15-020

# SUMMIT COUNTY EMERGEMCY MANAGEMENT AGENCY BID FOR HAZMAT PORTABLE BIO-DETECTION SYSTEM

The Summit County Special Operations Response Team is requesting bids for a Portable Bio-Detection System for Hazardous Materials Emergency Response. The purpose of this instrument is to detect and identify biological agents using real time PCR technology. The system must be designed for operations by First Responders.

## **GENERAL REQUIREMENTS**

All specifications contained herein are considered minimum requirements for the delivery of the "new" Portable Bio-Detection System

## **BID RESPONSE**

Any exceptions to minimum specifications shall be described in detail on a separate page attached to the bid response titled "EXCEPTIONS & CLARIFICATIONS

Failure to disclose an exception will indicate total compliance.

Each bid must be accompanied by a set of detailed contractor's specifications.

Bids shall be enclosed in a sealed envelope endorsed on the outside of the envelope "Bid for HazMat Portable Bio-Detection System", pursuant to specifications provided, with the name of the bidder prominently displayed on the face of the envelope.

All bids shall be delivered at or before the time and place stated herein. Bids received after the stated date and time will be returned unopened to the bidder.

The following specifications and characteristics must be met with no deviations. These are the minimal acceptable properties of the system.

#### **Bio-Detection System Requirements**

- \*System shall employ Real-time PCR technology to deliver the most reliable and sensitive detection and identification of biological pathogens in the field.
- \* System shall be designed specifically for field use,
- \* The system shall be compact and lightweight. Instrument shall weigh less than 15 pounds.
- \* System shall require minimal sample preparation requirements and be easy to use.
- \* The system shall simultaneously tests ten (10) pathogens with reliable, DNA-based results available in less than 30 minutes.
- \* The system shall be able to conduct 12 simultaneous reactions.
- \* System shall be easily operated while working in protective equipment under extreme conditions.
- \* The system shall be both battery powered and has a 110-220v power supply.

- \*The system shall include Bluetooth® or USB capabilities, bar code reader, and a bright, easy-to-read color screen.
- \*The system shall use a reagent pouch system--- integrated freeze-dried reagents packaged in durable plastic pouches for ease of use.
- \* System must have a less that 1% error rate.
- \* System must have a Detection limit as low as 100 cfu/ml.
- \* System must have Less than 1% false positive error rate.
- \* System must come with a pelican case, battery charger, battery pack, USB data cable, air filtration assembly, desktop software, user manuel, quick guides and plunger twist tool included.
- \* System shall have capabilities for Internal calibration and diagnostics ensure the instrument is functioning within tolerances before and during operation.

## **Bio-Detection Reagent System**

The reagent system must have the capability of testing for 10 category A and B pathogens in one pouch. The reagent system must be able to run all tests simultaneously in 30 minutes. The reagent system must be able to test for the following pathogens:

- Anthrax

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- Brucella melitensis
- Botulism A
- Coxiella
- E. coli
- Tuleremia
- Ricin
- Salmonella
- Smallpox
- Plague

The reagent system must be freeze dried with the ability to be reconstituted in the field. The reagents will be kept in a reagent depot account and shipped to Summit County SORT before the expiration of the previous reagent system. The bid shall include a minimum of 50 reagent test system kits to be included in the reagent depot.

#### Operational Training

Bidder must provide must provide three (3) one day operational training sessions to be conducted in Summit County Ohio to technicians who will operate this equipment. One (1) set of training materials will be provided to Summit County SORT to be able to conduct future refresher trainings.