NOTICE OF INTENT FOR A SOLE SOURCE AWARD

Posted on SAM.gov pursuant to RFO FAR 5.101 and 6.302-1

Notice Type: Special Notice — Intent to Sole Source / Restrict Competition

Posted Date: 7/29/2026

Response Date and time: 08/13/2026, 3PM Eastern Time

SECTION 1 — CONTRACTING OFFICE INFORMATION

Field	Information
Contracting Activity	U.S. Food and Drug Administration (FDA), Office of Acquisitions and Grants Services (OAGS)
Solicitation Number	75F40126Q00337
Contracting Officer	Min Jie Zeng
Point of Contact	Minjie.Zeng@fda.hhs.gov

SECTION 2 — ACQUISITION INFORMATION

Field	Information
Product Service Code (PSC)	6640 — Laboratory Equipment and Supplies
NAICS Code	334516 — Analytical Laboratory Instrument Manufacturing
Small Business Size Standard	1,000 Employees
Contract Type	Firm-Fixed-Price (FFP) Purchase Order

Field	Information
Acquisition Procedure	FAR Part 12 — Commercial Products and Commercial Services (RFO)
Set-Aside	None — Sole Source
Period of Performance	12 months
Place of Delivery	[Insert Delivery Location, City, State, ZIP]

SECTION 3 — DESCRIPTION OF REQUIREMENT

The U.S. Food and Drug Administration (FDA), Office of Acquisitions and Grants Services (OAGS), intends to award a sole source, firm-fixed-price purchase order to **Z-Spec, Inc.** for the acquisition of the following brand-name commercial items:

Item	Quantity	Unit Measure	Unit Price	Extended Price
Z-Spec Z-max Analyzer	1	Ea	$	$
Z-Spec E-max PLUS Analyzer	1	Ea	$	$

The Z-max Analyzer is a proprietary instrument specifically optimized for the detection and quantification of lead (Pb) and other heavy metals in food, food additives, and agricultural products using Z-Spec's patented **High Definition X-ray Fluorescence (HDXRF®)** technology. The E-max PLUS Analyzer is a proprietary instrument engineered for the rapid quantification of ultra-low levels of cadmium (Cd) and other heavy metals — including arsenic (As), lead (Pb), copper (Cu), nickel (Ni), and chromium (Cr) — in soil, food, and water matrices using Z-Spec's proprietary **Monochromatic X-ray Fluorescence (MXRF)** technology.

These instruments are required by the FDA, Human Food Program (HFP) to support rapid analytical testing of foods, dietary supplements, cosmetics, and spices for toxic elements including arsenic (As), cadmium (Cd), mercury (Hg) and lead (Pb) detection. The analytical capabilities may be extended to include additional elements as needed.

SECTION 4 — BASIS FOR RESTRICTING COMPETITION

The FDA intends to restrict competition and award on a sole source basis to **Z-Spec, Inc.** (15 Tech Valley Drive, Suite 110 East Greenbush, NY 12061) pursuant to the authority at:

- **RFO FAR 6.103-1** — Only one responsible source

The basis for this restriction is as follows:

1. Proprietary Technology. The Z-max and E-max PLUS Analyzers are proprietary instruments exclusively designed, developed, and manufactured by Z-Spec, Inc. The instruments employ patented HDXRF® and MXRF optical and detection architectures that are unique to Z-Spec, Inc. and are not available from any other source.

2. No Technically Equivalent Substitute. Market research conducted by the FDA has determined that no other commercially available XRF or elemental analysis instrument provides equivalent analytical sensitivity, detection limits, and methodology required to meet the Government's specific technical requirements. Conventional energy-dispersive XRF (EDXRF) instruments available from other manufacturers do not achieve the detection performance levels required as below:

Performance Specifications - Required Limits of Detection

Element	LOD required (ug/g)
As	0.03
Cd	0.04
Hg	0.06
Pb	0.06
Tl	0.06

3. Only One Responsible Source. Z-Spec, Inc. is the only responsible source capable of providing the Z-max and E-max PLUS Analyzers that can meet all the government’s needs. No other vendor manufactures or supplies instruments of equivalent capability that would satisfy the Government's minimum needs in terms of fair market prices, quality, and delivery.

SECTION 5 — RESPONSE INSTRUCTIONS

This notice is being posted in accordance with **FAR 5.101** and **RFO**: **FAR 6.103-1(d)** to provide all interested parties an opportunity to respond with information demonstrating their capability to meet the Government's requirements.

The Government will consider all capability statements or offers received within 15 calendar days of the date of this posting.

Any responsible source that believes it can provide the required items and meet all of the Government's requirements — including the specific technical performance characteristics described herein — may submit a capability statement or quote to the Contracting Officer identified below. Responses must be submitted in writing and must include, at a minimum:

1. Company name, address, SAM UEI, and SAM.gov registration status;
2. A detailed technical description of the proposed product, including manufacturer name, model number, and technical specifications demonstrating the ability to meet the Government's requirements stated on the attached Statement of Work;
3. Pricing information;
4. Delivery schedule; and
5. Evidence of past performance supplying equivalent analytical instrumentation to federal, state, or commercial customers.

Responses must be received no later than 08/13/2026, 3PM Eastern Time.

Responses shall be submitted electronically to:

Contracting Officer: Min Jie Zeng

Email: Minjie.Zeng@fda.hhs.gov

SECTION 6 — DISCLAIMER

This notice does **not** constitute a Request for Quotations (RFQ) or a commitment by the Government to issue a solicitation or award a contract. The Government is not obligated to acquire any supplies or services described herein. No reimbursement will be made for any costs associated with providing information in response to this notice.

If no capability statements or quotes are received that demonstrate the ability to meet the Government's requirements, the FDA intends to proceed with a sole source award to **Z-Spec, Inc.** without further notice.

All responsible sources that submit a timely and adequate capability statement or a quote will be considered. A determination by the Government not to compete this requirement based on responses to this notice is solely within the discretion of the Government.

SECTION 7 — ATTACHMENTS

Attachment 1 — Statement of Work

Point of Contact:

Min Jie Zeng

Contracting Officer

U.S. Food and Drug Administration

Office of Acquisitions and Grants Services

Minjie.Zeng@fda.hhs.gov

Attachment- STATEMENT OF WORK

07/29/2026

1. Purpose

The Office of Chemistry and Toxicology, Division of Bioanalytical Chemistry, Chemical Contaminants Branch requires the purchase of two portable Mono-Chromatic High Definition X-ray fluorescence spectrometers (mHD-XRF systems): the Z-max Analyzer and the E-max PLUS Analyzer. These systems will support rapid analytical testing of foods, dietary supplements, cosmetics, and spices for toxic elements including arsenic (As), cadmium (Cd), mercury (Hg) and lead (Pb) detection. The analytical capabilities may be extended to include additional elements as needed.

The proposed instruments are required to continue and to expand the efforts of the FDA to protect the U.S. food supply and to respond to emergencies in a timely and accurate manner.

2. Background

The Chemical Contaminants Branch within the Office of Chemistry and Toxicology, Division of Bioanalytical Chemistry requires the portable XRF spectrometers with low detection limits. The requested instrumentation will be used for several elemental analysis applications including, but not limited to:

1. Qualitative screening of toxic elements in foods, dietary supplements, and cosmetics with special emphasis on spices
2. Quantitative testing of toxic elements in foods, dietary supplements, and cosmetics with special emphasis on spices
3. Method development and validation for such applications
4. New instrumentation, including the proposed Z-max and E-max analyzers utilize proprietary doubly curved crystal technology that reduces spectral background to enable detection limits 100-1000x lower than other XRF designs.

FDA requires this instrumentation to offer highly accurate, cost-effective testing for toxic elements that do not require traditional wet chemistry analysis including microwave digestion and analysis. These applications are critical to the FDA's mission to ensure the safety of the nation's food supply and reduce dietary exposure to chemical contaminants like toxic elements.

3. Objectives

The purchase of these mHD-XRF systems is necessary to support method development and validation for toxic element testing that is critical to the FDA's mission. The major components of the acquisition plan are as follows:

- Items Required:
    - Z-Spec, Inc. Part number (106-01) Z-max Analyzer
    - Z-Spec, Inc. Part number (102-02) E-max PLUS Analyzer

- Accessories, including sample cups, sample prep kit, transporting case, food/plant standards kit.

4. Technical Specifications

4.1. System

- **Detection Method**: energy dispersive XRF
- **Optics**: Doubly Curved Crystal (DCC) optics
- **Excitation**: 17 keV excitation beam or greater
- **Power**: compatible with standard U.S. 120V 60 Hz power
- **Portability:**
- Field-portable design (<10 kg) combined with high analytical sensitivity, enabling both laboratory and on-site testing

4.2. Sample Preparation

- Samples will be provided as dried powders, and purchase should include sample holders and/cup, along with XRF transparent film to hold powdered sample.

4.3. Performance Specifications - Required Limits of Detection

o Must meet ultra-low limits of detection for toxic elements (e.g., As, Cd, Hg, Pb, Tl) required for FDA regulatory and research applications.

Element	LOD required (ug/g)
As	0.03
Cd	0.04
Hg	0.06
Pb	0.06
Tl	0.06

4.4. Software and Data Management

- **Fundamental Parameters data model**
- **Data Output**: Integrated hardware/software architecture designed specifically for food safety and contaminant analysis workflows and data should be available for export in standard .txt or .csv formats
- **Connectivity**: Ethernet, USB ports

5. Scope

The major evaluation factor for this solicitation will be ability to meet technical requirements. The Government reserves the right to select the system that will offer best value, including consideration features that may enhance the value of the instrument, such as additional software, training, and extension of warranty periods. Cost will be considered only after the technical and hardware requirements are met.

6. Delivery

The vendor is responsible for delivery of the instrument and all components specified above to the FDA/HFP laboratory facility located at 5001 Campus Drive, College Park, MD 20740. The delivery should be made to the loading dock within 45 days after award. The instrument will not be accepted until performance specifications have been met. The FDA project officer will perform inspection and acceptance of the instrument. The entire system will be warranted for parts and labor for 12 months from date of installation. Service must be provided by service engineers who are trained and certified by the original manufacturer of the instrument. Engineers should have access to the manufacturer's latest technical developments, repair procedures, application updates, diagnostic software, and planned maintenance procedures. Work shall be conducted Monday through Friday, excluding federal holidays.

7. Installation and Set-up

The vendor will be responsible for installation and set-up, including initial calibrations.

8. Training and Documentation

Installation includes a one-day onsite training led by field application scientist (FAS).

9. Warranty and Maintenance

The instrument will be covered by a one-year Extended Warranty. The Standard Warranty covers all parts and labor with one preventative maintenance. Subsequent PMs available separately.

10. Quality Assurance

The system must be newly manufactured unit, not used or refurbished, or previously used for demonstration. The instrument must meet all the technical requirement specified above in: 3. Objectives and 4. Technical Specifications.

11. Place of Delivery

FDA/HFP, 5001 Campus Drive, College Park, Maryland, 20740. Delivery and installation should be coordinated through the HFP Project Officer. Work shall be conducted Monday through Friday, excluding federal holidays.

12. Period of Performance

Estimate Period of Performance 09/30/2026-09/29/2027