

**Liquid Scintillation Counter**

**Event No. 7072**

**Bidder's Checklist – Envelope Requirements**

This checklist shall be attached to the outside of Envelope of a bid. Failure to complete, sign, and attach this checklist may result in a bid being deemed nonresponsive. Nonresponsive bids will be returned to the vendor unopened.

Firm name: \_\_\_\_\_  
 Contact person: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone number: \_\_\_\_\_  
 Email address: \_\_\_\_\_

**Envelope must contain the following documents:**

<b>Initials</b>	<b>Document</b>
	Bid Proposal Form, Including Acknowledgement of Any Addenda
	Exception Sheet
	Contractor Affidavit and Agreement (Employee Eligibility Verification)
	Affidavit Verifying Status for City of Savannah Benefit Application
	Any Other Requirements as Stated in the Specs

By signing below, bidder is attesting that all items listed in the checklist above have been included in Envelope.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Liquid Scintillation Counter

EVENT NO. 7072

### SPECIFICATIONS AND SPECIAL CONDITIONS

- 4.0 The purpose of these specifications is to describe requirements for one Liquid Scintillation Counter for measuring samples.

To submit pricing electronically for this event, enter pricing for each line item shown under the lines tab on the event summary. To enter pricing manually, complete the attached bid proposal form. Manually submitted bids must be submitted on the bid proposal forms contained in these specifications in order to be considered.

A pre-bid conference has been scheduled to be conducted at the Purchasing Office, 301 West Oglethorpe Avenue, Savannah, Georgia, 31401. This meeting will allow contractors to discuss the specifications and resolve any questions and/or misunderstandings that may arise with City staff. You are invited to attend.

- 4.1 Requirements of Perkin Elmer Tri-Carb LSC 4910TR Liquid Scintillation Counter.

- 4.2 Each System shall meet the following functional and performance requirements:

4.2.1. Low Level Liquid Scintillation Analyzer (with SNC/IPA cassette and protocol plug)

4.2.2. The System's scintillation counting efficiency shall be 65% for H3 with unquenched samples

4.2.3. Counting efficiency > 90% for C-14 with unquenched samples

4.2.4. Background empty chamber < 6 CPM

4.2.5. Unquenched Standard Set, 20mL vials (Background, H-3 and C-14)

4.2.6. Luminescence control and correction

4.2.7. Alpha-Beta Separation

4.2.8. Temperature control; lowers temperature in the instrument by 5°C to 6 °C compared with room temperature

4.2.9. Stabilizes temperature inside of the instrument.

- 4.3 Performance

4.3.1 ALPHA BETA SEPARATION PKG

4.3.2 Instrument Performance Assessment (IPA): IPA is a quality control monitor of critical instrument performance parameters to support the validity of data

4.3.3 Luminescence Detection and Correction: Removes interference from luminescence by detecting and recording only the chance coincidence (unwanted luminescence) events. These luminescence events are then subtracted from the total counts

4.3.4 High Sensitivity: Improves instrument sensitivity by reducing background counting levels with the use of the proven TR-LSC (Time Resolved – Liquid Scintillation Counting) technology

4.3.5 Alpha Beta Separation: Improves accuracy of alpha and beta counts by minimizing misclassified events using PSA histogram (Pulse Shape Analysis) discrimination. Dual PSA discriminators reduce misclassifications even farther while providing reportable spill corrected results

4.3.6 Unquenched LSC standards, 20ml vials: unquenched low level 3H, 14C & BKD STDS laser printer, 110V

4.3.7 Utility Cart (Assembled)

4.3.8 New instrument online training and support

#### 4.4 Installation and Training

4.4.1 The contractor shall install the Systems at the following facilities: Industrial and Domestic Water Plant 6183 Highway 21 North, Port Wentworth Georgia, 31407

4.4.2 The contractor shall provide one-day training for up to three staff of the end user in the operation and maintenance of the System at the end user's location immediately after the installation.

#### 4.5 Deliverable Data Items

For each system, the contractor shall provide to the end user two complete sets of operation and servicing manuals and technical drawings in English.

5.1 The bid response shall include all documents required in the bidder's checklist.

All referenced documents must be completed and returned in their entirety to constitute a complete bid.

5.2 Copies: One unbound, printed and signed original and one identical, printed copy of the bid must be submitted in response to the bid.

5.3 Original invoices should be sent to:

City of Savannah  
Accounts Payable  
P.O. Box 1027  
Savannah, Georgia 31402

5.4 The vendor is responsible for determining and acknowledging any addenda issued in connection with this bid solicitation. All addenda issued for this event must be acknowledged in order for a bid to be considered.

5.5 To be awarded bids, vendors must be registered as suppliers on the City of Savannah's website at [www.savannahga.gov](http://www.savannahga.gov).

5.6 This contract will be awarded to the vendor offering the lowest net price to the City, and meeting or exceeding all specifications herein.

**EXCEPTION SHEET**

Event # 7072

If the commodity(ies) and/or services proposed in the response to this bid is in anyway different from that contained in this proposal or bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder's offer is in total compliance with all aspects of the proposal or bid.

Below are the exceptions to the stated specifications:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company

\_\_\_\_\_  
Title

**BID PROPOSAL FORM**

**(SUBMIT AS THE COVER SHEET)**

City of Savannah Purchasing Department  
301 West Oglethorpe Avenue  
2<sup>nd</sup> floor  
Savannah, Georgia 31401  
ATTN: Purchasing Director

**EVENT NUMBER: 7072**

**Business Location: (Check One)**

Chatham County  
 City of Savannah  
 Other

**ALL BIDDERS MUST BE REGISTERED VENDORS ON THE CITY'S WEBSITE TO BE AWARDED AN EVENT. PLEASE REGISTER AT WWW.SAVANNAHGA.GOV.**

**MANUALLY SUBMITTED BIDS MUST BE SUBMITTED ON THIS BID PROPOSAL FORM IN ORDER TO BE CONSIDERED.**

Name of Bidder: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**DO YOU HAVE A BUSINESS TAX CERTIFICATE ISSUED IN THE STATE OF GEORGIA? (CHECK ONE) YES: \_\_\_\_\_ NO: \_\_\_\_\_**

**FROM WHAT CITY/COUNTY \_\_\_\_\_  
TAX CERTIFICATE #: \_\_\_\_\_ FED TAX ID #: \_\_\_\_\_**

**INDICATE LEGAL FORM OF OWNERSHIP OF BIDDER (STATISTICAL PURPOSES ONLY):  
CHECK ONE:  CORPORATION  PARTNERSHIP  
 INDIVIDUAL  OTHER (SPECIFY: \_\_\_\_\_)**

**Do you plan to subcontract any portion of this project? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, please complete the attached schedule of DBE participation. Also complete the schedule if you will be using any DBE suppliers.**

**ADDENDA ACKNOWLEDGEMENT**

My signature below confirms my receipt of all addenda issued for this proposal.

\_\_\_\_\_  
Signature

\*This acknowledgement is separate from my signature on the fee proposal form. My signature on the fee proposal form will not be deemed as an acknowledgement of addenda.

THE UNDERSIGNED PROPOSES TO FURNISH THE FOLLOWING ITEMS IN STRICT CONFORMANCE TO THE BID SPECIFICATIONS AND BID INVITATION ISSUED BY THE CITY OF SAVANNAH FOR THIS BID. ANY EXCEPTIONS ARE CLEARLY MARKED IN THE ATTACHED COPY OF BID SPECIFICATIONS.

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
1	Liquid Scintillation Counter	1 each		

TOTAL BID \$ \_\_\_\_\_

**PAYMENT TERMS: PLEASE CHECK ONE AND FILL IN BLANKS**

(Minimum of 10 working days must be allowed for discount to be considered in bid award)

\_\_\_ Less \_\_\_ % \_\_\_ Days Prompt Payment Discount (if offered) (\_\_\_\_\_)

\_\_\_ Net - 30 Days (no discount offered) - 0 -

TOTAL NET BID \$

=====

**TIME REQUIRED FOR DELIVERY AND INSTALLATION AFTER RECEIPT OF ORDER:**  
\_\_\_\_\_ DAYS

I certify this bid complies with the General and Specific Specifications and Conditions issued by the City except as clearly marked in the attached copy.

\_\_\_\_\_  
Please Print Name                      Authorization Signature                      Date

**CONTRACTOR AFFIDAVIT AND AGREEMENT**  
Employment Eligibility Verification

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the City of Savannah has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the City of Savannah, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the City of Savannah at the time the subcontractor(s) is retained to perform such service.

\_\_\_\_\_  
EEV / Basic Pilot Program\* User Identification Number

BY:

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name of Authorized Officer or Agent

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor

\*As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV / Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

\* \* \* \* \*

## **Instructions for Completing Contractor Affidavit and Agreement Form**

As required under Senate Bill 529 – “Georgia Security and Immigration Compliance Act” of 2006, O.C.G.A. Section 2, Article 3 13-10-91, public employers, their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled "Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program," to the Rules and Regulations of the State of Georgia. (See website: [http://www.dol.state.ga.us/pdf/rules/300\\_10\\_1.pdf](http://www.dol.state.ga.us/pdf/rules/300_10_1.pdf).) The new rules designate the “Employment Eligibility Verification (EEV) Basic Pilot Program” operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: <https://everify.uscis.gov/enroll/StartPage.aspx?JS=YES>. Bidders shall comply with this new rule and submit with your bid the attached “Contractor Affidavit and Agreement.”



## ***Affidavit Verifying Status for City of Savannah Benefit Application***

By executing this affidavit under oath, as an applicant for a City of Savannah, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for a City of Savannah contract for \_\_\_\_\_. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

1.) \_\_\_\_\_ I am a citizen of the United States.

**OR**

2.) \_\_\_\_\_ I am a legal permanent resident 18 years of age or older.

**OR**

3.) \_\_\_\_\_ I am an otherwise qualified alien (8 § USC 1641) or nonimmigrant under the Federal Immigration and Nationality Act (8 USC 1101 *et seq.*) 18 years of age or older and lawfully present in the United States.\*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Signature of Applicant: \_\_\_\_\_ Date \_\_\_\_\_

Printed Name: \_\_\_\_\_

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

\* \_\_\_\_\_  
Alien Registration number for non-citizens.

Notary Public  
My Commission Expires:

***Instruction for Completing Systematic Alien Verification  
for Entitlement (SAVE) Form***

O.C.G.A. § 50-36-1, requires Georgia's cities to comply with the federal **Systematic Alien Verification for Entitlements (SAVE) Program**. SAVE is a federal program used to verify that applicants for certain "public benefits" are legally present in the United States. Contracts with the City are considered "public benefits." Therefore, the successful bidder will be required to provide the Affidavit Verifying Status for City of Savannah Benefit Application prior to receiving any City contract. The affidavit is included as part of this bid package but is only required of the successful bidder.

## TRI-CARB 4910TR Liquid Scintillation Counter

### SPECIFICATIONS

#### Liquid Scintillation Counters



Tri-Carb 4910TR

### 1.01 DESCRIPTION

The Tri-Carb 4910TR liquid scintillation counter provides high performance and flexibility for multi-application and multi-user laboratories detecting radioactivity in life science research, environmental monitoring and/or health physics assays. Optional Packages are available for High Sensitivity Counting of low activity samples and Alpha Beta Separation for unknown or mixed samples.

### 1.02 EXCLUSIVE STANDARD FEATURES

- **TR-LSC (Time-resolved Liquid Scintillation Counting)** for high sensitivity, low background liquid scintillation counting
- **Single/Dual labeled color-corrected DPM** provides the ability to determine absolute activity levels of the sample
- **QuantaSmart™ Software** a robust multitasking, easy networking environment with unlimited assays in a secure multiuser environment
- **SpectraWorks 2** spectral analysis package that determines optimal counting regions, and calculates figure of merit automatically
- **Replay** reanalyzes sample counts without recounting samples
- **Dynamic Color Correction** ensures accuracy of tracking lower energy sample spectra over a wide quench range
- **Auxiliary Spectrum Memory** stores rejected events for future analysis
- **Bi-directional Sample Conveyor** with a capacity of up to 408 (20 mL vials) or 720 (4 or 7 mL vials)
- **Varisette™** sample cassette for intermixing vial sizes without special adapters

**PerkinElmer**  
*For the Better*

- **Operational-status LED Indicator** for clear assay status updates at a glance

### 1.03 ADDITIONAL STANDARD FEATURES

- **Direct DPM** determines single-label DPM in any cocktail without the use of quench standards
- **Luminescence Detection Reporting** percent luminescence is flagged on printout to alert user of possible sample problems
- **30 Quick Count Protocol Flags** with the flexibility to define unlimited assays
- **Fold-away Ergonomic Arm** adaptable to enter data either sitting or standing
- **Built in Computer** with Windows 10 Operating System
- **Date and Time Clock** provides real time display and time-stamped printouts; battery supported
- **Anti-jam Recovery** protects samples, vials and the counting system from damage if obstructions occur
- **Automatic Power-fail Recovery** restarts counting when power is restored and the instrument has reinitialized itself



- **Positive Sample Identification** provides protocol number, cassette number, sample number, user-selectable printout and data file storage for the counting time and date on each sample