

INVITATION TO BID

Jackson Township Division of Fire  
3756 Hoover Road P.O Box 517  
Grove City, Ohio 43123  
Fire Administration- (614) 875-5588  
Fax- (614) 875-2691

Bid Description: Direct Capture Vehicle Exhaust Removal System

Bid Opening Date: 07/20/2021 Time: 7:00 P.M. EST  
Bid Closing Date: 07/20/2021 Time: 11:30 A.M. EST

**DO NOT SUBMIT MORE THAN ONE BID PROPOSAL FOR EACH BID**

**NAME AND ADDRESS INFORMATION MUST APPEAR BELOW**

Submitted by:

Salesperson/Company Rep Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Federal Tax ID No: \_\_\_\_\_

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

P.O. Box: \_\_\_\_\_

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

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**TABLE OF CONTENTS**

Invitation to Bid..... 1

Table of Contents ..... 2

Legal Advertisement ..... 3

Instructions for Submitting Bid .....4-5

Requirements and Specifications..... 6-14

Pricing.....14

Signature Page ..... 15

Non-Collusion Affidavit ..... 16

Form of Contract .....17

Certificate of Fiscal Officer ..... 18

## LEGAL ADVERTISEMENT FOR BIDS

The Jackson Township Division of Fire, Grove City, Ohio (hereinafter referred to as "Agency or Agency's") requesting sealed bid proposals for the purchase of a Direct Capture Vehicle Exhaust Removal System. As part of this package, a current ISO-9001-2015 certificate must be included in the bid package from the manufacturer of the system for the manufacturing of the product.

Bids will be received until 11:30 A.M. EST on July 20<sup>th</sup>, 2021 at the  
Jackson Township Division of Fire  
3756 Hoover Road P.O Box 517  
Grove City, Ohio 43123

All bid packages will be opened and reviewed for accuracy and compliance one hour after that time. Once completed, the Fire Chief or his designee will make a formal recommendation to the Jackson Township Board of Trustees followed by notification to the successful bidder.

Copies of the Invitation to Bid, specifications, proposal are available at the following  
address: 3756 Hoover Road Grove City, Ohio 43123-0517

The proposals shall be made on the forms provided, or as indicated in the Invitation to Bid.

- \*All proposals shall be sent via U.S. Postal Service, Federal Express, DHL or UPS.
- \*No proposal will be accepted via walk-in or hand to hand delivery.

Jackson Township Division of Fire reserves the right to accept or reject any or all proposals; to waive any informalities or irregularities in the bids received and to award the contract to the lowest and best bidder whose proposal is deemed most favorable to Jackson Township Fire Department.

Source(s) of Advertisement: **Jackson Township Fire Webpage @ [www.jacksontwp.org](http://www.jacksontwp.org), Jackson Township Fire Facebook and Twitter, Grove City Record, Builder's Exchange.**

Dates Advertised: July 1<sup>st</sup>, July 8<sup>th</sup>, and July 15<sup>th</sup>, 2021

## INSTRUCTIONS FOR SUBMITTING BIDS

1. The original bid response shall be submitted in a sealed envelope with the words **“Diesel Exhaust Removal System”** clearly marked on the outside of the envelope. If bidder is using an alternate or similar type of service, the bid response must be contained in a sealed envelope within the **“Express Mailer Package”** (the bid description must be listed on the exterior of the sealed envelope contained within the **“Express”** mailer). **Failure to submit the bid in a sealed envelope and / or without the bid description clearly marked on the exterior shall result in immediate disqualification and no further consideration given for the award.**

2. The original bid response packet (hereinafter referred to as **“bid”**) shall be submitted to the following:

Jackson Township Division of Fire  
3756 Hoover Road P.O Box 517  
Grove City, Ohio 43123-0517

3. Bid will be received no later than one (1.5) hours prior to the scheduled date and time of opening as listed on the Invitation to Bid (hereinafter referred to as **“ITB”**). All bids will be time and date stamped upon receipt by the Jackson Township Division of Fire, which shall be the official date and time of receipt. Postmarks, or other times and dates appearing will not be considered as the official date and time of receipt. Delivery to any other location not defined above, does not constitute a bid received by the Jackson Township Division of Fire. Bids submitted with insufficient postage will not be accepted. Telegraphic, facsimiles, or any other mode of transmission other than stated above shall not be considered as valid submission to the Agency. Bidders using an alternate or similar type of mailing service should verify with the service as to which address is required to ensure proper delivery of the response to Jackson Township Division of Fire. The agency will not be held liable for non-delivery and/or late delivery of any bid response due to a bidder listing an incorrect address.
4. The original bid response shall be properly completed, signed by the bidder, and accompanied by one copy of necessary supportive documentation, including the executed non-collusion affidavit. The original bid response must contain an authorized original signature of the bidder on the signature page.
5. All exceptions to the specifications outlined herein shall be noted on the bid specification and thoroughly explained in the bid proposal. It will be the responsibility of the Jackson Township Division of Fire to determine if a substitution to the specification is considered **“equal to”**. The bidder must provide with any exception detailed specifications so that the Agency can make the necessary comparisons to make a proper decision. Failure to do so may result in the rejection of submitted bid for noncompliance.
6. Any bid received after the scheduled date and time of opening will be marked as late, remain sealed, and will receive no further consideration for award. Bidders should allow enough time for

mailing their bids to ensure delivery prior to the established cut-off time on the opening date and time. The Agency will not be responsible for a late bid due to failure of the bidder to allow enough time for delivery of the bid.

7. To protect the integrity of the bidding process, bids shall not be prepared, completed, or altered on the premises of Agency. Any bid which is prepared, completed, or altered on the premises of Agency shall be immediately disqualified and receive no further consideration for award.
8. Bids, unless otherwise proven herein, are subject to applicable Public Records Law. Copies of bid responses must be requested and will be provided within a reasonable timeframe and at a fee established by Agency. To expedite and properly respond to such public records requests, a written request shall be submitted.
9. Any pre-bid questions or inquiries must be submitted in writing to the Agency and received no later than three (3) business days before the scheduled opening date. The Agency will not respond to any pre-bid questions or inquiries received later than three (3) business days before the scheduled opening date. The issuance of an addendum is dependent upon the information received and the impact on the competitive bid process. Pre-bid questions can be emailed to Battalion Chief Jim Parmenter, email address: [ParmenterJ@Jacksonwp.org](mailto:ParmenterJ@Jacksonwp.org).
10. All pre-bid enquiries must contain the following information:
  - Name of sender
  - Company Name
  - Phone Number
  - Opening Date
  - Bid Description
  - A Detailed Description of the Question
  - Any Other Pertinent Information

Bidders shall not contact any other Agency division or office for responses to pre-bid questions.

## REQUIREMENTS AND SPECIFICATIONS

### **Section 1: Intent**

The purpose of this ITB is to establish pricing for Direct Capture Vehicle Exhaust Removal Systems for Four stations. The bid must include a current ISO-9001-2015 certificate from the manufacturer of the system for the manufacturing of the product. The bid should include available upgrades, is requested.

### **Section 2: Free on Board (F.O.B.) Destination:**

The net unit bid price shall include delivery charges, Free on Board (F.O.B.) to locations of system installation indicated in Section 1 of Requirements and Specifications.

### **Section 3: Delivery and Installation**

Delivery and installation date(s) shall be established and agreed upon by both parties within a reasonable time-frame acceptable to the Agency.

#### **3.1: Delivery Hours**

All deliveries shall be made between the hours of 9:00 A.M. and 4:00 P.M. EST, Monday through Friday unless special permission is granted by Agency to temporarily waive or adjust this requirement.

### **Section 4: Product Specifications**

SPECIFICATION AND DOCUMENTATION OF COMPLIANCE SHEET SCBA FILLING SYSTEM

BIDDER'S NAME:

---

MAKE AND MODEL:

---

LOCATION OF MANUFACTURER:

---

# Direct Source Capture Vehicle Exhaust Removal System

Jackson Township Division of Fire  
Grove City, Ohio

## Specifications

### **1.1 Extraction System Overview**

1.1 The exhaust system shall be designed to vent 100 % of exhaust gases and particulate safely to the outside of the fire station. The exhaust system shall be designed and installed by factory trained and authorized personnel, certified by the manufacturer of the exhaust system. Manufacturers shall be required to have a minimum of 5 years of proven manufacturing experience in the manufacture of emergency vehicle exhaust extraction equipment.

1.2 The department shall be able to use the exhaust system for performing vehicle checks indoors.

1.3 The exhaust system and all its components shall be compliant to Chapter 9 of the 2018 edition of NFPA 1500 and shall be designed for high temperature vehicle exhaust fire rescue applications. The system shall automatically activate, disconnect, shutdown, and reactivate upon return without human intervention.

1.4 Exceptions and Variances from any of the specifications outlined in these bid specifications must be acknowledged and listed on a sheet attached to your bid. Failure to list and acknowledge exceptions to the specifications will result in rejection of the bid.

### **2.1 Quality Standard Assurance and Experience:**

2.1 All standards of quality are to meet and adhered to: UL, NFPA, AMCA, IMC, ASME, UMC, NEC and all local and state building codes. A current ISO-9001-2008 certificate must be included in the bid package from the manufacturer of the system for the manufacturing of product.

2.2 Independent System testing information documenting the overall the effectiveness of the proposed system in a fire station must be available upon request.

2.3 References: At least 10 recent fire station references in the state within the last 5 years must be included to verify experience in the fire/rescue market. References can be provided for specific equipment and model number being proposed for this product. Contact information shall be provided upon request.

2.4 Manufacturing Experience: Companies that have 5 years or more years of manufacturing experience of automatic vehicle exhaust removal systems for fire/rescue are preferred. All equipment and material of this exhaust system package must be of Standard Product of the prime manufacturer. No products from other secondary manufacturers shall be offered. Product shall have proven history longevity and service.

### **3.1 System Description**

The exhaust system shall be a direct source capture system designed to handle exhaust fumes from diesel engines. The system shall address a total of 17 capture points housed in 3 Stations of the Jackson Township Division of Fire. System shall be designed to provide as much flexibility as possible to allow vehicles to move from bay to bay and between stations. Tailpipe Adapters shall be of similar size throughout. Convert all vehicles to under chassis exhaust using a diverter valve as the preferred method on top stack exhaust trucks. Installation must be neat and clean using best material available.

#### **Station 201 – 4343 Grove City Road**

Shall be a 2-drop system with two 60-foot rails.

Fan: 3000 CFM minimum

#### **Station 202 – 3650 Hoover Road**

Shall be a 8-drop system with 30-foot rails

Fan: 5000 CFM minimum

#### **Station 203 – 2650 London-Groveport Road**

Shall be a 5-drop system with 3- 60- foot rails and 1 short rail

Fan: 4000 CFM minimum



## **4.1 Air Volume and Fan Requirements**

**4.2** The exhaust fan for each facility shall provide a minimum of 650 cfm per vehicle at 6.0 inches static pressure loss. Motor/ Blower curve performance information from the manufacturer must be provided with the bid document showing air handling capacity at various static pressure losses.

4.3 Exhaust system hose drops shall be the same cross-sectional diameter as the vehicle tailpipe or greater. Also, exhaust systems shall maintain CFM that matches the cfm of the vehicle engine exhaust when running at 1500 RPM. Hose drops that do not match or exceed the size of the tailpipe and the cfm of the engine's exhaust shall not be accepted.

4.4 The fan shall be a backward incline fan made from continuous welded construction. Fan housings that are screwed together or riveted are not acceptable. Fans shall be tested and balanced prior to installation, be manufactured in an ISO Certified Facility in accordance with AMCA Certification Standards. A safety disconnect near the blower fan motor must be provided.

## **5.1 Turnkey Installation**

5.1 Complete exhaust system installation including the exhaust fan, control box, ductwork, track, hose, and nozzle connection must be completed. All electrical work from the panel out is included in this scope of work. Tailpipe modifications from the muffler out that are required to ensure proper system operation are to be included in the scope of the work. All duct material installed shall conform to existing Class II SMACNA Standards. An appropriate rain cap shall be provided on the building exterior.

5.2 All system components shall be labeled with manufacturer identification and be standard equipment from the manufacturer.

5.3 Installation of Exhaust System shall be accomplished by a factory trained and authorized installation team that specializes in the business of installing emergency response exhaust systems. Name of installation firm must be indicated in the bid document with exhaust removal system experience provided.

## **6.1 Nozzle Attachment**

6.1 The Exhaust Capture System must provide complete, 100% exhaust removal at the source from vehicle start up to exit of the apparatus from the station. In no event shall the nozzle allow for the potential escaping of diesel exhaust into the bay area. A check valve is required to stop contaminant from escaping into the bay area. It is a requirement of this bid that the system be capable of capturing 100% of exhaust gas

and particulate even in the event the fan does not activate. Any nozzle that does not completely seal 100% around the tailpipe will not be accepted.

6.2 The exhaust system shall be attached to the vehicle within 3 feet of the door threshold.

6.3 The system shall be designed so that attachment to exhaust hose is accomplished by the operator standing erect and with one simple motion to connect system to the vehicle.

6.4 A rigid lower hose section with handle shall be provided to allow for easy hose connection.

6.5 The nozzle shall allow for the introduction of ambient air to significantly cool the air stream inside the hose and prolong the life of the equipment. Any system that does not seal around the tailpipe and allow for cool ambient air introduction shall be eliminated.

6.6 All adapters and nozzles shall be of similar size to allow vehicles to freely move from bay to bay. Any Nozzle adapter shall not exceed greater than minimal diameter to allow adequate ground to tailpipe clearance.

6.7 Tailpipe adapter and nozzle must have inlet that is 5 inches or greater so, exhaust airflow is not impeded. Nozzle to flex hose elbow transition must also be 5 inches or larger to maximize airflow.

6.8 Adapter shall be manufactured of rust resistant material to ensure consistent, good connection

## **7.1 Nozzle Release and Material**

7.1 The release of the nozzle shall occur by a forward motion of an apparatus. The separation shall be accomplished by a simple mechanical release.

7.2 The disconnection of the hose shall not be speed dependent and shall have a balancer that helps lift the exhaust nozzle off the vehicle tailpipe. The nozzle must separate from the tailpipe at the same point each time regardless of the speed of the vehicle.

7.3 Any auto-release system that is speed sensitive requiring the driver to modify the exit speed to control the nozzle release shall not be accepted.

7.4 Release of nozzle from the tailpipe shall not cause tugging or stretching of the hose to occur. Stress from separation and transporting of the hose to the door shall be borne by an internal cable to prolong life of the hose.

7.5 Nozzle elbows constructed of one piece, cast aluminum are preferred to eliminate the possibility of denting, rusting and breaking.

## **8.1 Sliding Aluminum Track/ Expandable Hose Track**

**8.2** The exhaust system shall use a lightweight aluminum track support system to convey the exhaust hose from door threshold to vehicle park position. The aluminum track shall be of box lock design with two cross supports for rigidity.

**8.3** An expandable hose track system shall be offered in the station to eliminate hose loops. The expandable hose shall be 6-inch diameter and have a compression/expansion ratio of 6:1. The expandable hose shall be attached to the track using a set of trolleys secured to the hose at 9-inch intervals.

**8.4** Rail and track system must be supported using adjustable, telescopic support legs allowing for future adjustment and changes to the system.

## **8.2 Suction Rail**

8.2.1 The suction rail system shall be comprised of Rail Sections which shall have a length of six to ten feet (6' to 10'). Aluminum Material shall be 6063-T-5 with a standard mill finish.

8.2.2 The aluminum suction rail shall be constructed from a one-piece continuous extruded aluminum profile. Construction shall be 6" round in diameter, with guide rails on each side to accommodate the external trolley assembly, and molded slots on the top for leg and support bracing

8.2.3 The trolley assembly shall be of external guide rail design. Four wheels must be out of the exhaust airstream and allow the trolley assembly to roll freely along the external guide rails. The chassis shall include a fitted cone assembly, designed to part the memory sealing lips. The cone assembly shall be designed with a series of friction rollers. These

rollers shall be designed to reduce the resistance between the memory lips and the cone assembly.

8.2.4 Shock absorber assembly shall incorporate an adjustable hydraulic cylinder, capable of reducing the forward impact of the trolley assembly, without causing damage to either the suction rail or the trolley assembly.

8.2.5 A rubber bumper shall be located on the trolley assembly and designed as a contact point. The hydraulic cylinder shall be equipped with a rubber bumper end stop. Both bumpers shall be designed to align upon impact, and at no time shall metal to metal or plastic to metal contact be allowed.

### **9.1 The System Balancer**

**9.2** The hose balancer shall be designed to operate as a non-locking or self-locking adjustable balancer with a lifting capacity of no less than 31 lbs. to keep hose off bay floor.

**9.3** Hose shall be supported by the balancer using a lifting elbow with an internal cable to reduce stress and wear and tear to the hose.

### **10.1 Extraction System Exhaust Hose**

10.2 The flexible exhaust hose is manufactured for the sole purpose of venting high temperature exhaust gases, which are produced by internal combustion engines.

10.3 This construction of hose must be capable of operating at a continuous minimum temperature of 400°F and intermittent temperatures of 550° Fahrenheit. Hoses that are not rated at or higher than these temperatures will not be accepted. Testing support data verifying the hose rating must be included in the submittal portion of this bid package.

10.4 Five-inch diameter flex hoses are preferred to smaller hoses to provide less static pressure loss and more efficient fan performance.

10.5 A two-foot, rigid, lower section hose shall be included with extreme heat tolerance. Hose shall be tested by independent certified laboratory to be capable to 850 - 1000 degrees Fahrenheit. Lower section hose additionally shall be flame retardant and be constructed using engineered materials to maintain shape and integrity.

### **11.1 Auto-Start Control System**

11.2 Shall be designed to sense the output pressure normally generated by any internal combustion engine. When the nozzle is connected to the vehicle's exhaust tailpipe and the vehicle is started by the operator an automatic controller, the increased output pressure shall be detected by a pressure sensor and activate the exhaust fan. A low voltage timer will keep the exhaust fan operating for a period designated by fire department procedures. As an option, ignition start activation may also be offered for consideration.

11.3 Controller Electrical controller must be UL listed/approved and manufactured in accordance with Underwriters Laboratories standard UL-508 enclosed industrial control panels and incorporate a limited energy control circuit. For safety, the enclosure must be NEMA4X rated fiberglass construction with a watertight seal.

**12.1 System Warranty**

12.1 Complete exhaust system parts warranty shall be for a minimum of 5 years. A warranty certificate describing the warranty to be provided must be included in the bid. Location and name of nearest service outlet should be listed in the bid. Location of parts inventory shall be indicated as well. All equipment must be supplied by one system manufacturer with the complete system covered in its entirety by the manufacturer's warranty.

**13.0 POINT OF ORIGIN:**

13.1 It is preferable that all equipment be manufactured by a U.S. Company that is base headquartered in the USA. Systems that are built using 100% American parts supplied from U.S. vendors are preferred.

**\*\*\*\*\*End of Specification\*\*\*\*\***

**PRICING**

Please quote and insert below your lowest net price for the commodities herein described. (This needs to be done for each style and type of bid)

Vendors Name: \_\_\_\_\_

<b><u>STATION</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QUOTE</u></b>
201	Diesel Exhaust System	\$ _____
202	Diesel Exhaust System	\$ _____
203	Diesel Exhaust System	\$ _____
	Total	\$ _____

**SIGNATURE PAGE**

Sealed replies to this invitation shall be received at the following address on or before the indicated cut-off time:

Jackson Township Division of Fire  
3756 Hoover Road P.O Box 517  
Grove City, Ohio 43123-0517

Failure to sign as indicated shall render your bid non-responsive and ineligible for award.

Your signature indicates that you have read, understood, and hereby agree to be bound by all terms, conditions, specifications and requirements contained in this invitation.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized signature by officer/Agent of company

\_\_\_\_\_  
Type or print name shown above

\_\_\_\_\_  
Title of Officer/Agent signing

\_\_\_\_\_  
Name of Company

**NON-COLLUSION AFFIDAVIT**

\_\_\_\_\_ Being first duly sworn on oath deposes and states:

Printed Name

1. That in connection with this procurement:

The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purposes of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.

The prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any bidder or to any competitor.

No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not submit a bid for the purpose of restricting competition.

2. The undersigned further states:

He or she is the person in the bidder’s organization responsible within that organization for the decision as to the prices being bid herein and that he or she had not participated and will not participate in any action contrary to the statements above.

He or she is not the person on the bidder’s organization responsible within that organization for the decision as to the prices being bid herein but that he or she has been authorized in writing to act as agent for the person responsible for that decision in certifying that such persons have not participated, and will not participate, in any section contrary to the statements above.

3. It is expressly understood that foregoing statements, representations, and promises are made as a condition to the right of the bidder to receive payment under any award hereunder.

**FOR CORPORATIONS:**

Name of Firm: \_\_\_\_\_

Please Check:

Corporations     Partnership     Sole Proprietor     Limited Liability Company

**ATTEST TO SEAL**

\_\_\_\_\_  
Signature and Title of Bidder

SUBSCRIBED AND SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Notary Public: \_\_\_\_\_  
Signature



**FORM OF CONTRACT**

THIS AGREEMENT, entered into effective this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,

by and between Jackson Township Division of Fire, Grove City, Ohio hereinafter called the "Fire Department" and \_\_\_\_\_ hereinafter called the "Vendor"

WITNESSETH: The vendor has agreed by this Contract does agree, with the Agency for the Unit Prices set forth in the Vendor's bid, to furnish all the materials and do all of the work of whatever kind necessary to complete, in a good, substantial and workmanlike manner, ready for use, and in strict accordance with the terms and conditions constituting the Invitation to Bid and subject to said specifications contained therein, to deliver (and install as specified) the following items:

**Direct Capture Vehicle Exhaust Removal System**

In strict accordance with all provisions set forth therein, for the unit price sum of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

\_\_\_\_\_  
Name of Vendor

\_\_\_\_\_  
Signature, Fire Chief

\_\_\_\_\_  
Signature of Vendor Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**CERTIFICATE OF FISCAL OFFICER**

As Fiscal Officer for the Jackson Township Division of Fire, Grove City, Ohio I hereby certify that funds in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) have been lawfully appropriated for the purpose of meeting obligations of this Contract with \_\_\_\_\_ duly authorized by Resolution # \_\_\_\_\_ 2020-099 \_\_\_\_\_ as approved by Jackson Township Division of Fire Board of Trustees.

The amount so appropriated is on deposit or in the process of collection to the credit of the appropriate fund free from any outstanding obligations.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Fiscal Officer