CD06-0414, "Radioactive Material License UT 2300249 and Groundwater Quality Discharge Permit No UGW450005 Shredder Facility – Submittal of Revised Drawings" October 25, 2006.
 - o. CD06-0425, "Groundwater Quality Discharge Permit No UGW450005 (GWQDP) Submittal of Revised Appendix J and K," November 7, 2006.
- (3) Rotary Dump Facility
 - a. CD05-0564, "Request to Construct – Rotary Dump," December 12, 2005.

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- b. CD05-0570, "Request to Construct Rotary Dump 00 Submittal of Dose Assessment," December 16, 2005.
 - c. CD06-0086, "Request to Construct Rotary Dump Facility – Response to Round 1 Interrogatory", March 2, 2006.
 - d. ASTM F-1417, "ASTM Method F 1417-92," March 29, 2006.
 - e. CD06-0147, "Request to Construct Rotary Dump Facility – Revised Drawings," April 10, 2006.
 - f. CD06-0210, "Request to Construct Rotary Dump Facility – Response to Round 2 Interrogatory," May 25, 2006.
 - g. CD06-0211, "Request to Construct Rotary Dump Facility – Response to Round 4B Interrogatory", May 25, 2006.
 - h. CD06-0226, "Request to Construct Rotary Dump Facility – Response to Round 2B Interrogatories," June 8, 2006.
 - i. CD06-0234, "Requests to Construct Shredder and Rotary Dump Facilities – Revised Wastewater Management Process," June 19, 2006.
- (4) Intermodal Container Wash Building
- a. CD05-0291a, "Radioactive Materials License No. UT 2300249 (RML) and Groundwater Quality Discharge Permit UGW450005 (GWQDP). Request to Construct Intermodal Container Wash Building and Access Control Building," June 9, 2005.
 - b. CD05-0388, "Request to Construct Intermodal Container Wash Building – Revised Design and Supplemental Information," August 8, 2005.
 - c. CD05-0432, "Request to Construct Intermodal Container Wash Building – Revised Design and Interrogatory Response," September 1, 2005.
 - d. CD06-0110, "MARSSIM Release for New Intermodal Container Wash Facility," March 22, 2006.
 - e. CD06-0206, "Radioactive Material License UT 2300249 and Groundwater Quality Discharge Permit No UGW450005 Intermodal Container Wash Building – Request to Operate," May 22, 2006.
 - f. "EnergySolutions LLC Low-Level Radioactive Waste Closure & Post-Closure Trust License UT 2300249 Trust #16673400," June 29, 2006.
 - g. CD06-0259, "Groundwater Quality Discharge Permit (GWDP) No UGW450005 Intermodal Container Wash Building – Revised Appendix J and K," July 10, 2006
- (5) Decontamination Access Control Building
- a. CD05-0291b, "Radioactive Materials License No. UT 2300249 (RML) and Groundwater Quality Discharge Permit UGW450005 (GWQDP). Request to Construct Intermodal Container Wash Building and Access Control Building," June 9, 2005.
 - b. CD05-0367, "MARSSIM Release of New Boxwash Access Control", July 26, 2005.
 - c. CD06-0139, "Radioactive Material License UT 2300249 and Groundwater Discharge Quality Permit (GWDP) No UGW450005 Decontamination Access Control Building – Request to Operate", April 6, 2006.
 - d. "EnergySolutions LLC Low-Level Radioactive Waste Closure & Post-Closure Trust License UT 2300249 Trust #16673400," June 29, 2006.

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- e. CD06-0245, "Groundwater Discharge Quality Permit (GWDP) No UGW450005 Decontamination Access Control Building – Revised Appendix J and K and Drawing No 05015-S100," June 30, 2006.
- (6) East Side Drainage Project
 - a. CD06-0175, "Request to Construct East Side Drainage and Gray Water System Modifications," May 1, 2005.
 - b. CD06-0244, "East Side Drainage and Gray Water System Modifications – Response to DRC Review," June 30, 2006.
 - c. CD06-0293, "Groundwater Discharge Quality Permit No UGW450005 East Side Drainage and Gray Water System – Revised Design and BAT Plans," August 4, 2006.
 - d. CD06-0327, "Groundwater Discharge Quality Permit No UGW450005 East Side Drainage and Gray Water System – Revised Appendix J BAT Performance Monitoring Plan and Appendix K BAT Contingency Plan," August 23, 2006.
 - e. CD06-0328, "Groundwater Discharge Quality Permit No UGW450005 East Side Drainage and Gray Water System – Revised Drawings," August 24, 2006.

- G. The following documents refer to revisions made in Revision 0 of the License Renewal Application:
- (1) AGRA Earth & Environmental, Inc. 1999. Summary Seismic Stability and Deformation Analysis: Envirocare LARW Disposal Facility, Clive, Tooele County, Utah. September 1, 1999. (1998 LRA Appendix J)
 - (2) AGRA Earth & Environmental, Inc. 2000a. Evaluation of Settlement of Compressible Debris Lifts: LARW Embankments, Clive, Tooele County, Utah. June 1, 2000.
 - (3) AGRA Earth & Environmental, Inc. 2000b. Evaluation of Settlement of Incompressible Debris Lifts: LARW Embankments, Clive, Tooele County, Utah. June 1, 2000.
 - (4) AMEC Earth & Environmental, Inc. 2000a. Letter Report: Allowable Differential Settlement and Distortion of Liner and Cover Materials. October 4, 2000.
 - (5) AMEC Earth & Environmental, Inc. 2000b. Letter Report Stability Considerations: Proposed LLRW Embankment. October 25, 2000.
 - (6) AMEC Earth & Environmental, Inc. 2000c. Letter Report Stability Considerations - Addendum: Proposed LLRW Embankment. November 8, 2000.
 - (7) AMEC Earth & Environmental, Inc. 2001. Response to Interrogatory Number 2: Placement of HICs in Caissons. October 1, 2001.
 - (8) AMEC Earth & Environmental, Inc. 2002. Placement of Large Liners in Caissons. June 19, 2002.
 - (9) Bingham Environmental. 1996. Project Memorandum HEC-1 and HEC-2 Analysis, LARW Application for License Renewal, Envirocare Disposal Facility, Clive Utah. November 26, 1996. (1998 LRA Appendix KK)
 - (10) EnergySolutions (Rebecca McCloud) to Utah Division of Radiation Control (Dane Finerfrock). 2006. Correspondence concerning corporate ownership and name changes. February 6, 2006.
 - (11) EnergySolutions (Tye Rogers) to Utah Division of Radiation Control (Dane Finerfrock). 2006. Correspondence concerning corporate ownership and name changes. February 3, 2006.
 - (12) EnergySolutions LLC. 2007. "2006 Annual 083106 Rev 052107.xls" [annual surety review],

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Revision 22, May 21, 2007

- (13) EnergySolutions to Utah Division of Radiation Control. 2006. Letter number CD06-0348, Radioactive Materials License No. UT2300249 – Revision to License Condition 26, Appendix R request submitted to DRC on March 17, 2006. September 1, 2006.
- (14) Envirocare of Utah, Inc. to URS Corporation. 2005. Personal communication via electronic mail (Sean McCandless and Robert D. Baird, PE). January 27, 2005.
- (15) Envirocare of Utah, Inc. to Utah Division of Radiation Control. 2004. Letter number CD04-0287, Updated Specific Gravity Report and Request for Eliminating Specific Gravity Monitoring. June 9, 2004.
- (16) Envirocare of Utah, Inc. to Utah Division of Radiation Control. 2005. Letter number CD05-0487, Cover Test Cell Evaporative Zone Depth (EZD) Report. October 13, 2005 June 9, 2004.
- (17) Envirocare of Utah, Inc. 2000a. Pre-Licensing Plan Approval Application for a License Amendment Allowing Disposal of Class B & C Low-Level Radioactive Waste. (revision of January 5, 2000 plan) March 15, 2000.
- (18) Envirocare of Utah, Inc. 2000b. Rock Cover Design. July 26, 2000.
- (19) Envirocare of Utah, Inc. 2001. "Clive Facility Total Ditch Flow Calculations." October 30, 2001.
- (20) Envirocare of Utah, Inc. 2003c. Application for Renewal: Radioactive License Materials License Number UT-2300249. July 2, 2003.
- (21) Envirocare of Utah, Inc. 2005d. Application for Renewal: Radioactive License Materials License Number UT-2300249, Revision 2 (including all Appendices). June 20, 2005.
- (22) Montgomery-Watson (John Pellicer and Patrick Corser) to Envirocare of Utah, Inc. (Tim Orton). 2000. Letter Report LLRW Cover Frost Penetration. March 1, 2000.
- (23) Rogers and Associates Engineering for the Utah Division of Radiation Control. 2000. Siting Evaluation Report for Proposed Disposal Under URRC R-313-25-3 of Class B & C Low Level Radioactive Waste. May 2, 2000.
- (24) Shrum, Dan to Robert D. Baird, PE, CCE (URS Corporation). 2005. Via electronic mail. February 28, 2005.
- (25) SWCA Environmental Consultants, Inc. 2000. Assessment of Vegetative Impacts on LLRW.
- (26) Tooele County Recorder. 1993. Entry No. 5489, Book 348, Page 104. March 16, 1993.
- (27) Utah Bureau of Radiation Control (Larry F. Anderson) letter to Envirocare of Utah, Inc. (Khosrow B. Semnani, President). 1987. "Radioactive Material License No. UT 2300249." November 18, 1991.
- (28) Utah Department of Environmental Quality (Diane R. Nielson, Executive Director) and Envirocare of Utah, Inc. (Khosrow B. Semnani, President). 1993. "Agreement Establishing Covenants and Restrictions." March 16, 1993.
- (29) Utah Division of Radiation Control (Dane Finerfrock) to Envirocare of Utah, Inc. (Daniel Shrum). 2007. "EnergySolutions 2006 Annual Surety Submittal, May 21, 2007 Update." June 1, 2007.
- (30) Utah Division of Radiation Control (Dane Finerfrock) to Envirocare of Utah, Inc. (Tye Rogers). 2004. "Restoration of Site Drainage." November 12, 2004.
- (31) Utah Division of Radiation Control (Dane Finerfrock) to Envirocare of Utah, Inc. (Tye Rogers). 2005a. "Response to December 4, 2004 Report - Restoration of Site Drainage: Request for Additional Information." February 23, 2005.

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- (32) Utah Division of Radiation Control (Dane Finerfrock) to Envirocare of Utah, Inc. (Tye Rogers). 2005b. "Response to March 25, 2005 Envirocare Response to the February 27, 2005 DRC Request for Information - Restoration of Site Drainage." April 22, 2005.
- (33) Utah Division of Radiation Control (Dane Finerfrock) to Envirocare of Utah, Inc. (Tye Rogers). 2007. "Restoration of Grade - Round 1 Interrogatories: Notice of Upcoming Requirements and Request for Schedule." February 16, 2007.
- (34) Utah Division of Radiation Control (Loren Morton) to EnergySolutions (Tye Rogers) . 2006. Correspondence regarding "DRC Response to Eight Submittals by EnergySolutions Regarding Proposed Class A Combined (CAC) Disposal Cell: Request for Additional Information, Round 3 Interrogatory." March 3, 2006.
- (35) Utah Division of Radiation Control to EnergySolutions, LLC. 2006. Letter of approval of Revision 20 of the CQA/QC Manual. September 21, 2006.
- (36) Utah Division of Radiation Control (William Sinclair) to Envirocare of Utah, Inc. 2000. Correspondence concerning expectations in addressing the land ownership issue. March 6, 2000.
- (37) Utah Division of Radiation Control. 2006a. Memorandum: Analysis of the December 20, 2005 Envirocare Submittal of Settlement Monitoring Plan Update. February 2, 2006. (Johnathan P. Cook to Loren Morton)
- (38) Whetstone Associates, Inc. memorandum to Envirocare of Utah, Inc. 2000. Technical Memorandum 41010 Infiltration Through Lower Radon Barrier, Class A, B, & C Cell Cover. November 7, 2000.
- (39) Whetstone Associates, Inc. 2000a. Revised Envirocare of Utah Western LARW [Class A] Cell Infiltration and Transport Modeling. July 19, 2000.
- (39a) Whetstone Associates, Inc. memorandum to Envirocare of Utah, Inc. 2001. Technical Memorandum 4101M Results of Cf-251 Modeling for the Class A Cell, Using the 898-year Half Life, August 21, 2001.
- (40) Whetstone Associates, Inc. 2001a. "Travel Time Through Class A Cell Cover." June 22, 2001.
- (41) Whetstone Associates, Inc. 2003b. Memorandum to Dan Shrum, Envirocare of Utah, "Open Cell Modeling Results for Years 7 - 12," Technical Memorandum 4101T, August 28, 2003.
- (42) Whetstone Associates, Inc. 2004. Revised Western LARW Cell Infiltration and Transport Modeling. July 19, 2004.
- (43) Zion's Bank and Energy Solutions, LLC, 2007. Surety Details. March 27, 2007.
- (44) "Envirocare's Cover Test Cell Evaporative Zone Depth (EZD) Report", Daniel B. Shrum of Envirocare of Utah, LLC to Dane L. Finerfrock of Utah Division of Radiation Control, CD05-0487, October 13, 2005.
- (45) "Cover Test Cell Data Report Addendum: Justification to Change EZD from 18-inches to 24-inches", Envirocare of Utah, LLC, October 5, 2005.
- (46) "October 13, 2005 Envirocare Submittal Regarding Cover Test Cell Evaporative Zone Depth (EZD) Report: CAC Cell Round 2 Interrogatory", Loren B. Morton of Utah Division of Radiation Control to Daniel B. Shrum of Envirocare of Utah, LLC, November 1, 2005.
- (47) "Class A Combined Embankment Interrogatories: Clarification of Envirocare October 13, 2005 Evaporative Zone Depth Report", Daniel B. Shrum of Envirocare of Utah, LLC to Dane L. Finerfrock of Utah Division of Radiation Control, CD05-0518, November 2, 2005.

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- (48) "Response to DRC Letter dated November 1, 2005 in Regards to Envirocare's October 13, 2005 Evaporative Zone Depth Report", Daniel B. Shrum of Envirocare of Utah, LLC to Dane L. Finerfrock of Utah Division of Radiation Control, CD05-0520, November 3, 2005.
- (49) "Cover Test Cell As-Built Report", Envirocare of Utah, LLC, January 24, 2002.
- (50) Appendix N, "Cover Test Cell Monitoring Report" dated June 20, 2003, Envirocare of Utah, LLC, License Renewal Application, Revision 2, dated June 20, 2005
- (51) Appendix G, "Drawings" variously dated, Envirocare of Utah, LLC, License Renewal Application, Revision 2, dated June 20, 2005.
- (52) "Attachment 4: EZD Cover Test Cell Data" CD-ROM attached to "Radioactive Material License #UT2300249 and Groundwater Quality discharge Permit No. UGW450005. Class A Combined Disposal Embankment - Response to September 19, 2005 Interrogatories", Tye Rogers of Envirocare of Utah, LLC to Dane L. Finerfrock of Utah Division of Radiation Control, CD05-0574, December 16, 2005.
- (53) "HDU Data", Mike LeBaron of Envirocare of Utah, LLC to Loren Morton of Utah Division of Radiation Control and Robert Baird of URS Corporation, e-mail dated December 19, 2005.
- (54) "Cover Test Cell WCR Data", Mike LeBaron of Envirocare of Utah, LLC to Loren Morton of Utah Division of Radiation Control and Robert Baird of URS Corporation, e-mail dated December 20, 2005.
- (55) "Matric Potential Conversion Factor", Mike LeBaron of Envirocare of Utah, LLC to Loren Morton of Utah Division of Radiation Control and Robert Baird of URS Corporation, e-mail dated December 21, 2005.
- (56) "RE: Evaporative Pan Data (39400085.10300 OUT)", Mike LeBaron of Envirocare of Utah, LLC to Loren Morton of Utah Division of Radiation Control and Robert Baird of URS Corporation, e-mail dated December 22, 2005.
- (57) "Report Combined Embankment Study: Envirocare", AMEC Earth and Environmental, Inc., December 13, 2005.
- (58) "Geotechnical Study Increase in Height and Footprint: Envirocare LARW Facility Near Clive, Utah", AMEC Earth and Environmental, Inc., May 27, 2005.
- (59) "Class A Disposal Cell: Containerized Waste Facility: Engineering Justification Report", Envirocare of Utah, April 12, 2001.
- (60) "Class A Disposal Cell: Containerized Waste Facility: Engineering Justification Report: Addendum 15 Percent Void Space Criteria", Envirocare of Utah, October 2, 2001.
- (61) "Mixed Waste Embankment Engineering Justification Report" Revision 2, Envirocare of Utah, October 20, 2001
- (62) "Minimum Temperature Return Rates", personal communication from Jim Ashby, November 1, 2000.
- (63) "Review of Cover Design for LARW Cell", TerraMatrix/Montgomery Watson to Envirocare of Utah, February 5, 1998.
- (64) "Cover Test Cell As-Built Report", Envirocare of Utah, January 24, 2002.
- (65) Letter CD02-0097, "Revised CQA/QC Manual - Containerized Waste Facility: Placement of Large Liners/HICs", Envirocare of Utah to Utah Division of Radiation Control, March 18, 2002.
- (66) Letter CD02-0269, "Revised CQA/QC Manual - Containerized Waste Facility: Placement of

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Large Liners/HICs - Response to Interrogatories", Envirocare of Utah to Utah Division of Radiation Control, July 3, 2002.

- (67) Letter CD02-0315, "Revised CQA/QC Manual - Containerized Waste Facility: Placement of Large Liners/HICs - Revised Settlement Analysis and CQA/QC Language", Envirocare of Utah to Utah Division of Radiation Control, August 7, 2002.
- (68) Letter CD02-0339, "Revised CQA/QC Manual - Containerized Waste Facility: Placement of Large Liners/HICs - Proposed Revision 15 of the LLRW CQA/QC Manual", Envirocare of Utah to Utah Division of Radiation Control, August 26, 2002.
- (69) Letter CD01-0212, "Engineering Justification Report - Waste Placement with CLSM", Envirocare of Utah to Utah Division of Radiation Control, May 16, 2001.
- (70) Letter CD01-0296, "Containerized Waste Facility - Placement of Class A Ion-Exchange Resins in Polyethylene HICs and Steel Liners", Envirocare of Utah to Utah Division of Radiation Control, July 5, 2001.

H. The following documents refer to revisions made in Amendment 1:

- (1) Letter CD07-0420, "RML UT2300249, Condition 58 -Request for Amendment to the Waste Characterization Plan, dated July 23, 2007.
- (2) Letter CD08-0078, "RML UT2300249, Condition 58 -Request for Amendment to the Waste Characterization Plan."
- (3) Letter CD08-0004, "RML UT2300249 Amendment for Calibration Sources" dated January 2, 2008.
- (4) Letter CD08-0066, "RML UT2300249; Request to amend License Condition 32" dated February 28, 2008.
- (5) Email dated February 29, 2008, from Boyd Imai to Mark Ledoux Re: Amendment Request (CD08-004).
- (6) Email dated November 23, 2007, from John Hultquist to Sean McCandless, Request for Information regarding WCP:
- (7) Letter dated March 7, 2008, Utah Division of Radiation Control (Dane Finerfrock) to EnergySolutions, LLC. (Sean McCandless). "Appendix I Organization dated February 28, 2008."
- (8) Memorandum from John Hultquist to File; dated March 11, 2008, Review of WCP revised November 9, 2007, and March 10, 2008.

I. The following documents refer to revisions made in Amendment 2:

- (1) Executive Secretary's letter dated May 16, 2008 [LA# 116-2008]

J. The following documents refer to revisions made in Amendment 3:

- (1) Letter CD08-0218, "Clive Transportation Hub" dated July 9, 2008.
- (2) Email dated July 28, 2008, from Mark Ledoux to Boyd Imai, "Clive cask hub."
- (3) Letter CD08-0339, Request to Amend License Conditions 10, 38, 43, and Table 40.A, dated October 21, 2008.
- (4) Letter CD08-0137, Request for Amendment to Condition 54, Site Radiological Security Plan, dated May 5, 2008.
- (5) Email dated May 6, 2008, from Mark Ledoux to John Hultquist, License condition 57 proposed

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changes.

- (6) Letter CD08-0111, RML UT2300249 License Condition 26, and RML UT2300478 License Condition 13.1.D Environmental Monitoring Plan, dated April 4, 2008
- (7) Letter CD08-0115, RML UT2300249 License Condition 26, and RML UT2300478 License Condition 13.1.D Environmental Monitoring Plan, dated April 9, 2008
- (8) Email dated November 13, 2008, from John Hultquist to Sean McCandless, Summary of meeting regarding the Env. Monitoring Plan.
- (9) Email dated December 11, 2008, from Sean McCandless to John Hultquist, Procedure CL-RS PR-120 Rev 2. Access Control Points, DRC Comment Rev.
- (10) Letter CD08-0376, RML UT2300249 License Condition 26, and RML UT2300478 License Condition 13.1.D Environmental Monitoring Plan, dated November 24, 2008
- (11) Email dated December 15, 2008, from Sean McCandless to John Hultquist, Procedure CL-RS PR-120 Rev 2. Access Control Points, Form update.

K. The following documents refer to revisions made in Amendment 4:

- (1) Letter dated January 26, 2009, (CD09-0020) from Daniel Shrum to Dane Finerfrock; Radioactive Material License No: UT230029 and UT2300478; Revision of Appendix I, *Organization*.
- (2) Letter dated January 28, 2009, John Hultquist to Dan Shrum, Request for Information, Revision to Appendix I *Organization* submitted January 26, 2009.
- (3) Letter dated February 9, 2009, (CD09-0038) from Dan Shrum to Dane Finerfrock, Revision to Appendix I *Organization*. Response to Request for Information.

L. The following documents refer to revisions made in Amendment 5:

- (1) Letter dated July 27, 2009, (CD09-0188) from Daniel Shrum to Dane Finerfrock; Radioactive Material License Number UT 2300249 - Request for Amendment.
- (2) Letter dated May 6, 2009, (CD09-0116) from Sean McCandless to Dane Finerfrock, Radioactive Material License #UT 2300249 - Request for Amendment and Response to April 15, 2009, Request for Information.
- (3) Letter dated May 28, 2009, Dane Finerfrock to Sean McCandless, 2009 Module 14 Engineering Inspection - Soil Lab and Testing Methods with accreditation for License Condition 45, Radioactive Materials License UT 2300249 Closeout Letter.
- (4) Letter dated April 7, 2009, (CD09-0091) from Sean McCandless to Dane Finerfrock Radioactive Material License #UT 2300249 and Ground Water Quality Discharge Permit No. UGW450005 - Response to DRC Request for Information
- (5) Memorandum from Dave Esser to File, dated May 21, 2009, Proposed correction to the Ground Water Quality Discharge Permit UGW45005 and Radioactive Material License UT2300249 - Amendment Review regarding section, disposal cell, and buffer zone Latitude and Longitude coordinates.

M. The following documents refer to revisions made in Amendment 6:

- (1) Letter dated October 22, 2007, (CD07-0340) from Sean McCandless to Dane Finerfrock; Radioactive Material License Number UT 2300249 - Request for Amendment to Conditions 14.B

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and 16.F.ii.

- (2) Letter dated November 20, 2007, from John Hultquist to Sean McCandless, Formerly Characteristic Hazardous Waste meeting, request to Amendment, Radioactive Material License #UT 2300249.
- (3) URS Memorandum dated December 10, 2007, Gary Merrell to Dane Finerfrock Review of Whetstone Technical Memorandum, "Formerly Characteristic Waste Modeling of Class A and Class A North Cells," from Susan Wyman to Dan Shrum, September 25, 2007.
- (4) Letter dated January 21, 2009, (CD09-0015) from Sean McCandless to Dane Finerfrock Formerly Characteristic Waste – Response to Letter dated November 20, 2007.
- (5) Letter dated January 21, 2009, (CD09-0014) Timothy Orton to Dennis Downs, Div. of Solid and Hazardous Waste, Class 2 Modification – Management of Wastes at the Mixed Waste Facility that will be disposed at the LLRW Facility.
- (6) Memorandum dated February 18, 2009, from Boyd Imai to John Hultquist, EnergySolutions Amendment Request (CD07-0340).
- (7) Memorandum dated September 21, 2009, from Boyd Imai to John Hultquist, Review; Formerly Characteristic Waste – License Amendment Request.
- (8) Letter dated August 31, 2009, Sean McCandless to Dane Finerfrock, Radioactive Material License No. UT2300249 – Revised request for Amendment – Formerly Characteristic (LLRW Destined) Waste.
- (9) Email dated October 15, 2009, Sean McCandless to John Hultquist, Formerly Characteristic, Attachments Revised RML 10/8/09 and WCP Revised 10/8/09.
- (10) Memorandum dated October 19, 2009, from Boyd Imai to John Hultquist, Formerly Characteristic Wastes – Transfer to LLRW.

N. The following documents refer to revisions made in Amendment 7:

- (1) Letter dated September 21, 2009, (CD09-0241) from Val J. Christensen to Amanda Smith; RML No. UT2300249 – Commitments Relating to Depleted Uranium Disposal.
- (2) Letter dated October 1, 2009, (CD09-0258) from Val J. Christensen to Dane Finerfrock; RML No. UT2300249 – Commitments Relating to Depleted Uranium Disposal
- (3) Notice of Agency Action to Consider Proposed License Condition No. 35 dated October 21, 2009.
- (4) Email dated February 22, 2010, from Laura Lockhart to Dane Finerfrock and John Hultquist, License Condition documents –comment response document.

O. The following document refer to revision made in Amendment 8:

- (1) Letter dated June 1, 2010, (CD10-0162) from Sean McCandless to Dane Finerfrock; RML No. UT2300249—Request for Amendment.
- (2) Letter dated July 15, 2010, (CD10-0200) from Sean McCandless to Rusty Lundberg; RML No. UT2300249—Revision of Appendix I, *Organization*.
- (3) Letter dated August 2, 2010, (CD10-0219) from Sean McCandless to Rusty Lundberg; RML No. UT2300249—Revision of Appendix I, *Organization*.
- (4) Letter dated November 1, 2010, (CD10-0298) from Rick Chalk to Rusty Lundberg; 1. Radioactive Material License UT 2300249, License Condition 16.1 (sic) Letter dated November

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23, 2009 to Dane Finerfrock from Mark Ledoux, CD09-0323, 2. Administrative request from DRC to EnergySolutions to amend License UT 2300249, License Conditions 6, 7, and 8.

(5) Email date November 18, 2010, from Thomas Brown to Boyd Imai, LC 8 E, K, M and O.

P. The following documents refer to revision made in Amendment 9:

- (1) Letter dated December 6, 2010, (CD10-0347) from Dan B. Shrum to Rusty Lundberg; RML No. UT2300249—Amendment Request – Condition 35.B, Depleted Uranium.
- (2) Memorandum dated December 13, 2010, from John Hultquist to File regarding Amendment request.

Q. The following documents refer to revision made in Amendment 10:

- (1) Letter dated February 24, 2011, (CD11-0045) from Dan Shrum to Rusty Lundberg; Radioactive Material License No. UT2300249, License Condition 35.B.
- (2) Letter dated February 24, 2011, from Rusty Lundberg to Dan Shrum Radioactive Material License No. UT2300249, License Condition 35.B Depleted Uranium Performance Assessment.
- (3) Letter dated March 14, 2011 (CD11-0075) from Dan Shrum to Rusty Lundberg Radioactive Material License No. UT2300249, License Condition 35.B Depleted Uranium Performance Assessment.

R. The following documents refer to revision made in Amendment 11:

- (1) Letter dated September 30, 2010, (CD10-0264) from L. Wayne Johns to Rusty Lundberg; Radioactive Material License No. UT2300249, License Condition 26, and Radioactive Material License No. UT2300478, License Condition 13.1.D Environmental Monitoring Plan.
- (2) Letter dated October 21, 2010, (CD10-0290) from L. Wayne Johns to Rusty Lundberg; Radioactive Material License No. UT2300249, License Condition 26, and Radioactive Material License No. UT2300478, License Condition 13.1.D Environmental Monitoring Plan.
- (3) Memorandum dated October 21, 2010, from Bill Craig to File; EnergySolutions request to change Appendix R.
- (4) Email dated January 25, 2011, from John Hultquist (DRC) to Sean McCandless (ES) regarding draft license and statement of basis.
- (5) Email dated January 27, 2011, from John Hultquist (DRC) to Sean McCandless (ES) responding to proposed language change to LC 60.

S. The following documents refer to revisions made in Amendment 12:

- (1) Letter dated August 2, 2011, (CD11-0183) from Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10.
- (2) Letter dated August 17, 2011, (CD11-0224) from Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10; Revised Request.
- (3) Letter dated August 25, 2011, (CD11-0234) Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 52 and 54.

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- (4) Email dated October 5, 2011, from Ryan Johnson (DRC) to Sean McCandless (ES); Request to Amend License Condition 52.
- (5) Email dated October 5, 2011, from Ryan Johnson (DRC) to Sean McCandless (ES); Request to Amend License Condition 54.
- (6) Letter dated October 13, 2011 (CD11-0282) Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 52 and 54.
- (7) Letter dated October 27, 2011, from Rusty Lundberg to Dan Shrum; Radioactive Material License No. UT2300249: Division of Radiation Control's (DRC) Response to Amend License Conditions 52 and 54, dated August 25, 2011.
- (8) Letter dated October 27, 2011, (CD11-0293) from Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Response to Inspection Report dated October 18, 2011. Radiation Safety Inspection, Containerized Waste Facility (CWF) Operations.
- (9) Letter dated November 2, 2011, (CD11-0298) from Rick Chalk to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10; Revised Request.
- (10) Letter dated November 7, 2011, from Rusty Lundberg to Sean McCandless; Radioactive Material License No. UT2300249: Division of Radiation Control's (DRC) Response to Amend License Conditions 39.B, dated October 27, 2011.
- (11) Email dated November 8, 2011, from Ryan Johnson (DRC) to Sean McCandless (ES); Draft Statement of Basis and Amendment #12 of Radioactive Material License UT2300249.
- (12) Letter dated November 8, 2011, (CD11-0307) from Sean McCandless to Rusty Lundberg, Radioactive Material License No. UT2300249; Revision of Appendix I, *Organization*.
- (13) Email dated November 15, 2011, from Ryan Johnson (DRC) to Sean McCandless (ES); Amendment request for LC 32.A.

T The following documents refer to revisions made in Amendment 13:

- (1) Letter dated August 2, 2011, (CD11-0183) from Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10.
- (2) Letter dated August 17, 2011, (CD11-0224) from Sean McCandless to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10; Revised Request.
- (3) Letter dated November 2, 2011, (CD11-0298) from Rick Chalk to Rusty Lundberg; Radioactive Material License No. UT2300249, Request to Amend License Conditions 6.E, 9 and 10; Revised Request.
- (4) Email dated November 17, 2011, from Ryan Johnson (DRC) to Sean McCandless (ES); Amendment request to store gauges on Section 29.

U. The following documents were submitted in support of proposed Amendment #14:

- 1) AMEC Earth & Environmental, Inc. 2011. Report: Geotechnical Update Report – EnergySolutions Clive Facility Class A West Embankment, February 15, 2011
- 2) AMEC Earth & Environmental, Inc. 2011. Cover Letter – Response to Interrogatory CAW

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- R313-25-8(4)-16/1: Seismic Hazard Evaluation, EnergySolutions Clive Facility, Class A West Embankment, Clive, Tooele County, Utah. report: Geotechnical Update Report – EnergySolutions Clive Facility Class A West Embankment, Clive, Tooele County, Utah. October 25, 2011.
- 3) AMEC Earth & Environmental, Inc. 2011. Response to Interrogatory CAW R313-25-8(4)-16/1: Seismic Hazard Evaluation, EnergySolutions Clive Facility, Class A West Embankment, Clive, Tooele County, Utah. October 25, 2011
 - 4) AMEC Earth & Environmental, Inc. 2011. Response to Interrogatory CAW R313-25-8(4)-16/2: Seismic Hazard Evaluation, EnergySolutions Clive Facility, Class A West Embankment, Clive, Tooele County, Utah. December 23, 2011.
 - 5) AMEC Earth & Environmental, Inc. 2012. Report: Response to Interrogatory CAW R313-25-8(4)-16/3: Seismic Hazard Evaluation/Seismic Stability Analysis Update, EnergySolutions Clive Facility, Class A West Embankment, Clive, Tooele County, Utah. April 6, 2012.
 - 6) AMEC Earth & Environmental, Inc. 2012. Addendum: Additional Cyclic Softening Analysis, EnergySolutions Clive Facility, Class A West Embankment, Clive, Tooele County, Utah. May 3, 2012.
 - 7) EnergySolutions, LLC. 2011. (CD11-0123) License Amendment Request: Class A West Embankment, with Attachments 1 Through 7 and cover letter from Sean McCandless to Mr. Rusty Lundberg at Utah Division of Radiation Control dated May 2, 2011.
 - 8) EnergySolutions, LLC. 2011. (CD11-0207) Radioactive Material License #UT2300249 and Ground Water Quality Discharge Permit No. UGW450005. Amendment and Modification Request – Class A West Embankment; Correction to Letter dated July 27, 2011, to Mr. Rusty Lundberg at Utah Division of Radiation Control.
 - 9) EnergySolutions, LLC. 2011. (CD11-0295) Responses to Round 1 Interrogatories: License Amendment Request (UT2300249) for the Class A West Embankment and cover letter to Mr. Rusty Lundberg at Utah Division of Radiation Control, October 28, 2011.
 - 10) EnergySolutions, LLC. 2011. (CD11-0327) Supplemental Responses to Round 1 Interrogatories: License Amendment Request (UT2300249) for the Class A West Embankment, November 28, 2011 and cover letter to Mr. Rusty Lundberg at Utah Division of Radiation Control, November 29, 2011.
 - 11) EnergySolutions, LLC. 2012. (CD12-008) Radioactive Material License #UT2300249, Class A West - Round 2 Interrogatory Response, dated January 12, 2012.
 - 12) EnergySolutions, LLC. 2012. (CD12-0049) Radioactive Material License #UT2300249, Class A West - Response to Division Request and Round 3 Interrogatory dated February 23, 2012.
 - 13) EnergySolutions, LLC. 2012. (CD12-0065) Radioactive Material License #UT2300249, Revised CAW Well Spacing Analysis, dated March 3, 2012.
 - 14) EnergySolutions, LLC. 2012. (CD12-0075) Radioactive Material License #UT2300249 and Ground Water Quality Discharge Permit No. UGW450005, Amendment and Modification Request - Class A West Embankment: Response to Round 3 Interrogatory URCR R313-25-7(3)-04, with attachments. Letter from Tim Orton, EnergySolutions, to Mr. Rusty Lundberg, Utah Division of Radiation Control, dated March 20, 2012.
 - 15) EnergySolutions, LLC. 2012. (CD12-0093) Radioactive Material License #UT2300249 - Class A West Embankment: Class A West: Round 3 Seismic Stability Response, dated April 4, 2012.

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- 16) Email dated April 6, 2012, from Sean McCandless to John Hultquist and Robert Baird; Final Report for CAW Round 3 Interrogatory Response.
- 17) EnergySolutions, LLC. 2012. (CD12-0095) Radioactive Material License #UT 2300249 and Ground Water Quality Discharge Permit No. UGW450005. Amendment and Modification Request – Class A West Embankment: Complete, Electronic Submittal.
- 18) EnergySolutions, LLC. 2012. (CD12-0114) Radioactive Material License #UT2300249 - Class A West Embankment: Liquefaction Addendum, Response to DRC Comments and Suggestions and Complete Electronic Copy.
- 19) Whetstone Associates, Inc. 2011. EnergySolutions Class A West Disposal Cell Infiltration and Transport Modeling Report, April 19, 2011.
- 20) Whetstone Associates, Inc. 2011. EnergySolutions Class A West Disposal Cell Infiltration and Transport Modeling Report, November 28, 2011.
- 21) Whetstone Associates, Inc. 2012. EnergySolutions Class A West Disposal Cell Infiltration and Transport Modeling Report, February 23, 2012.
- 22) EnergySolutions, LLC. 2012. (CD12-00185) Radioactive Material License #UT2300249 and Ground Water Quality Discharge Permit No. UGW450005 - Class A West Embankment: Clay Distortion Study Plan.

V. The following documents were submitted in support of proposed Amendment #15:

- (1) Letter (CD12-0275) dated October 24, 2012, from Sean McCandless of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249 and UT 2300478; Request to amend License and approve revised Appendix I, *Organization*.
- (2) Letter dated December 14, 2012, from John Hultquist of the DRC to Sean McCandless of EnergySolutions. Request for Information (RFI) for Appendix I, *Organization* Submittal dated October 24, 2012: Radioactive Material Licenses UT 2300249 & UT 2300478.
- (3) Letter (CD12-0315) dated December 19, 2012, from Sean McCandless of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material License Nos. UT 2300249 and UT 2300478: Response to Request for Information for Appendix I, *Organization*.
- (4) Letter (CD13-0033) dated February 4, 2013, from Sean McCandless of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249 and UT 2300478; Revised request to amend License and approve revised *Organization*.

W. The following documents were submitted in support of proposed Amendment #16:

- (1) Letter (CD12-0275) dated October 24, 2012, from Sean McCandless of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249 and UT 2300478; Request to amend License and approve revised Appendix I, *Organization*.

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- (2) Letter (CD12-0296) dated November 30, 2012, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material License No. UT 2300249; 2012 Annual Surety Update (Update).
 - (3) Letter dated March 6, 2013, from Rusty Lundberg of the DRC to Sean McCandless of *EnergySolutions*. Request for Information (RFI) 2012 Annual Surety Update: Radioactive Material Licenses UT 2300249.
 - (4) Letter (CD13-0119) dated April 25, 2013, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material License No. UT 2300249; Annual Surety Submittal -- Response to Additional Request for Information.
 - (5) Letter (CD13-0144) dated May 16, 2013, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249 Request for Administrative Corrections to Conditions 32.E and 76.
 - (6) Letter (CD13-0238) dated August 22, 2013, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249; Request for Minor Modifications to Conditions 22.A. and B., 31, 39.E, and 77.
 - (7) Letter (CD13-0255) dated September 19, 2013, from Vern Rogers of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material License No. UT2300249; Revised Requests for Modifications to Conditions 22, 31, 39.E, and 77.
 - (8) Email dated October 11, 2013, from John Hultquist of the DRC to Sean McCandless of *EnergySolutions*. License Amendment 16.
 - (9) Email dated October 14, 2013, from Vern Rogers of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material License UT 2300249; Response to Proposed Amendment 16
- X. The following documents were submitted in support of proposed Amendment #17:
- (1) Letter (CD13-0267) dated September 24, 2013, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249; Amendment Request, License Condition 68.
 - (2) Letter (CD14-0017) dated January 31, 2014, from Sean McCandless of *EnergySolutions* to Rusty Lundberg of the DRC. Radioactive Material Licenses UT 2300249; Amendment Request, License Condition 32.A.

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- (3) Memo to EnergySolutions, LLC File Division of Radiation Control; from Connie Rauen, P.E through Ryan Johnson and John Hultquist, Licensing and Permitting Section, DRC;. Licensing and Permitting Section, DRC; dated February 13, 2014; Subject: *Review of ES Radioactive Material License #UT 2300249 –Amendment Request, License Condition 32.a.*
- (4) Memo to File: Radioactive Material License (RML) UT2300249 License Amendment 17, from Ryan Johnson through Rusty Lundberg and John Hultquist; dated February 28, 2014; Subject: *Changes to License Condition 68.*
- (5) Letter (CD14-0125) dated May 28, 2014, from Sean McCandless of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material License UT 2300249-Resquest for Minor Modification to Condition 14.A.

Y. The following documents were submitted and in support of proposed Amendment #18:

- (1) Letter (CD14-0271) dated December 10, 2014, from Vern Rogers, EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material License UT 2300249; Revision of Appendix I, *Organization.*
- (2) Email dated December 19, 2014 from John Hultquist, DRC to Vern Rogers, EnergySolutions regarding LC 32.A and currently approved Appendix I.
- (3) Email dated December 23, 2014 from Steve Gurr, EnergySolutions to John Hultquist, DRC updating revision number and date of Appendix I.
- (4) Letter (CD14-0291) dated December 30, 2014, from Vern Rogers, EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material License UT 2300249; Revision of Appendix I, *Organization – resubmission.*

Z. The following document was submitted and in support of proposed Amendment #19:

- (1) Letter (CD15-0083) dated March 31, 2015, from Vern Rogers, EnergySolutions to Rusty Lundberg of the DRC. Radioactive Material License UT2300249; Condition 75 - Extension and Category 1 - Administrative License Amendment Request.

AA. The following document was submitted or referenced and in support of proposed Amendment #20:

- (1) Federal Register Volume 79 Number 133 dated July 11, 2014, Part V Department of Transportation, Pipeline and Hazardous Materials Safety Administration.
- (2) Letter (CD15-0100) dated April 15, 2015, from Vern Rogers of EnergySolutions to Rusty Lundberg

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of the DRC. Radioactive Materials License UT2300249; Response to Notice of Enforcement Discretion with DRC Inspection Module 11 Rev. 8, Qualifications and Training and Request to withdraw and resubmit Revised Appendix I, Organization.

(3) Letter (CD15-0114) dated May 7, 2015, from Vern Rogers of EnergySolutions to Rusty Lundberg of the DRC. Radioactive Materials License UT2300249; Condition 57; Amendment Request.

(4) Email from Ryan Johnson of the DRC to Vern Rogers of EnergySolutions dated May 7, 2015: Appendix I changes.

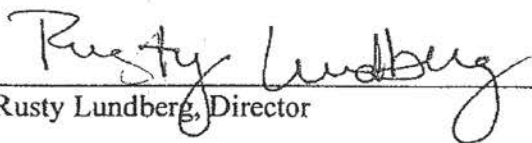
(5) Emails between Steve Gurr of EnergySolutions and Ryan Johnson of the DRC dated from May 11, 2015 to June 1, 2015, Response to Appendix I.

(6) Letter (CD-15-0124) dated May 20, 2015, from Vern Rogers of EnergySolutions to Rusty Lundberg of the DRC, Radioactive Materials License UT2300249; Additional Response to Questions regarding Appendix I, *Organization*.

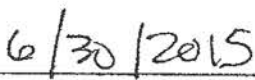
(7) Letter (CD15-0132) dated June 1, 2015, from Vern Rogers of EnergySolutions to Rusty Lundberg of the DRC, Radioactive Material License UT2300249; Consolidation of Amendment Requests.

(8) Emails between Vern Rogers of EnergySolutions and Ryan Johnson of the DRC dated June 3, 2015, UT2300249-Condition 53.B.

UTAH DIVISION OF RADIATION CONTROL



Rusty Lundberg, Director



Date

Perma-Fix of Florida, Inc.

Gainesville, FL

**STATE OF FLORIDA
DEPARTMENT OF HEALTH
BUREAU OF RADIATION CONTROL**

RADIOACTIVE MATERIALS LICENSE

Pursuant to Chapter 404, Florida Statutes, and Chapter 64E-5, Florida Administrative Code (F.A.C.), and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to receive, acquire, possess and transfer the radioactive material(s) designated below and to use such radioactive material(s) for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations and orders of the state of Florida, Department of Health now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. Name: PERMA-FIX OF FLORIDA, INC.</p>	<p>3. License Number: 2598-1</p> <p>is hereby renewed in its entirety with reference to application dated May 29, 2015.</p>
<p>2. Address: 1940 N.W. 67th Place Gainesville, FL 32653</p>	<p>4. Expiration Date: 6/30/2020</p> <p>5. Category: 4B</p>

Radioactive Material (element and mass number)	7. Chemical And/Or Physical Form	8. Maximum Quantity Licensee May Possess At Any One Time
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<p>A. Any radioactive material with Atomic Numbers 1 through 92 (except special nuclear material)</p>	<p>A. Any form except gas</p>	<p>A. 80 curies</p>
<p>B. Special nuclear material</p>	<p>B. Any form except gas</p>	<p>B. 10 curies total. Uranium enriched in the isotope U-235 not to exceed 350 grams of U-235; U-233 not to exceed 200 grams; isotopes of plutonium not to exceed 200 grams. Any combination of the above not to exceed unity.</p>
<p>C. Transuranic (except special nuclear material)</p>	<p>C. Any form except gas</p>	<p>C. 1 curie total; not to exceed 100 nanocuries per gram of material for transuranic isotopes with a radiological half-life of 20 years or greater</p>

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6. Radioactive Material (element and mass number)	7. Chemical And/Or Physical Form	8. Maximum Quantity Licensee May Possess At Any One Time
D. Any radioactive material with Atomic Numbers 1 through 98 (except Cf-252)	D. Sealed sources	D. 20 curies total; not to exceed 50 millicuries each for sources with an Atomic Number greater than 83
E. Any radioactive material with atomic numbers 1 through 95	E. Any form except gas	E. 100 millicuries total; no single source to exceed 20 millicuries
F. Radioactive material distributed to a general licensee per 64E-5.206 (1) & (4), F.A.C.	F. Sealed sources	F. No single source to exceed that quantity authorized for the general license

9. Authorized Use

All materials shall be received, processed, and disposed in accordance with the provisions of 64 E.5, Florida Administrative Code (F.A.C.) and the conditions contained in this license. The following authorizations shall be conducted in accordance with statements, representations, and procedures of the approved license and corresponding amendments.

- A. - C.
 1. For receipt, storage, handling, consolidation, sorting and segregation, decontamination services; survey for release of potential contaminated materials, and repair of contaminated equipment.
 2. For processing of waste by treatment operations, compacting, sectioning, bulking, blending, neutralization, stabilization, drying, macro-encapsulation, reuse of contaminated equipment, containers, and packaging of these waste for transfer to authorized recipient or waste management or disposal facility;
 3. For research and development as defined in 64E-5.101, F.A.C., and as described in Condition 26.
- D. For receipt, storage, handling, consolidation, and repackaging of sealed sources for shipment to an authorized recipient or waste management or disposal facility.
- E. To be used as calibration and reference sources.
- F. To be used in devices approved for receipt under general license provisions as described in Items 6, 7 and 8.

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CONDITIONS

10. A. The authorized place of use and storage is the licensee's facility located at the address in Item 2.
- B. The authorized place of use shall be temporary job sites of the licensee throughout the state of Florida. This condition does not prohibit use in other agreement states and states under the jurisdiction of the U.S. Nuclear Regulatory Commission (NRC) under reciprocity that has been approved by an agreement state or the NRC.
11. Failure to comply with the provisions of this license is a felony of the third degree pursuant to section 404.161, Florida Statutes. Also, violations may warrant an administrative fine of up to \$1,000.00 per violation per day, pursuant to section 404.162, Florida Statutes.
12. A. Licensed material shall be used, at the facility listed in item 2 above and at temporary job sites, by or under the supervision and in the physical presence of, Raymond Whittle, Tom Wickes, Tom Yarbrough, Mike Davis, Randy Self, Dwayne Singleton, Yun "Ken" Xia, Andy Owens, Nate Jones, Tristan Timm, or other individuals who have successfully completed the licensee's training course as described in application dated May 29, 2015. The Licensee shall maintain training records for inspection by the department
- B. The radiation safety officer is Tristan Timm.
13. The licensee shall comply with the provisions of Chapter 64E-5, F.A.C., Part IX, "Notices, Instructions and Reports to Workers, Inspections" and Part III, "Standards for Protection Against Radiation."
14. The licensee shall not transfer possession or control of radioactive material, or products containing radioactive material as a contaminant except:
 - A. By transfer to a specifically licensed recipient; or
 - B. As provided otherwise by specific provision of this license pursuant to the requirements of Chapter 64E-5, F.A.C.
15. Radioactive material transported on public thoroughfares shall be packaged, prepared for shipment and transported in accordance with Title 49, Code of Federal Regulations and Chapter 64E-5, F.A.C.

License Number: 2598-1
Amendment No.: 43
Control Number: 20150602-0877

LICENSEE COPY

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Category: [4B]

Expiration Date: 6/30/2020

STATE OF FLORIDA
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16. The licensee shall assure that each sealed source is tested for leakage or contamination and follow the appropriate actions as required by section 64E.5.1303, F.A.C. Licensed material shall be tested at least every 6 months. The test sample (smear) shall be taken by the licensee using an approved leak test kit. Analysis of the test sample shall be performed by individuals who are licensed by the department, NRC, agreement state, or licensing state to provide these services. The licensee is required to retain leak test records containing the manufacturer's name, model and serial number of each sealed source tested, identity of each sealed source radionuclide and its estimated activity, the measured activity of each test sample expressed in microcuries, the date of the test and signature of the radiation safety officer or designee. The records shall be maintained for 3 years for inspection by the department.
17. The licensee shall conduct a physical inventory and inspection at least every 12 months to account for all sealed sources received and possessed under this license as required by section 64E-5.1304, F.A.C. Inventory records shall be maintained for 3 years from the date of the inventory for inspection by the department, and shall include the manufacturer's name, model and serial numbers of each sealed source, the identity of each sealed source radionuclide and its estimated activity, the location of each sealed source, the date of the inventory and the signature of the radiation safety officer or designee.
18. The licensee shall notify the Bureau of Radiation Control at least 48 hours in advance of shipping its low-level radioactive waste to a commercial treatment, storage, or disposal facility. Notification shall consist of either calling (407) 297-2095 or writing the Bureau of Radiation Control, Department of Health, Post Office Box 680069, Orlando, FL 32868-0069.
19. Licensed material described in items 6, 7, 8 and 9 Subitems A through E, shall not be stored at the licensee's facility located at the address in Item 2, for a period greater than 3 years from the date of receipt. The licensee must maintain records of receipt and disposal, including dates, activities, and isotopes for inspection by the department.
20. The licensee shall notify the department within 48 hours of discovery of customers who submit radioactive materials not in conformance with Condition 21. This 48-hour notification may be by telephone. The notification shall include the generator's name, address, license number, isotopes, concentrations or activities, and dates and description of materials submitted. The notification shall be made in writing to the department within 30 days of discovery of the materials submitted to the licensee.
21.
 - A. Specific activity for material described in Items 6, 7, 8 and 9, Subitems A-C are determined by calculation or sample analysis and averaged over the entire weight of the package.
 - B. Radium 226 sealed sources authorized under 6, 7, 8, and 9, Subitem D must be leak tested within 30 days of shipment.

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22. A. In lieu of the bonding methods described in 64E-5.217, F.A.C., the licensee is considered to have satisfied the financial assurance requirements for this license provided: the licensee maintains the Insurance Certificate to Demonstrate Financial Assurance for Closure and Post Closure for Perma-Fix of Florida, Inc. FL 980711071 as described in The Agreement by and Between The Department of Environmental Protection, The Florida Department of Health, (formerly The Florida Department of Health and Rehabilitative Services), and Perma-Fix of Florida, Inc. dated August 14, 1995, signed by Robert Foster, President, Perma-Fix Environmental Services, Inc., the Certificate of Liability Insurance, dated August 28, 2014, and the correspondence between Perma-Fix of Florida, Inc. and the Florida Department of Environmental Protection dated September 15, 2014, signed by Edgar Echevarria, Environmental Specialist II, Hazardous Waste Regulation Section.
- B. Pursuant to 64E-5.217(1)(d), F.A.C., the department may re-evaluate, at any time, the adequacy of an existing bond or guaranty and may require an adjustment by either increasing or decreasing the amount of the bond or guaranty required.
23. The licensee shall comply with section 64E-5.1308, F.A.C., listing additional requirements for device(s) received under general license provisions as described in Items 6, 7, 8 and 9. The licensee shall conduct a physical inventory and inspection at least every 12 months to account for all sealed sources received and possessed under this license as required in section 64E-5.1304, F.A.C. Inventory records shall be maintained for 3 years from the date of the inventory for inspection by the department, and shall include the manufacturer's name, model and serial numbers of each sealed source, the identity of each sealed source radionuclide and its estimated activity, the location of each sealed source, the date of the inventory and the signature of the radiation safety officer or designee.
24. The licensee may dispose of any radioactive material with a physical half-life of less than 120 days by decay in storage provided all of the following are met:
- A. Radioactive material to be disposed is held for decay in storage a minimum of 10 half-lives;
- B. 1. The radioactive material is monitored at the container surface before disposal as ordinary trash and its radioactivity cannot be distinguished from the background radiation level in a low background radiation area with an appropriate radiation survey instrument set on its most sensitive scale and with no interposed shielding;
2. Radioactive materials contained in liquid scintillation media is to be sampled according to established procedures and disposed as non regulated material as described in paragraph 64E-5.331(1)(a), F.A.C.

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24. C. All radiation labels are removed or obliterated, unless specifically authorized in writing or license condition by the department;
- D. Each generator column is separated and monitored individually with all radiation shielding removed to ensure that its contents have decayed to background levels before disposal; and
- E. The licensee shall retain a record of each disposal for 3 years. The record shall include:
1. The date of the disposal;
 2. The date on which the radioactive material was placed in storage;
 3. The radionuclides disposed;
 4. The model and serial number of the radiation survey instrument used;
 5. The background dose rate;
 6. The radiation dose rate measured at the surface of each container; and
 7. The name of the individual who performed the disposal.
25. The licensee shall not aggregate or collocate radioactive materials in storage in excess of a total of 16 curies of Am-241 or Am-241/Be, 5.3 curies of Cf-252, 13.4 curies of Cm-244, 8.0 curies of Co-60, 26.9 curies of Cs-137, 269 curies of Gd-153, 19.9 curies of Ir-192, 10,810 curies of Pm-147, 15.9 curies of Pu-238, 15.9 curies of Pu-239/Be, 53.9 curies of Se-75, 269 curies of Sr-90 (Y-90), 5,404 curies of Tm-170, 10.7 curies of Ra-226, or 80.9 curies of Yb-169. If several radionuclides are aggregated, the sum of the ratios of the activity of each source, i of radionuclide, n , $A_{(i,n)}$, to the quantity of concern for radionuclide n , $Q_{(n)}$, listed for that radionuclide will equal or exceed one. $[(\text{aggregated source activity for radionuclide A}) \div (\text{quantity of concern for radionuclide A})] + [(\text{aggregated source activity for radionuclide B}) \div (\text{quantity of concern for radionuclide B})] + \text{etc.} > 1$.
26. A. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, 8 and 9 of this license in accordance with statements, representations and procedures contained in the licensee's application dated May 29, 2015, signed by Raymond Whittle, Vice President / General Manager.

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26. B. The licensee shall comply with all applicable requirements of Chapter 64E-5, Florida Administrative Code, and these regulations shall supersede the licensee's statements in applications or correspondence, unless the statements are more restrictive than the regulations.



For the Bureau of Radiation Control:

JUN 11 2015

Issuance Date: _____



Gan Preamplume
Environmental Specialist II
4052 Bald Cypress Way – Bin C21
Tallahassee, FL 32399-1741
(850) 245-4545

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is: Agency Clerk, 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448. A copy of the petition should also be sent to: Bureau Chief, Bureau of Radiation Control, 4052 Bald Cypress Way, BIN # C21, Tallahassee, FL 32399-1741. The Bureau Chief's facsimile number is 850-487-0435. Mediation is not available as an alternative remedy. Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a "final order." Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.

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Diversified Scientific Services,
Inc. (DSSI)
Kingston, TN



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 DIVISION OF RADIOLOGICAL HEALTH
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RADIOACTIVE MATERIAL LICENSE

Amendment 98

Pursuant to Tennessee Department of Environment and Conservation Regulations, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

LICENSEE		3. License number R-73014-H24 amended in its entirety
1. Name Diversified Scientific Services, Inc. (DSSI)	4. Expiration date August 31, 2024	
2. Address 657 Gallaher Road Kingston, Tennessee 37763	5. File no. R-73014	
6. Radioactive Material (Element and Mass Number)	8. Chemical and/or physical form	9. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
See Supplementary Sheets		
10. Authorized Use		
See Supplementary Sheets		

CONDITIONS

11. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

See Supplementary Sheets

Date of Issuance: August 6, 2014

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For the Commissioner
 Tennessee Department of Environment and Conservation

By: Charles Arnott
 Division of Radiological Health
 Charles Arnott
 Health Physicist



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- | 6. Radioactive Material
(Element and
<u>Mass Number</u>) | 8. Chemical
and/or
<u>Physical Form</u> | 9. Maximum Radioactivity
and/or Quantity of Material
Which Licensee May Possess
<u>at Any One Time</u> |
|---|--|---|
| A. Hydrogen 3 | A. Any liquids or solids for operations authorized in Item 10 of this license and for treatment as outlined in the License Operational Criteria. (Hazardous constituents shall be authorized by the facility's appropriate RCRA Hazardous Waste Permit(s) issued by the State of Tennessee, Division of Solid Waste Management, and/or TSCA Hazardous Waste Permit(s) issued by the US EPA) | A. 20000 Curies |
| B. Carbon 14 | B. Same as in 8.A. | B. 300 Curies |
| C. Any Radioactive Material with Atomic Numbers 1 through 83, inclusive, except Hydrogen 3 and Carbon 14. | C. Same as in 8.A. | C. The total combined isotopic activities <u>shall not exceed</u> 20 Curies at any one time. |
| D. Any Radioactive | D. Same as in 8.A. | D. The total combined |



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	Material with Atomic Numbers 84 through 92, inclusive, except special nuclear material.		isotopic activities <u>shall not exceed 10 Curies</u> at any one time.
E.	Transuranics, except special nuclear material.	E. Same as in 8.A.	E. Total not to exceed 100 millicuries.
F.	Uranium (not U-233 or U-235)	F. Same as in 8.A.	F. Total quantity authorized in Items F. and G. is 3000 kilograms.
G.	Thorium	G. Same as in 8.A.	G. See Item 9.F.
H.	Uranium 233	H. Same as in 8.A.	H. 175 grams (see Note 1 below)
I.	Uranium enriched in the U-235 isotope	I. Same as in 8.A.	I. 350 grams of contained U-235 (see Note 1 below)
J.	Plutonium	J. Same as in 8.A.	J. 200 grams (see Note 1 below)
K.	Any Radioactive Material with Atomic Numbers 1 through 95, inclusive, except special nuclear material.	K. Sealed Source in plated, encapsulated, embedded, or flame sealed (liquid) form. Liquid radioactive standards.	K. No single source to exceed 100 microcuries. Total not to exceed one 1 millicurie.



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- | | | |
|--------------|---|--|
| L. Nickel 63 | L. Sealed Source (Any source used in electron capture detectors as part of a gas chromatograph authorized by the NRC Sealed Source and Device Registry) | L. Six (6) sources not to exceed twenty (20) millicuries each or the maximum amount authorized by the NRC Sealed Source and Device Registry. |
|--------------|---|--|

Note:

- (1) For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified here for the same kind of special nuclear material. The sums of such ratios for all kinds of special nuclear material in combination shall not exceed "1" (i.e., unity).

10. Authorized Use

- | | |
|---------------|--|
| A. through J. | In accordance with statements, and representations, and procedures contained in material referenced in conditions of this license: <ol style="list-style-type: none"> 1. For treatment as solids or liquids; and/or 2. For the burning as radioactive liquids with suspended or dissolved solids; and 3. Storage and processing of the resultant site-generated waste. 4. Shredding, compacting, and stabilization operations of on-site and/or commercially generated radioactive wastes. 5. Laboratory analysis of samples. 6. Waste receipt, unpacking, sorting and/or separating, repackaging, storage, and transfer of radioactive material for processing at a facility affiliated or unaffiliated with DSSI 7. Possession or receipt as contaminates on equipment. |
| K. | For use in instrument calibration and standardization. For use in analytical method development, method verification and quality control. |
| L. | For use in electron capture detectors as part of gas chromatographs |



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authorized by the NRC Sealed Source and Device Registry.

Conditions

12. The licensee shall comply with applicable provisions of 0400-20-04, 0400-20-05, and 0400-20-10 of "State Regulations for Protection Against Radiation."
13. Radioactive material authorized by this license shall be used only at 657 Gallaher Road, Kingston, Tennessee 37763.
14. A. Radioactive material authorized by this license shall be used by, or under the supervision of, Joseph W. Crider, Michael B. Nance, Gerald Boatwright, Kenyon Mee, James Monday, James E. Ryans, Eric Fillmore, Bryan Shannon, James H. Dailey, Marcus Jackson, Jeffery Roberts, Matthew Hall, or Rufus Miles. An Authorized User must be physically present on site whenever radioactive material is being used which is defined as any handling or processing operation involving radioactive materials.

B. The Radiation Safety Officer for this license is James H. Dailey.
15. Pursuant to 0400-20-05-.121 and 0400-20-05-.123 of "State Regulations for Protection Against Radiation," the licensee may dispose of radioactive material by incineration in accordance with statements, representations, and procedures contained in application dated July 11, 2014, with attachments, and other material referenced in conditions of this license.
16. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination is not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:
 - A. Radioactive waste material shall not be stored with non-radioactive waste.
 - B. A written record of all radioactive waste material shall be maintained until it has been determined by a suitable survey or radioassay that it has decayed to background levels or until it has been shipped to an authorized recipient in accordance with all applicable



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regulations. Accountability of radioactive waste material prepared for shipment but not yet shipped from the licensee's premises shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.

- C. For material which has decayed to background levels as determined by radioassay or external level as measured with appropriately calibrated instruments, records shall indicate that the material was determined to be no longer radioactive and will indicate the methods and results of the survey or analysis.
- D. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that this material has been received.
- E. All records and written confirmations required by this condition shall be maintained for inspection by the Department.

The requirements for this condition are in addition to any other requirements for the handling and/or disposal of radioactive material contained in this license and "State Regulations for Protection Against Radiation."

- 17. A. Sealed sources authorized by this license shall be tested for leakage and/or contamination at intervals not to exceed three (3) years, or as specified in the NRC Sealed Source and Device Registry. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.



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- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Division of Radiological Health, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee, 37243, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed in accordance with statements, representations, and procedures contained in application dated July 11, 2014, with attachments, or by persons specifically licensed by this Department, the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State to perform such services.
18. Notwithstanding the periodic leak test required by Condition 17, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
19. The licensee shall not open sealed sources containing radioactive material.
20. Detector cells containing Nickel 63 authorized by this license shall only be used in conjunction with a properly operating temperature control mechanism which prevents the temperature of the foil from exceeding the specifications authorized in the NRC Sealed Source and Device Registry.
21. Maintenance and repair of detector cells containing radioactive material shall be performed only by the manufacturer, or by other persons specifically authorized by this Department, the U.S. Nuclear Regulatory Commission, or another Agreement State to perform such services.
22. ~~Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.~~



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23. When not installed in a gas chromatograph, detector cells containing licensed material shall be stored in a properly labeled container under lock and key to prevent access by unauthorized individuals.
24. In lieu of using the conventional radiation caution colors (magenta or purple or black on yellow background) as provided in 0400-20-05-.110(1) of "State Regulations for Protection Against Radiation," the licensee is hereby authorized to label detector cells and cell baths, containing byproduct material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
25. No provision of this license relieves the licensee from compliance with other Federal, State and local laws, ordinances, and regulations applicable to the licensee's activities.
26. The licensee is authorized to perform leak testing of sealed sources in accordance with statements, representations, and procedures contained in correspondence referenced in Condition 39 of this license.

The tests shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample, or in the case of radium, the escape of radon at the rate of 0.001 microcurie per 24 hours. The customer shall be furnished a report of the results in units of microcuries.

If the test reveals the presence of 0.005 microcurie or more of removable contamination, or in the case of radium, the escape of radon at the rate of 0.001 microcurie or more per 24 hours, the customer of the licensee shall be informed of the Department's requirements as follows: "The licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations."

A report shall be filed within five (5) days of the test with the Division of Radiological Health, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243, describing the equipment involved, the test results, and the corrective action taken.

27. The licensee is authorized to receive, possess, and use any radioactive material distributed under a general license, issued by the U.S. Nuclear Regulatory Commission, another



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Agreement State, or a Licensing State without being specifically referenced in Items 6, 8, 9, and 10 of this license. Notwithstanding any other conditions of this license, the general licensee may possess and use radioactive material received under the provisions of "State Regulations for Protection Against Radiation", 0400-20-10 in accordance with the requirements provided at the time of transfer of the radioactive material under the terms of the general license.

28. No radioactive material (excluding calibration and standardization sources or useable equipment) or radioactive waste may be possessed under this license, from its time of receipt or generation until its disposal or transfer from the facility, for a period of time greater than three hundred and sixty-five (365) days, except that radioactive material (not excluded above) which does not have a location for disposal that is approved by all regulatory agencies that have jurisdiction over the material and its disposal may be stored for greater than three hundred and sixty-five (365) days. The quantity of radioactive material that may be stored for this extended period of time shall not exceed twenty (20) percent of the possession limit authorized by Item 9 of this license.
29. The licensee shall not accept either radioactive waste and/or items contaminated or potentially contaminated with licensable quantities of radioactive material or radioactive materials or items from licensable activities for repackaging, processing, refurbishing, storage pending disposal or disposal unless the shipper of such waste possesses a valid License for Delivery issued pursuant to 0400-20-10-.32 of "State Regulations for Protection Against Radiation."
30. Written assurances must be furnished by the facility shipping the radioactive material indicating that the facility may accept return of the material processed or unprocessed. In addition, for states outside the Southeast Compact the state or appropriate Compact must be a signatory to the Interregional Access Agreement for Waste Management or assurances shall be obtained from the appropriate state governor's office, the state radiation control program, and the appropriate Compact official, if any.
31. The licensee shall establish in every contractual obligation relating to radioactive materials the ability to return radioactive materials, processed or unprocessed, to the prior licensed or exempt possessor.



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32. A. The licensee shall develop and maintain written radiological protection procedures that ensure implementation of the radiation safety program in accordance with "State Regulations for Protection Against Radiation" (SRPAR), ALARA, and the documents referenced in conditions of this license.
- B. In addition, the licensee shall develop and implement written standard operating procedures to ensure all activities involving the handling and/or use of radioactive materials authorized by this license are carried out in a manner consistent with SRPAR, ALARA, and the documents referenced in Condition 49 of this license. Activities for which written procedures must be developed include the operation and maintenance of processing equipment, waste treatment systems, and all ancillary systems in, or on, which radioactive materials may be present.
- C. The written procedures required by this license by this condition shall be available for inspection by the Department. These written procedures may be modified without prior approval of the Department when deemed appropriate and documented by the Radiation Safety Officer. However, adherence to the current procedures as written shall be considered a condition of the license.
33. The licensee shall, prior to exceeding eighty (80) percent of the regulatory limit (public dose), either by calculation or physical measurement, notify both the Division's Environmental Field Office Manager in Knoxville and the Division's Manager of Licensing and Registration in Nashville.
34. The licensee shall, within thirty (30) days after the end of each calendar quarter, submit a report to the Division's Manager of Licensing and Registration in Nashville. The report shall include the number of burns in the quarter, the total activity burned by isotope, the monitored fence line dose (OSLD) results, and the public TEDE indicated in section 5.1.1 of the "Environmental Radiation Dose Control Procedure," document number RP-017.
35. The licensee is authorized to store containers which previously contained radioactive material (empty containers) outside of the DSSI building in accordance with statements, representations, and procedures contained in application dated July 11, 2014, with attachments. Each empty container in outside storage shall:
1. Be emptied of contents as far as practical;



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- 2. Contain no hazardous material or standing liquid;
- 3. Be in unimpaired condition and securely closed so that there will be no leakage under conditions normally incident to transportation or storage;
- 4. Have no radiation levels on the external surface of the package exceeding 0.5 mR/hr average and 2.0 mR/hr hotspot;
- 5. Have no non-fixed contamination on the external surface of the package exceeding the NRC Reg. Guide 1.86 free release limits;
- 6. Have no internal non-fixed contamination exceeding:

Beta and gamma emitters and low toxicity alpha emitters*;	2200 dpm/cm ²
--	--------------------------

All other alpha emitters (*As defined by USDOT 49CFR 173.403)	220 dpm/cm ²
--	-------------------------

- 7. Have any labels previously applied removed, obliterated, or covered and an "Empty" label affixed;
 - 8. Be stored on a paved (asphalt or concrete) surface; and
 - 9. Be arranged such that the containers can be visually inspected on all sides.
36. The following evaluations shall be performed for all process ventilation systems:
- A. Air balance within the RCA at least semi-annually, and following any ventilation system or process changes which could potentially alter the effectiveness of the system.
 - B. Particulate removal efficiency of the main filtration system HEPA filters by DOP or comparable testing in accordance with pertinent ANSI standards immediately following installation of new HEPA filters or at least semi-annually. This condition



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License Number R-73014-H24

authorizes the use of the procedure for HEPA testing described in application dated July 11, 2014, 2004, with attachments.

37. The licensee shall comply with the requirements described in Order EA-07-305 (the Order). The licensee shall complete implementation of said requirements by November 10, 2008. The licensee shall notify the Division of Radiological Health when they have achieved full compliance with the requirements described in the Order. The notification shall be made within twenty-five (25) days after full compliance has been achieved. This notification shall include a certification that the Trustworthiness and Reliability (T&R) Official (and any subsequent T&R Official) is themselves deemed trustworthy and reliable by the Licensee as required in paragraph B.2. of the Order. The licensee shall notify the Division of Radiological Health within 24 hours if the results from a criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.
38. An exemption is granted to the requirements of 0400-20-05-.113(1) of "State Regulations for Protection Against Radiation" to not require the posting of containers of radioactive material with the wording "CAUTION, RADIOACTIVE MATERIAL." Containers of radioactive waste may be marked as containing radioactive material, and be marked with a unique identification number as stated in 4.2.2 of the DSSI License Operational Criteria.

This exemption may be withdrawn or modified by the Department at any time it is determined necessary to protect the public health and safety or if it is found that the conditions on which this exemption is based have been violated.

39. A. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in the following:
- Application dated July 11, 2014, with attachments
 - Letter dated July 3, 2014
 - Email dated August 5, 2014, with attachment
- B. The licensee shall comply with the requirements described in the Division of Radiological Health letter dated December 1, 2005, and attached document entitled



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
WILLIAM R. SNODGRASS TENNESSEE TOWER, 15th FLOOR
312 ROSA L. PARKS AVENUE, NASHVILLE, TENNESSEE 37243

RADIOACTIVE MATERIAL LICENSE

Amendment 98

Supplementary Sheet

Page 13 of 13 Pages

License Number R-73014-H24

"INCREASED CONTROLS FOR LICENSEES THAT POSSESS SOURCES CONTAINING RADIOACTIVE MATERIAL QUANTITIES OF CONCERN." The licensee shall complete implementation of said requirements within 6 months from the issuance of the license amendment or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1 of the attachment, whichever is later. Within 25 days after the implementation of the requirements of this condition, the licensee shall notify the Division of Radiological Health in writing that it has completed the requirements of this condition.

RSO, Inc.

Attachment D

RSO, Inc.

David E. Wellner, Manager, Radioactive Materials Services and Senior Broker Resume

Position **Manager, Radioactive Materials Services Senior Broker**

Experience 1991–Present RSO, Inc. Laurel, MD
Manager, Radioactive Materials Services

- Manager, Radioactive Materials Services Department. Responsible for the management of radioactive waste services to government and commercial customers. Including brokerage of low level radioactive waste disposal, transportation, radioactive waste decay-in-storage, short term warehousing of radioactive material, and transportation services for radioactive material.
- Maintained profitability of the department during changes in the industry, developed teaming arrangements with compatible companies to provide a range of services.
- As company resource provided direct radioactive waste consultation and service to customers including work at University of Maryland –Colleg Park, Virginia Commonwealth University-Richmond, St. Joseph's University-Philadelphia, Georgetown University-Washington DC, and supported decommissioning activities of the Radiation Safety Services Department. Perform "Emergency Response" services related to radioactive material incidents.
- Instituted use of computer software (Low-Track) for radioactive waste shipment manifesting and in-house development of data base for decay-in-storage tracking and inventory.

1987–1991 RSO, Inc. Laurel, MD
Radiation Service/Senior Technician

- Handling and packaging of low level radioactive waste for disposal, transportation, and radioactive waste decay-in-storage.
- Supervised projects including several shipments of radioactive waste to various processors and disposal sites.

Education • University of Maryland, College Park, MD, Bachelors of Science, Technology & Management, December 1998.

Training Technical Training Courses

- Global Threat Reduction Initiative, Alarm Response Training, Y12 National Security Complex, September 2014
- Basic DOT Hazardous Material Training, RSO, Inc. March 2014
- 49CFR DOT IATA IMDG Radioactive Materials Training, Dangerous Goods International Training Center, September 2012
- Protocols for Proper Loading and Closure of Special Form Capsules 49 CFR 172.704 (a)(2)(i) Los Alamos National Laboratory, OSRP, November 2011
- 49CFR DOT IATA IMDG Radioactive Materials Training, Dangerous Goods International Training Center, October 2010



- CHS Hazmat Employee Training, RSO, Inc. February 2010
- DOT, NRC & IATA Requirements for Shipping Radioactive Material, Radiation Safety Academy, January 2008
- Hazmat Employee and Controlled Hazardous Substance Refresher Training, February 2007
- Advanced Radioactive Waste Packaging Transportation and Disposal, Duratek, Inc. August 2005
- US Department of Transportation, Radioactive Materials Course, December 2003
- Nucletron Corporation, Source Return Training Course, April 2003

Certifications

Technical Certifications

- State of Maryland Approved, Hazmat Employee Trainer
- Controlled Hazardous Substances Driver's Certificate (Maryland)
- Commercial Driver's License (Maryland Class B with Hazardous Endorsement)
- USEPA "Hazwhoper" Certified (40 hr)

Affiliations

- Member, Health Physics Society, Baltimore Washington Chapter
- Member, Conference Radiation Control Program Directors, Inc.



David A. Frazier, Radioactive Materials Technician/Driver Resume

Position	Radioactive Materials Senior Technician/Broker
Experience	1987–Present RSO, Inc. Laurel, MD Radioactive Materials Technician <ul style="list-style-type: none">• Handling, packaging and manifesting of low level radioactive waste for disposal, transportation, and radioactive waste decay-in-storage. Perform radiation services at customer facilities under a variety of working conditions. Perform shipments of radioactive waste to various processors and disposal sites and implementation of customer radioactive waste management programs.• Perform “Emergency Response” services related to radioactive material.• Use of computer software (Low-Track) for radioactive waste shipment manifesting and use of data base for decay-in-storage tracking and inventory.
Training	Technical Training Courses <ul style="list-style-type: none">• Global Threat Reduction Initiative, Alarm Response Training, Y12 National Security Complex, September 2014• CHS Hazmat Employee Training, RSO, Inc. 3/28/2014• 8 Hour Hazwoper Refresher Training, 29 CFR 1910.120 (e) & (p). 8/2014• Radioactive Materials International Civil Aviation Organization, International Maritime Dangerous Goods and US Department of Transportation 49 CFR, DGI, 9/28/2012
Education	High School Diploma, Howard High School, June 1986.
Certifications	Technical Certifications <ul style="list-style-type: none">• Controlled Hazardous Substances Driver's Certificate (Maryland)• Commercial Driver's License (Maryland Class B with Hazardous Endorsement, Tanker)• Confined Space Operations (OSHA 29 CFR 1910.146) 8/15/2012• Fall Protection (OSHA 29 CFR 1926.500(a),501,502,& 503) 8/15/2012• Hazardous Waste Site Worker 40 Hr. (OSHA CFR 1910.120(e)(3)(i)) 8/15/2012• Bloodborne Pathogens (OSHA 29 CFR 1910.1030) 8/15/2012• Protcols for Proper Loading & Closure of Special Form Capsule (49CFR 172.704(a)(2)(i) 11/15/2011• TSA Determination of Eligibility (CFR part 1572) 10/17/2012



Christina A. Hirschmann, Sr. Broker and Radioactive Materials Technician

Resume

Position **Radioactive Materials Broker**

Experience 1996–Present RSO, Inc. Laurel, MD
Radioactive Materials Technician/Broker

- Responsible for maintaining inventory control and data management systems. Provide customer support and logistics. Maintain Federal and State Transportation Permitting Program. Prepare reports and summaries of operating activities. Prepare hazardous material shipping documents in accordance with DOT and customer requirements. Receive radioactive packages and prepare radioactive packages for shipment. Perform inventory, supply ordering and invoicing for departmental operations. Perform shipments of radioactive waste to various processors and disposal sites and implementation of customer radioactive waste management programs.
- Use of computer software (Low-Track) for radioactive waste shipment manifesting and use of data base for decay-in-storage tracking and inventory.

Training **Technical Training Courses**

- DOT & NRC Requirements for Shipping and Receiving Radioactive Materials, Dade Moeller & Assoc. - February 24, 2015
- CHS Hazmat Employee Training, RSO, Inc. February 2010
- US DOT Haz Mat Employee Training and MDE CHS Driver Training – February 27, 2007 presented by RSO, Inc.
- DOT & NRC Requirements for Shipping and Receiving Radioactive Materials – July 11, 2006 presented by Radiation Safety Academy
- Meeting the Function-Specific Training Requirement of NRC Bulletin IE 79-19 and 49 CFR Part 172, Subpart H, Hazmat Employee Training presented by Duratek, Inc. – August 18-20, 2003
- EPA Hazardous Waste Compliance Workshop presented by Safety Council of Maryland – February 5, 2003
- Certificate of Attendance for EPA Region II Emergency Preparedness and Prevention Conference – December 8-12, 2002
- DOT & NRC Requirements for Shipping and Receiving RAM presented by Radiation Safety Academy – May 7-8, 2001
- OSHA Hazardous Materials Site Worker Annual Recertification – March 6, 2001
- Hazardous Materials Site Worker Course (40-hours) presented by All American Environmental Services, Inc. – March 27-31, 2000
- Radioactive Waste Packaging, Transportation, and Disposal training contributing to the completion of NRC Bulletin IE 79-19 and 49 CFR Part 172, Subpart H presented by Chem-Nuclear Systems – August 9-12, 1999
- Dun & Bradstreet, Collections - March 1998

Education

Howard Community College, Columbia, MD.
Tidewater Community College, Norfolk, VA. Fall 1994-Spring 1995

RSO, Inc.

Attachment E

RSO, Inc. - Laurel, MD
RSO Radioactive Materials Technician/Driver Uniform



RSO, Inc.

Attachment G

RSO, Inc. University References

Pertinent Contracts-Currently in Progress

Name of Contracting Organization	Georgetown University Environmental Health & Safety Department
Contract Number	Order Number PO-0006145
Contract Type	Firm Fixed Price (Indefinite Quantity)
Total Contract Value (\$)	Current Contract Total: \$70,000
Name of Contracting Activity	Radioactive Waste Management and Calibration of Radiation Survey Meters
Contracting Agency	Georgetown University EHSO PCS Building PO Box 571431 Washington, DC 20057
Contracting Officer	Catalina Kovats Phone: 202-687-4712
Program Manager	Catalina Kovats Phone: 202-687-4712
Beginning and Ending Dates	Start: October 29, 2014 Ending: October 29, 2015
Relevance to the RFP	Radioactive Waste Management. Including radiations surveys of work areas using hand-held survey meters, inventory of radioactive materials items for disposal, packaging of radioactive material (sealed sources), and collection of packages of radioactive waste, preparation for shipping, manifesting, collection, and transport to processors.

Name of Contracting Organization	University of Maryland
Contract Number	PO 11273
Contract Type	Firm Fixed Price (Indefinite Quantity)
Total Contract value (\$)	\$35,000 per year
Name of Contracting Activity	Radioactive Waste and Mixed Waste Management and Disposal Services
Contracting Agency	University of Maryland Department of Environmental Safety College Park, MD 20742
Contracting Officer	Karen Contreras Phone: 301-405-3373

Program Manager	John Follum Phone: 301-405-3163
Beginning and Ending Date	Start: August 4, 2014 Ending: August 3, 2015
Relevance to the RFP	Radioactive Waste Management. Scope of work includes profiling mixed wastes, providing packaging supplies, and collection of packages of radioactive waste, manifesting, labeling, surveying, and transportation to processing facilities.

Name of Contracting Organization	University of Delaware
Contract Number	Per Service Date
Contract Type	Firm Fixed Price (Indefinite Quantity)
Total Contract value (\$)	\$3,000 per year
Name of Contracting Activity	Radioactive Waste and Mixed Waste Management and Disposal Services
Contracting Agency	University of Delaware 222 S. Chapel St. Newark, DE 19716
Contracting Officer	William Fendt Phone: 302-831-8475
Program Manager	William Fendt Phone: 302-831-8475
Beginning and Ending Date	Start: December 1, 1996 Ending: Open
Relevance to the RFP	Radioactive Waste Management. Scope of work includes profiling mixed wastes, providing packaging supplies, and collection of packages of radioactive waste, manifesting, labeling, surveying, and transportation to processing facilities.

RSO, Inc. Other References

Pertinent Contracts-Currently in Progress

Name of Contracting Organization	Smithsonian Institution
Contract Number	PO 0000064507
Contract Type	Firm Fixed Price (Indefinite Quantity)
Total Contract value (\$)	\$50,000 per year
Name of Contracting Activity	Radioactive Waste and Mixed Waste Management and Disposal Services
Contracting Agency	Smithsonian Institution PO Box 37012 MRC 1200 Washington, DC 20013-7012
Contracting Officer	Dorothy Leffler Phone:
Program Manager	David Peters Phone: 202-633-2672
Beginning and Ending Date	Start: March 11, 2014 Ending: March 17, 2016
Relevance to the RFP	Radioactive Waste Management. Scope of work includes profiling mixed wastes, providing packaging supplies, and collection of packages of radioactive waste, manifesting, labeling, surveying, and transportation to processing facilities.

Name of Contracting Organization	Environmental Management Services, Inc. (EMSI)
Contract Number	Open Purchase Order
Contract Type	Firm Fixed Price
Total Contract Value (\$)	\$60,000
Name of Contracting Activity	Radioactive Waste Management
Contracting Agency	Environmental Management Services, Inc. 1688 E. Gude Drive Suite 301 Rockville, MD 20850
Contracting Officer	Shobhana Sharma Phone: 301-309-0475
Program Manager	Shobhana Sharma Phone: 301-309-0475

Beginning and Ending Dates	Start: 1995 Ending: Open
Relevance to the RFP	RSO subcontracts waste brokerage services to EMSI for Radioactive Waste Management at multiple EMSI client locations. Scope of work includes profiling mixed wastes, providing packaging supplies, and collection of packages of radioactive waste, decay in storage, manifesting, labeling, surveying, and transportation to processing facilities.

Name of Contracting Organization	Incyte Corporation
Contract Number	PO 89299
Contract Type	Firm Fixed Price (Indefinite Quantity)
Total Contract value (\$)	\$35,000 per year
Name of Contracting Activity	Radioactive Waste and Mixed Waste Management and Disposal Services
Contracting Agency	Incyte Corporation 1801 Augustine Cut-Off Wilmington, DE 19803
Contracting Officer	Deseriee Washington Phone:
Program Manager	Mark Czerwinski Phone: 302-498-6827
Beginning and Ending Date	Start: March 25, 2008 Ending: Open
Relevance to the RFP	Radioactive Waste Management. Scope of work includes profiling mixed wastes, providing packaging supplies, and collection of packages of radioactive waste, manifesting, labeling, surveying, and transportation to processing facilities.

**VIRGINIA COMMONWEALTH UNIVERSITY
CLARIFICATION QUESTIONS AND NEGOTIATION POINTS**

**Radioactive Waste Disposal Services
RFP No.:6528137SW
October 20, 2015**

RSO

1. Section (5.f) RSO Alternate Disposal Methods, #2 of your response, you state that "VCU may benefit from shipping DSW for incineration in boxes instead of compaction in steel drums." **Please provide pricing in \$/lb for disposal of DSW by this method.** Include packaging provided by RSO, and the specifications of what type of packaging is proposed for this disposal method.

RSO Response:

The pricing for the dry solid waste for direct incineration at Energy Solutions is as follows:

Dry Solid Material, per 3.9 cu. ft. container for incineration with furnished fiberboard box (Spec. UN 1G/X120/S/15 USA) with waxed bottom and 4 ml liner, <=50 lbs. gross wt.
Unit Price \$6.01 per lb. gross wt.

Annual contract disposal weights could be reduced using the incineration method because of the outer package weight differences. One 55 gallon steel drum weighs approximately 50 lbs empty. We estimate savings for package weight reduction to be about \$2,000.00 per year. Waste must be incinerable (e.g., wood, paper, plastic, glass)

2. **If VCU elects to change from current disposal methods to a method recommended by RSO, could this be done on a trial basis (e.g. six months) during the contract period in order to fully evaluate the impact on workflow for VCU?** In light of your suggestion of alternate waste disposal methods, are you open to including set pricing for more than one disposal method for a given waste type in any negotiated final contract?

RSO Response:

RSO would allow a disposal method change on a trial basis. We routinely encourage waste generators to evaluate different disposal alternatives that best meet their needs. RSO is open to including set pricing for more than one disposal method in a negotiated final contact. For example VCU could ship 1 drum of compacted non-incinerable waste (e.g., metals) and 4 boxes of incinerable waste. (e.g., wood, paper, plastic, glass)

3. RSO currently uses Perma-Fix of Florida for disposal of LSV waste. **Why does RSO elect to dispose of this waste through Perma-Fix instead of NSSI?**

RSO Response:

RSO has contractual relationships with both Perma-Fix and NSSI. We ship waste to each facility based on costs and the facilities ability to accept and treat specific mixed wastes (radioactive and hazardous).



Kelly A McClurg <mcclurgka@vcu.edu>

Fwd: VCU Final Discussions/Negotiations RFP#6528137SW

1 message

Elizabeth A Rosenberg <earosenb@vcu.edu>
To: Kelly A McClurg <mcclurgka@vcu.edu>

Fri, Nov 13, 2015 at 10:27 AM

Beth RosenbergRadiation Safety Specialist
Virginia Commonwealth University
Office of Environmental Health and Safety
Radiation Safety Section804.828.9134
earosenb@vcu.edu

----- Forwarded message -----

From: **Sandra D White** <sdwhite2@vcu.edu>

Date: Fri, Nov 6, 2015 at 9:00 AM

Subject: Fwd: VCU Final Discussions/Negotiations RFP#6528137SW

To: Elizabeth H Dean <ehdean@vcu.edu>, Elizabeth A Rosenberg <earosenb@vcu.edu>, John C Carter <jccarter@vcu.edu>

Team,

Please see final response from RSO.

Thank you.

Sandra D. White, VCO, CUPO
Purchasing Manager, Service Category
VCU Procurement ServicesMailing Address:
PO Box 980327
Richmond, VA 23298-0327Direct Phone Number (804) 828-0663
FAX: (804) 828-7837
Email Address: sdwhite2@vcu.edu

----- Forwarded message -----

From: **David Wellner** <DWellner@rsoinc.com>

Date: Fri, Nov 6, 2015 at 8:52 AM

Subject: VCU Final Discussions/Negotiations RFP#6528137SW

To: "Sandra D White (sdwhite2@vcu.edu)" <sdwhite2@vcu.edu>

Cc: Christina Hirschmann <christina@rsoinc.com>

Ms. White,

Attached is the completed revised Pricing Schedule and the Final Discussions/Negotiations page for RSO's best and final offer. The pricing has remained unchanged from our original offer.

Sincerely,

David E. Wellner, Manager

dwellner@rsoinc.com

RSO, Inc.

PO Box 1450

Laurel, MD 20725-1450

301-953-2482 x306 (Wash)

410-792-7444 x306 (Balt)

This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

11/10/2015 10:11:11 AM From: David E. Wellner [mailto:dwellner@rsoinc.com] Sent: Monday, November 9, 2015 10:08 AM To: 'Ms. White' [mailto:mswhite@vcu.edu] Subject: Fwd: VCU Final Discussions/Negotiations RFP#6528137SW

2 attachments



SKMBT_C22015110609490.pdf

121K



SKMBT_C22015110609491.pdf

794K

FINAL DISCUSSIONS/NEGOTIATIONS – RSO
November 4, 2015

Description
Please resubmit the price schedule for contract pricing to include pricing for DSW both compacted in 55 gal drums, and packaged in fiberboard boxes for incineration. A revised pricing schedule worksheet is attached.
Please confirm if your new pricing schedule is your best and final offer. Keep in mind that price is a factor in the selection decision. Generally, please review pricing to see if it can be improved upon.

PRICE SCHEDULE
RFP #6528137SW Radioactive Waste Disposal Services
(Page 1of3)

A. **TOTAL FIXED PRICING:**

Offerors shall submit pricing in the following format:

1. **Standard Disposal Methods / Hypothetical Price Schedule:**

a. Quantities:

- (1) The quantities identified in "ATTACHMENT C," subsection "A.1.c.(1)(a)" through "A.1.c.(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)" are estimates only (based upon historical annual requirements).
- (2) The Contractor should provide radioactive waste disposal services for the actual quantities ordered, at the contract price(s), regardless of whether such total quantities are more or less than those shown (also refer to Section X, the "SPECIAL TERMS AND CONDITIONS," subsection "Q").

b. Pricing:

- (1) Offerors shall identify / complete each "UNIT PRICE," "TOTAL EXTENDED PRICE" and the "TOTAL SUM" field / space in "ATTACHMENT C," for subsection:
 - (a) "A.1.c.(1)(a)" through "A.1.c.(1)(i)" / "VCU FURNISHED / LABELED" packaging containers / materials / supplies; and
 - (b) "A.1.c.(2)(a)" through "A.1.c.(2)(i)" / "CONTRACTOR FURNISHED / LABELED" packaging containers / materials / supplies.

Note: VCU reserves the right to award the contract based upon using VCU furnished (refer to "ATTACHMENT C," the "PRICE SCHEDULE," subsection "A.1.c.(1)"; "VCU FURNISHED / LABELED"); or Contractor furnished (refer to "ATTACHMENT C," subsection "A.1.c.(2)"; "CONTRACTOR FURNISHED / LABELED"), packaging containers / materials / supplies, whichever is determined to be in the best interest of VCU, as solely determined by VCU.

- (2) Each "UNIT PRICE," "TOTAL EXTENDED PRICE" and "TOTAL SUM" (refer to "ATTACHMENT C," subsection "A.1.c.(1)(a)" through "A.1.c.(1)(i)" / "A.1.c.(2)(a)" through "A.1.c.(2)(i)") must be shown (to include decimal points); in case of arithmetic errors, the "UNIT PRICE" will govern.
- (3) Each "UNIT PRICE" (refer to "ATTACHMENT C," subsection "A.1.c.(1)(a)" through "A.1.c.(1)(h)" / "A.1.c.(2)(a)" through "A.1.c.(2)(h)") shall reflect the total fixed price per container / overpack, for the disposal of the applicable radioactive waste products specified in, and in response to, this RFP, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

PRICE SCHEDULE
RFP #6528137SW Radioactive Waste Disposal Services
 (Page 2 of 3)

c. Price Schedule:

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING					(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING				
		UNIT PRICE	X	ANNUAL QUANTITY	=	TOTAL EXTENDED PRICE	UNIT PRICE ²	X ³	ANNUAL QUANTITY ⁴	= ⁵	TOTAL EXTENDED PRICE ²
a	Dry, Solid Material / UOM = per (lb) / per container - compacted	\$6.15	X	250 lbs x 8 Containers	=	\$12,300.00	\$6.37	X	250 lbs x 8 Containers	=	\$12,740.00
b	Dry, Solid Material / UOM = per (lb) / per container - for incineration	\$5.50	X	50 lbs x 32 Containers	=	\$8,800.00	\$6.01	X	50 lbs x 32 Containers	=	\$9,616.00
c	Double-Walled Animal Carcasses / UOM = per (lb) / Per Container for incineration	\$18.46	X	75 lb x 2 Overpacks	=	\$2,679.00	\$18.84	X	75 lb x 2 Overpacks	=	\$2,826.00
d	Category I (Deregulated/Exempt) - C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half-life / UOM = per 55-gallon container; 7.5 cu.ft. per container.	\$806.85	X	8 Containers	=	\$6,454.80	\$879.85	X	8 Containers	=	\$7,038.80
e	Category II (Regulated Isotopes) 30 - 109 day half-life / UOM = per 55-gallon container; 7.5 cu. ft. per container.	\$1,393.95	X	4 Containers	=	\$5,575.80	\$1,466.95	X	4 Containers	=	\$5,867.80
f	Category III (Regulated >109 Day) - C-14 and/or H-3 with specific activities >0.05 uCi/ml and/or other isotopes with >109 day half-life. / UOM = per 55-gallon container; 7.5 cu.ft. per container.	\$3,476.61	X	2 Containers	=	\$6,953.22	\$3,549.61	X	2 Containers	=	\$7,099.22
g	Regulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack.	\$3,536.35	X	1 Overpack	=	\$3,536.35	\$3,661.35	X	1 Overpack	=	\$3,661.35
h	Derugulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack.	\$806.85	X	1 Overpack	=	\$806.85	\$984.85	X	1 Overpack	=	\$984.85
i	Decayed Waste for Final Destruction (i.e. incineration, shredding, etc.) / UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers = 222.5 cu.ft.:	\$0.86	X	25 Containers	=	\$2,150.00	\$1.46	X	25 Containers	=	\$3,650.00
TOTAL SUM (the "TOTAL EXTENDED PRICE" for "(a)" through the "TOTAL EXTENDED PRICE" for "(h)"):						\$49,256.02					\$53,484.02

Arithmetic error. Submitted correctly on original pricing proposal. See corrected pricing sheet dated 12-01-15. (KMD)

PRICE SCHEDULE
RFP #6528137SW Radioactive Waste Disposal Services
(Page 3of3)

3. **Alternative Methods of Disposal:**

- a. Offerors shall submit a price schedule of all "UNIT PRICES" (to include all surcharges) for all applicable alternative methods of disposal (e.g., incineration or thermal treatment of frozen animal carcasses / decayed solids; decay-in-storage, etc.); also refer to Section VI, the "PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS," subsection "B.2..c.(1)(d)" for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each "UNIT PRICE" shall reflect the **total fixed price** for the applicable alternative method of disposal, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED.**

4. **Disposal of Sealed Sources:**

- a. Offerors shall submit a price schedule of all "UNIT PRICES" (to include all surcharges) for all applicable disposal methods of sealed sources (also refer to Section VI, the "PROPOSAL PREPARATION AND SUBMISSION REQUIREMENTS," subsection "B.2..c.(1)(f)" for which the Offeror is capable of providing / performing radioactive waste disposal services.
- b. Each "UNIT PRICE" shall reflect the **total fixed price** for the applicable disposal method, to include: all packaging containers / materials / supplies (as applicable), labels and labeling, receiving, transporting, storing, treatment / disposal services, etc.; **EXTRA CHARGES WILL NOT BE ALLOWED:**
 - (1) The Contractor should, upon request by VCU, provide VCU with a **total fixed price**, on a case-by-case basis for the disposal of sealed sources; the total fixed price for sealed sources should be based upon (and should **not exceed**) the Contractor's current contract unit price schedule for the:
 - (a) "Standard Disposal Methods" identified in section "ATTACHMENT C-2," subsection "1.A.(1)" through "1.A.(9)" / "1.B.(1) through "1.B.(9)";
 - (b) "Alternative Methods of Disposal" (refer to "ATTACHMENT C-1," subsection "A.1.c.(2)"), as applicable, or for the
 - (c) "Disposal of Sealed Sources" (refer to "ATTACHMENT C-1," subsection "A.1.d.(2)."

B. **PERFORMANCE:**

"Performance" shall be defined as the FIRM number of calendar days after receipt of order (ARO), that your company can begin providing / performing the Radioactive Waste Disposal Services specified in, and in response to, this RFP; this timeframe may be a factor in making the award:

14 Calendar Days ARO

PRICE SCHEDULE
RFP #65281375W Radioactive Waste Disposal Services
(Page 2 of 3)

c. Price Schedule:

ITEM #:	WASTE TYPE / UNIT OF MEASURE (UOM)	(1) VCU FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR)- TOTAL FIXED PRICING					(2) CONTRACTOR FURNISHED / LABELED (LABELS FURNISHED BY THE CONTRACTOR) - TOTAL FIXED PRICING				
		UNIT PRICE	X	ANNUAL QUANTITY	=	TOTAL EXTENDED PRICE	UNIT PRICE2	X3	ANNUAL QUANTITY4	=5	TOTAL EXTENDED PRICE2
a	Dry, Solid Material / UOM = per (lb) / per container - compacted	\$6.15	X	250 lbs x 8 Containers	=	\$12,300.00	\$6.37	X	250 lbs x 8 Containers	=	\$12,740.00
b	Dry, Solid Material / UOM = per (lb) / per container - for incineration	\$5.50	X	50 lbs x 32 Containers	=	\$8,800.00	\$6.01	X	50 lbs x 32 Containers	=	\$9,616.00
c	Double-Walled Animal Carcasses / UOM = per (lb) / Per Container for incineration	\$18.46	X	75 lb x 2 Overpacks	=	\$2,679.00 \$2,769.00	\$18.84	X	75 lb x 2 Overpacks	=	\$2,826.00
d	Category I (Deregulated/Exempt) - C-14 and/or H-3 with specific activities <0.05 uCi/ml and isotopes with <30 day half-life / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$806.85	X	8 Containers	=	\$6,454.80	\$879.85	X	8 Containers	=	\$7,038.80
e	Category II (Regulated Isotopes) 30 - 109 day half-life / UOM = per 55-gallon container; 7.5 cu. ft. per container:	\$1,393.95	X	4 Containers	=	\$5,575.80	\$1,466.95	X	4 Containers	=	\$5,867.80
f	Category III (Regulated >109 Day) - C-14 and/or H-3 with specific activities >0.05 uCi/ml and/or other isotopes with >109 day half-life. / UOM = per 55-gallon container; 7.5 cu.ft. per container:	\$3,476.61	X	2 Containers	=	\$6,953.22	\$3,549.61	X	2 Containers	=	\$7,099.22
g	Regulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$3,536.35	X	1 Overpack	=	\$3,536.35	\$3,661.35	X	1 Overpack	=	\$3,661.35
h	Derugulated Bulk Liquid / UOM = per 30/55-gallon overpack; 7.5 cu.ft. per overpack:	\$806.85	X	1 Overpack	=	\$806.85	\$984.85	X	1 Overpack	=	\$984.85
i	Decayed Waste for Final Destruction (i.e. Incineration, shredding, etc. / UOM = per cardboard box container: 20" x 22" x 36" / 8.9 cubic feet / 100 lbs per container; 8.9 cu.ft. x 25 containers = 222.5 cu.ft.:	\$0.86	X	25 Containers	=	\$2,150.00	\$1.46	X	25 Containers	=	\$3,650.00
TOTAL SUM (the "TOTAL EXTENDED PRICE" for "(a)" through the "TOTAL EXTENDED PRICE" for "(h)":						\$49,346.02					\$53,484.02
						\$49,256.02					

CAH
12-1-2015



Kelly A McClurg <mcclurgka@vcu.edu>

RE: FW: RFP#6528137SW Radioactive Waste Disposal

1 message

Christina Hirschmann <christina@rsoinc.com>

Thu, Dec 3, 2015 at 11:35 AM

To: Kelly A McClurg <mcclurgka@vcu.edu>

Cc: David Wellner <DWellner@rsoinc.com>

Kelly,

Please review—let me know if the following correction will work. I cannot find the original spreadsheet to enter the corrected amount.

Thanks,

Christina Hirschmann, Radioactive Materials Broker

christina@rsoinc.com

RSO, Inc.

PO Box 1450

Laurel, MD 20725-1450

301-953-2482 x309 (Wash)

410-792-7444 x309 (Balt)

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From: Kelly A McClurg [mailto:mcclurgka@vcu.edu]

Sent: Thursday, December 03, 2015 10:54 AM

To: Christina Hirschmann

Cc: David Wellner

Subject: Re: FW: RFP#6528137SW Radioactive Waste Disposal

Hi Christina and David,

Just following up on the request below.

Thanks!

Kelly McClurg, CUPO, VCO, VCA, APMD
Senior Buyer

Virginia Commonwealth University

University Purchasing

912 W. Grace Street, 5th Floor

Richmond, VA 23220

Direct Line: (804) 828-1070

Main Line: (804) 828-1077

Fax: (804) 828-9188

mcclurgka@vcu.edu

On Tue, Dec 1, 2015 at 1:38 PM, Kelly A McClurg <mcclurgka@vcu.edu> wrote:

Hi Christina and David,

I was reviewing the latest pricing schedule and noticed a typo in Item #C. The first column should total to \$2,769.00. Can you update the pricing sheet, date it December 1, 2015 and send it to me? Since that is being revised, I've added it to the contract. If you wouldn't mind resigning, that would be great. I also had to change the name of the person signing the contract on VCU's behalf. Everything else is the same. See attached.

Thanks!

Kelly McClurg, CUPO, VCO, VCA, APMD
Senior Buyer

Virginia Commonwealth University

University Purchasing

912 W. Grace Street, 5th Floor

Richmond, VA 23220