

**City of Kirksville, Missouri**  
**Invitation to Bid**  
**Vacuum Tank/Bed Unit**

Sealed bids will be received for the furnishing of **one 2023, or latest model, Vacuum Tank/Bed Unit** until 3:00 p.m., Thursday, March 30, 2023, at which time they will be opened and read aloud. All bids must be on forms furnished by the City of Kirksville. Proposals that contain any omission, erasures, alterations, or specifications that contain any irregularities of any kind may be rejected as unresponsive. No proposal will be considered unless properly signed by the bidder, or his legally authorized agent or representative, with address, phone number and date given in the correct spaces provided.

By action of the City Council, the municipal purchasing officers are encouraged to select products manufactured, assembled or produced in the United States if the quality and price are comparable with other goods.

The City of Kirksville reserves the right to reject any bid for any reason. The City may waive any and all irregularities and/or formalities as deemed appropriate. The City has the right to negotiate contract terms with the successful bidder. The City may disregard all nonconforming, non-responsive or conditional Bids. Past performance, service and parts availability, and warranty will be considered in the selection process. No bid may be withdrawn after the time for opening of the bids is past. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Selection will be made based on the lowest bid price and best value to the City.

All bids must be addressed to: **City Clerk, City Hall, 201 South Franklin Street, Kirksville, Missouri 63501**; and plainly marked on the outside in the lower left corner: **Sealed Bid – Vacuum Tank/Bed**. Any bids received after the designated time of the announced bid opening shall be refused and returned unopened to bidder.

The City of Kirksville does not discriminate in its decisions on the basis of age, ancestry, color, disability, gender, gender identity, marital status, national origin, race, religion, sexual orientation, or on any other basis that would be in violation of any applicable federal, state, or local law. Furthermore, the City of Kirksville will make reasonable accommodations for qualified individuals with known disabilities unless doing so would result in an undue hardship.

Public Works Department  
(660) 627-1291

**City of Kirksville, Missouri  
Public Works Department  
Bid Proposal – Vacuum Tank/Bed Unit**

To furnish one 2023, or Latest Model, Vacuum Tank/Bed Unit, complete, installed and ready to use, in accordance with the specifications contained herein.

TO: City of Kirksville, Missouri

The undersigned, as bidder, declares that he/she is familiar with the requirements of the specifications, and if this proposal is accepted, agrees to furnish and install one 2023, or latest Model, Vacuum Tank/Bed Unit, of domestic manufacturer, for the following amount:

<b><u>Description</u></b>	<b><u>Quantity</u></b>	<b><u>Total Price</u></b>
One 2023, or Latest Model, Vacuum Tank/Bed Unit, per specification, to include installation.	1	\$ _____
	<b>Total Bid Price</b>	\$ _____

If this bid is accepted, delivery shall be within 6 months after due notification from the City of Kirksville, Missouri, of acceptance of this bid. Any bid may be modified or withdrawn prior to the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered; but will be returned, unopened, to bidder. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the City and the bidder. By my signature below, I certify that this bid submittal meets the specifications requested and I have the authority to submit the pricing.

Submitted with this bid proposal are manufacturer's descriptive literature for unit bid along with the guarantee and warranties for unit.

SUBMITTED ON \_\_\_\_\_, 2023.

**Bidder Signature & Information:**

Firm: \_\_\_\_\_

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

By: \_\_\_\_\_  
(Please Print)

\_\_\_\_\_  
\_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Email Address (if available)

Signature: \_\_\_\_\_

Phone No. (\_\_\_\_) \_\_\_\_\_

Fax No. (\_\_\_\_) \_\_\_\_\_

Cell No.: (\_\_\_\_) \_\_\_\_\_

**City of Kirksville, Missouri**  
**Specifications**  
**2023, or latest model, Vacuum Tank/Bed Unit.**

**INTENT**

It is the intent of these specifications to describe one Vacuum Tank/Bed Unit, used for hauling and spreading water and wastewater plant sludge, and to permit qualified bidders to quote on the furnishing of this unit in accordance with these specifications. All parts not specifically mentioned in the scope of these requirements which are necessary to provide a complete operational unit shall be furnished by the successful bidder.

**WARRANTY**

Please include warranty information with bid.

**MANUALS AND CERTIFICATES**

All manuals, instructions, and warranty certificates shall accompany the unit. Parts, technical/service Information can be provided on CD.

**GENERAL TERMS**

The unit furnished shall be the manufacturer's current production model. The equipment shall be a production of a domestic manufacturing concern. The specifications shall be construed as minimum. Should the manufacturer's current published data or specifications exceed these they shall be considered minimum and furnished.

**The city will only consider bids from companies within 250 miles of Kirksville who can provide service and warranty work.**

**You are bidding on tank/bed specified below to include installation.**

The successful bidder will be installing this vacuum tank/bed unit on a 2023 Freightliner Tandem Chassis with 156" cab to axle. The unit will be equipped with an interface module and PTO gearbox on transmission. Any necessary parts/equipment to make the Vacuum Tank/Bed unit fully functional will be provided by the successful bidder. **The truck cab/chassis has an estimated delivery of October 2023**

**Tank Description:**

3600 Gallons Nominal  
Compartments: 1-CPT  
Gal. (F to R) 3600

Int. MAWP: 15 PSI  
Test Pressure: 25 PSI  
External Pressure: Full Vacuum  
Max Loading Temp: 150° F Max

**Vessel:**

**1. Shell Material:** 0.260" Manuf. 5454-H32 Aluminum alloy bright finish

**2. Head Material:** 0.235" Manuf. 5454-0 aluminum alloy, flanged and ASME dished, bright finish exterior heads.

**3. Rear Head Options:** (1) NVE 20" full opening 5-lug with SS lid and Buna gasket, located at bottom of rear head and hinged to roadside.

**4. Internal Weld Finish:** As-welded.

**5. External Weld Finish:** Snag – proof.

**6. Baffles:** (2) 0.235" Manuf. 5454-0 aluminum alloy mill finish, full circle, flanged and dished baffles. Baffles have a tunnel drain at 6 o'clock, holes at 3, 9, and 12 o'clock

**7. Manhole:** (1) NVE 20" full opening 6-lug with cast AL lid and Buna gasket.

**8. Primary Shutoff:** (1) NVE 204-1206-3HB 12" full opening 3-lug low profile cast AL lid w/3" hose barb, 8" SS shutoff ball cage, Buna gasket. Primary shutoff located near front of tank with hose barb pointed to front 60° to roadside.

**9. Sill:** Extruded aluminum full-length sill with .25" thick crossmembers.

**10. Lifting Lugs:** (2) 0.50" thick lifting lugs on top centerline.

**11. Vessel Vacuum Relief:** (1) 3.00" half coupling located on top centerline with a 3.00"MPT x 2.00"FPT PVC reducing bushing and 2.00" plug.

### **Driveline Systems:**

**1. Roadside Drive System:** Driveline with a 1:1 gear box to supply power to the vacuum pump.

**3. Throttle Control Location:** In-cab.

### **Vacuum System Plumbing:**

**1. Vacuum Pump Package:** NVE 866 Challenger Max Pac System, or equivalent.

-Liquid cooled

-@ 1000 RPM: 381 CFM @ 20" Hg (continuous)

-@ 1000 RPM: 370 CFM @ 25" Hg (continuous)

-pressure and vacuum relief valves

-compound vacuum / pressure gauge

-secondary scrubber

-inlet filter

-oil separator

-vacuum / pressure change over valve

-one way flow valve to eliminate back spin

**2. Diesel Flush Package:** Diesel flush kit including: reservoir, orifice fitting and manually operated ball valve.

**3. Vacuum Plumbing:** Rubber Vacuum hose to connect the primary shutoff and secondary shutoff.

**4. Flange Pattern:** TTMA bolt pattern flanges.

**5. Front Load Pipe:** 4.00" SCH 40 AL pipe (pointed forward) near bottom of front head with a 4.00" flange.

**5a. Front Load Valve:** 4.00" Stainless Steel heated collar, 4.00" NVE lever valve, cam & grove adaptor and dust cap.

**6. Curbside Rear Load Pipe:** 4.00" flange with a SCH 80 AL pipe extending through rear head (near bottom) at 45° pointed upward so that interior of pipe ends near top of tank with bracing and deflector.

**6a. Curbside Rear Load Valve:** 4.00" Stainless Steel heated collar, 4.00" NVE lever valve, cam & grove adaptor and dust cap.

**7. Load Pipe Deflector(s):** Standard stainless-steel deflectors on specified load pipes.

**8. Outlet:** Sump assembly at bottom rear of tank with a 6.00" SCH 40 AL elbow and pipe to rear of tank ending with a 6.00" flange.

**8a. Outlet Valve:** 6.00" Stainless Steel heated collar, 6.00" NVE lever valve, cam & grove adaptor and dust cap.

### **Electrical:**

**1. Side Marker Lights:** (2) amber lights located on front curbside and roadside. (2) red lights located on rear curbside and roadside.

**2. Triple ID Lights:** (3) red lights located on the top of the rear head.

**3. Tail Lights:** Three lights each side, (2) red signal / brake / tail lights, (1) white backup light on each side. Tail lights located in rear wheel skirting panel.

**4. License Plate Lamp:** License plate lamp located under roadside tail lights.

**5. Work Lights:** (2) swivel work lights mounted at top rear curbside and roadside.

**6. Beacon Safety Light:** (1) Included

### **Accessories:**

**1. Ladder** (1) ladder located on curbside above the hose trough under the manhole.

**2. Hose Trough:** Bright aluminum hose trough 8.25" tall x 30.75" wide on curbside and roadside full length of tank. Hose trough begins at front head seam and ends approximately 16" beyond rear head seam.

**3. Hose Trough Guard:** Bright aluminum diamond plate hose guard located on curbside and roadside full length of tank, covering approximately 18" of the barrel above the hose trough.

**4. Hose Trough Ends:** Bright aluminum diamond plate ends angled to center with grooved rod on top.

**5. Wheel Skirting Panel:** Bright aluminum panel at rear of tank under hose trough extending from rear wheel (trimmed to wheel contour) to rear of tank on curbside and roadside. Rear of wheel panel closed off with bright aluminum diamond plate. Mud flaps installed.

**6. Curbside Cabinet:** (1) 36" wide x 24" tall x 24" deep aluminum underbody cabinet with 1 door hinged at bottom mounted to truck frame.

**7. Hose Hangers:** (2) heavy duty aluminum brackets with one on curbside and one on roadside of rear head. (2) hose rub rails are attached to the rear head on curbside and roadside.

**8. Sight Glasses:** (3) 5" sight glasses located on rear head at approximately 9 o'clock, 10 o'clock and 11 o'clock position.

**9. Digital Capacity Indicator:**

Garnet Model 808P2-SeeLevel gauge or equivalent installed on a 1.00" full coupling located on top centerline of tank. Electronic liquid level display located at rear roadside. Switch installed in truck cab to turn the gauge on/off. Alarm wired to the gauge with Alarm 1 programmed at 80% of rated tank capacity, Alarm 2 programmed at 95% of rated tank capacity.

**10. Bumper:** (1) 4" x 8" carbon steel rect. tube, 93" wide, per DOT PHMSA specs.

**11. Conspicuity Tape:** 2" wide retro-reflective tape in accordance with US DOT NHTSA rules.

**12. Data Plates:** Data plates to be stamped in U.S. gallons and lbs.