

## Report to Community and Protective Services Committee

**To:** Chair and Members,  
Community and Protective Services Committee

**From:** Cheryl Smith, Deputy City Manager, Neighbourhood and  
Community-Wide Services

**Subject:** SS-2025-037: London Fire Department Single Source  
Procurement of Hazardous Materials Handheld Spectrometer

**Date:** March 17, 2025

## Recommendation

That, on the recommendation of the Deputy City Manager, Neighbourhood and Community-Wide Services, the following actions be taken with respect to the single source procurement of an XplorIR hazardous materials handheld spectrometer:

- a) in accordance with Section 14.4(e) of the Procurement of Goods and Services Policy, Fire Administration **BE AUTHORIZED** to enter into negotiations with Visiontec Systems, 1-247 Armstrong Ave, Georgetown, ON, L7G 4X6, for the price of \$83,880 (excluding HST) for a single source, one-time purchase of one (1) XplorIR handheld spectrometer for the London Fire Department;
- b) the approval above, **BE CONDITIONAL** upon The Corporation of the City of London negotiating satisfactory prices, terms, conditions, and entering into a contract with Visiontec Systems to provide one (1) XplorIR handheld spectrometer to the London Fire Department;
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with the authorization set out in parts a) and b) above;
- d) that the funding for this procurement **BE APPROVED** as set out in the Source of Financing Report attached hereto as Appendix A; and,
- e) the Mayor and Clerk **BE AUTHORIZED** to execute any contract or other documents, as required, to give effect to these recommendations.

## Executive Summary

This report requests authorization from Council to procure one (1) XplorIR handheld spectrometer using Section 14.4(e) of the Procurement of Goods and Services Policy for the London Fire Department's ('LFD') Hazardous Materials ('HazMat') special team.

## Linkage to the Corporate Strategic Plan

The London Fire Department Single Source Procurement of Hazardous Materials Handheld Spectrometer request is aligned with the following strategic areas of focus, outcomes, and expected results from the City of London Strategic Plan 2023-2027:

**Wellbeing and Safety:** London has safe, vibrant, and healthy neighbourhoods and communities.

- Londoners feel safe across the city, in the core, and in their neighbourhoods and communities.

**Well-Run City:** Londoners experience good stewardship, exceptional and valued service.

- London's finances are maintained in a transparent, sustainable, and well-planned manner, incorporating intergenerational equity, affordability, and environmental, social, and governance considerations.

# Analysis

## 1.0 Background Information

### 1.1 Context

The LFD has several specialized response teams, including one for incidents involving potential or confirmed hazardous materials. The HazMat team's responsibility is to prepare for and respond to all chemical, biological, radiological, nuclear, and explosive threats within, and travelling through, our city. With a wide range of hazards under their purview, specialized equipment is required to enable HazMat team members to detect, identify, and mitigate those hazards.

Currently, the LFD has an opportunity to better identify unknown hazards in a timely manner. When dealing with chemical releases that could necessitate large-scale evacuations, identification of the product being released is crucial and time sensitive. A delay in identification can hamper mitigation efforts and potentially risk lives. Early identification is crucial, not only for chemical releases, but also for smoke from chemical fires. As technology in this field evolves, detection capabilities improve. To stay current with this technology and the needs of the City, the LFD must ensure that it is capable of providing a thorough, competent, and efficient response to such incidents.

To ensure a reliable level of service in hazardous material responses, the LFD must continue to conduct research to stay current.

## 2.0 Discussion and Considerations

### 2.1 Request for XplorIR Handheld Spectrometer

Given the need to provide service at the highest level possible and to cover a wide variety of potential threats to public safety, procurement of this handheld spectrometer will ensure the City of London has access to technology that can identify hazardous materials. Without such technology, HazMat responses can be unnecessarily long, tying up emergency vehicles for hours at a time, leading to a delay in taking positive action on a call until the hazards associated with that unknown product are understood.

The XplorIR handheld spectrometer allows for the rapid detection and identification of gases and vapours. This equipment includes a 5,500-spectra library of gases and vapours without any calibration required. This "gas/vapour phase" of threats is the most concerning for both first responders and the public, as it is gas-phase products that can require large-scale evacuations and can incapacitate people most quickly. This technology represents a massive leap forward in the LFD HazMat team's ability to detect and rapidly identify gas threats, which will allow for a faster formulation of an Incident Action Plan to mitigate those threats based on their unique hazards.

This procurement will equip the LFD HazMat team and London's First Response Community with the tools they require to keep Londoners safe for years to come. This report seeks authorization to procure one (1) XplorIR handheld spectrometer from VisionTec, the sole authorized distributor of 908 Devices in Canada, using Section 14.4(e) of the Procurement of Goods and Services Policy (please see below):

#### 14.4 Single Source

Single Source means that there is more than one source of supply in the open market, but only one source is recommended due to predetermined and approved specifications. The procurement may be conducted using a Single Source process if the goods and/or services are available from more than one source, but there are valid and sufficient reasons for selecting one supplier in particular, as follows:

e. The required goods and/or services are to be supplied by a particular supplier(s) having special knowledge, skills, expertise or experience;

### 3.0 Next Steps

When this XplorIR handheld spectrometer is received, the LFD will initiate training of HazMat team members on the use of this equipment. In addition, communications will go out to partner agencies to add this to the list of locally available equipment. The HazMat team will continue to research the industry and development of new technologies in the field. If this handheld spectrometer is received in Spring 2025, it will be in service within several weeks of delivery.

### 4.0 Financial Impact/Considerations

The total cost of this purchase is \$83,880 (excluding HST), which includes the XplorIR Quantification Package and an enhanced warranty.

These funds are available in the LFD Capital budget. The lifecycle of this equipment will be considered when planning for future Multi-Year Budget processes.

## Conclusion

The LFD is requesting Council authorization to procure one (1) XplorIR handheld spectrometer for its HazMat special team. This will enable the LFD to provide the best response possible and stay current with advancements in technology.

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**Submitted by:** Lori Hamer, Fire Chief

**Recommended by:** Cheryl Smith, Deputy City Manager, Neighbourhood and Community-Wide Services

c: Vakul Arora, Senior Manager, Purchasing and Supply, Finance Supports  
Jason Davies, Manager III, Financial Planning and Policy, Finance Supports  
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## Appendix A: Source of Financing Report