

1. Identification of the agency and the contracting activity:

The requiring activity is the Alcohol and Tobacco Tax and Trade Bureau's Scientific Services Division. The contracting activity is the Bureau of the Fiscal Service.

2.a Nature and/or description of the action being approved:

The purpose of this limited source justification is to obtain approval for the purchase of replacement of TTB's current equipment which consists of an Exploris 120 OrbitrapTM mass spectrometer along with a Vanquish Flex ultra-high performance liquid chromatograph from Thermo Fisher Scientific through their GSA contract 47QSWA21D0055.

2.b Name of the vendor:

Thermo Electron North America, LLC
Thermo Fisher Scientific
UEI: CMBPHDRMCS51
(Other Than Small)

2.c Requisition No.: TTB-40200-25-0012**2.d Bridge contract:** ☐ Yes ☒ No**2.e Brand name:** ☒ Yes ☐ No**3.a A description of the supplies or services required to meet the agency's needs:**

The proposed acquisition is to acquire an ultra-high performance liquid chromatograph (UHPLC) with a high-resolution accurate mass (HRAM) mass spectrometer (MS) with the following capabilities: A UHPLC with an operating pressure rating up to 15,000 psi and compatible with the corresponding MS, and a HRAM-MS equipped with a quadrupole-OrbitrapTM that has a resolving power of 120,000 at 200 m/z and requires no external gases other than nitrogen.

3.b Includes IT: ☐ Yes ☒ No**3.c IGCE/Estimated dollar value:****4.a Identification of the authority being used (Check the appropriate box that applies).**

☐ FAR 8.405-6(a)(1)(i)(A) – An urgent and compelling need exists, and following the procedures would result in unacceptable delays.

☒ FAR 8.405-6(a)(1)(i)(B) – Only one source is capable of providing the supplies or services required at the level of quality required because the supplies or services are unique or highly specialized.

☐ FAR 8.405-6(a)(1)(i)(C) – In the interest of economy and efficiency, the new work is a logical follow-on to an original Federal Supply Schedule order or BPA provided that the original order or BPA was placed in accordance with FSS procedures in accordance with the applicable Federal Supply Schedule ordering procedures. The original order or BPA must not have been previously issued under sole-source or limited-sources procedures.

☐ FAR 8.405-6(b) – Items peculiar to one manufacturer. (i.e., Brand Name specifications)

4.b Supporting Rationale:

The proposed contractor's unique qualifications and the nature of the acquisition requires use of the authority cited as follows:

- i. Thermo Fisher Scientific is the only manufacturer of an orbital ion trap (Orbitrap™) mass spectrometer. TTB currently owns and operates an Orbitrap™ mass spectrometer for the sample screening of pesticides, limited and prohibited ingredients, and adulterants and contaminants.
- ii. The Orbitrap™ is the only benchtop mass spectrometer capable of reaching a resolving power of 120,000 at 200 m/z, requires no external gases other than nitrogen, and can maintain a mass accuracy of < 1 ppm RMS for at least 5 days.
- iii. All currently used compound databases, acquisition methods, processing methods, and report templates were developed and validated using Thermo Fisher Scientific software specific for Orbitrap™ data files. A change in HRAM technology would eliminate the ability to continue current operations and would lead to significant man hours in re- development and re-validation of all acquisition and processing methods and compromise our access to compound databases.
- iv. Currently, Thermo Fisher Scientific Compound Discoverer software is used for targeted and non-targeted compound identification and confirmation using custom analytical workflows that are specific to TTB's needs. A change in HRAM technology would eliminate the ability to continue current use of this software. Additional expense and significant man hours would be required to regain these capabilities on another platform.

Two sole source letters are attached to verify Thermo Fisher Scientific is the sole source provider for the products and service needed for this requirement. A formal Notice of Intent to Sole Source was posted to sam.gov on July 24,2025 and closed on August 4, 2025, with no responses received, therefore, a sole source award will be issued to Thermo Electron North America/Thermo Fisher Scientific.

5. A determination by the ordering activity Contracting Officer that the order or BPA represents the best value consistent with FAR 8.404(d): The contracting officer will determine price is fair and reasonable consistent with FAR 8.404(d).

6. A description of the market research conducted among schedule holders and the results or a statement why market research was not conducted:

Market research of mandatory sources was conducted by the procurement office at Fiscal Service; no other sources other than Thermo Fisher Scientific were identified.

As mentioned above, two sole source letters are attached to verify Thermo Fisher Scientific is the sole source provider for the products and service needed for this requirement. A formal Notice of Intent to Sole Source was posted to sam.gov on July 24,2025 and closed on August 4, 2025, with no responses received, therefore, a sole source award will be issued to Thermo Electron North America/Thermo Fisher Scientific.

7.a Any other facts supporting this justification:

A quadrupole-time-of-flight (Q-ToF) mass spectrometer is the closest HRAM technology offered by other vendors. However, Q-ToFs currently do not exceed a resolving power of 100,000 at TTB's mass range of interest. The higher resolving power of the Exploris allows for a higher level of confidence in the identification of compounds of interest, which is particularly important in the case of enforcement samples.

7.b Attachments: ☒ Yes ☐ No Sole Source Letters

A statement of the actions, if any, the Requiring Activity and Contracting Activity may take to remove or overcome any barriers that led to restricted consideration before any subsequent acquisition for the supplies and services is made:

Thermo Fisher Scientific is expected to remain the sole source for this requirement for the foreseeable future. It is not expected that any alternative providers will become available in the foreseeable future. However, prior to the expiration of the award, the Government will conduct market research to determine if alternatives to Thermo Fisher Scientific are available; if so, the Government will review the alternatives to see if they meet the Government's needs. If the alternatives meet the Government's needs, the Government will re-evaluate the requirement, determine if pursuing alternatives are in the Government's best interest, and move forward in accordance with that determination.