

City of Conway Office of the Mayor

Mayor Tab Townsell www.cityofconway.org

INVITATION TO THE VENDOR ADDRESSED:

Bidders are invited to furnish the items listed herein in accordance with the terms and conditions attached. Sealed bids must be in the Office of the Mayor; no later than 10:00am, Wednesday, February 18, 2015 at which time all bids will be opened and read in the Downstairs Conference Room in City Hall. Successful bidders will receive purchase order, within 30 days after City Council approval, if necessary. Unsigned bids will be rejected.

<u>Bid Specifications – Conway Sanitation Department</u> 2015-13_2015 Automated Side Loading Refuse Truck

It is intended that the following set of bid specifications be used as a guideline for a 2015 new and unused <u>CNG</u> powered, automated side loading refuse truck. The body must be capable of compacting and transporting refuse to a landfill and dispensing the load. The truck must be able to maintain a highway speed of 70 mph. Equipment must be ready to use when delivered on site.

<u>within a 60 mile radius of the City of Conway and have on hand a representative amount of parts suggested by the manufacture</u>. The service center must have factory trained technicians at their facility. Bidder must provide a list of references whom have used this service center within the last twelve months. Parts, service, and operator's manuals must be provided with this unit. A complete copy of the warranty for the chassis and packer body must be provided.

Awarded bidder shall deliver the complete unit within 180 days after receiving notice of award via a City of Conway issued, signed, and dated Purchase Order. All specifications are set at a minimum. Any exceptions must be listed and summated to the City of Conway Sanitation Dept. within five business days before bid is awarded. All cylinders shall have a five year manufacturer's warranty.

GENERAL SPECIFICATIONS:

- 1. Truck must have a minimum GVW of 58,000lbs.
- 2. Cab must be low entry cab over design.
- 3. Cab to axle measurements shall be 192".
- 4. Refuse body shall be a minimum of 28 cubic yards.
- 5. Truck must meet requirements for severe duty operations.
- 6. Right hand drive only will be accepted.

ENGINE:

- 1. 6 cylinder in-line water cooled turbo charged CNG powered.
- 2. Shall provide a minimum of 320hp/ 1000 lb-ft.
- 3. Shall be equipped with extended life coolant.
- 4. A gear driven air compressor shall be provided.

TRANSMISSION:

- 1. Allison 4500 RDS.
- 2. Electronic push-button shift console.
- 3. Water to oil cooler.
- 4. Transmission PTO mounting option required.

FRONT AXLE:

- 1. Front axle shall be a minimum of 18,000lbs.
- 2. Front springs shall be 18,000lbs tapered leaf springs.
- 3. Front shock absorbers are required.

REAR AXLE:

- 1. Rear axle capacity shall be a minimum of 40,000lbs.
- 2. Axle shall be rear leaf spring design.
- 3. Shall have a driver controlled differential lock.

BRAKES:

- 1. Air brakes must be provided.
- 2. Steer and drive axles must have automatic slack adjusters.
- 3. Both drive axles must be park brake equipped.
- 4. Air tanks must have drain valves.
- 5. An air dryer is required.

FUEL SYSTEM:

Shall be designed to facilitate a dedicated Compressed Natural Gas (CNG) fuel system rated for 3,600 PSI. Each vehicle must be constructed utilizing best industry practices and meet the following minimum standards:

Fuel Tank Enclosure:

A self-contained fuel tank enclosure is to be designed for mounting of all CNG fuel storage cylinders and to meet the following specifications, "Agility Fuel Systems" or equal. Shall be roof mounted on top of the refuse body. Constructed out of high strength aluminum or carbon steel. Left side valve access holes. Structure shall be designed to meet all NFPA 52 codes/requirements (including 8g loading in six principal directions).

CNG Fill Panel:

Mounted on left hand side of vehicle and designed to meet the following specifications, "Agility Fuel Systems" or equal. Equipped with the following:

- 1. Access Door
- 2. Manual 1/4 turn shut-off valve, "Swagelok" two-way ball type valve or equal.
- 3. One, NGV1 type fill receptacle with tethered dust cap, 1,500 SCFM minimum.
- 4. Stainless steel Swagelok® tube fittings
- 5. Minimum 75scfm high pressure coalescing type fuel filter installed downstream of tanks and upstream of the pressure reducing regulator
- 6. One solenoid shutoff valve upstream of the pressure reducing regulator
- 7. ITT high pressure reducing regulator
- 8. Liquid filled high pressure fuel gauge installed before fuel pressure regulator.
- 9. Liquid filled low-pressure fuel gauge installed after fuel pressure regulator
- 10. Pressure sending unit capable of driving the chassis OEM's fuel gauge

Fuel Storage Cylinders:

- Shall be NGV2-07, type 3 cylinders rated for a minimum 20 year life-cycle.
 Four (4) cylinders shall be supplied to meet the total specified 60 diesel gallons equivalent (DGE) minimum. DGE is determined by multiplying the total cubic feet of water volume of the four cylinders by 2.129. (Minimum total water volume is to be 35.22 cubic feet).
- 2. Cylinders are to be rated @ 3,600 PSI per cylinder minimum.
- 3. Cylinders are to be equipped with a horizontal neck mount design
- 4. One manual cylinder shut-off valve is to be installed at each cylinder's outlet.
- 5. Each cylinder is to have stainless steel pressure relief device (PRD) vent lines.

Fuel Filter(s) Accessories:

- 1. Coalescing type fuel filters installed to minimize and prevent fuel system contamination (sized for the proper flow rates and easy accessibility). One installed downstream of regulator.
- 2. Stainless steel Swagelok® tube fittings
- 3. Hoses Parker "Par-Flex" or equal NGV4.2 and NFPA 52 hose and hose connection (when used).
- 4. Tubing-Seamless, 316L stainless steel tubing conforming to ASTM A269 or equivalent. (No metal-to-metal contact).

Labeling:

Permanent type Mylar or etched aluminum labels shall be readily visible and located in the engine compartment and at the fueling connection as per NFPA52 requirements.

CAB EXTERIOR:

- 1. The cab must be painted DuPont # 96939 Bengal Tan.
- 2. Heated West Coast and convex style mirrors shall be mounted to the cab with breakaway features.

CAB INTERIOR:

- 1. Driver's seat shall be air ride equipped.
- 2. Gauges shall include; speedometer, tachometer, engine oil pressure, engine temperature, voltmeter, air pressure, and fuel gauge.
- 3. An AM/FM radio shall be provided.
- 4. Cab interior grab handles.

- 5. Safety belts shall be standard.
- 6. Driver and passenger side sun visors.
- 7. Air conditioning and heat is required that will maintain 70 degrees year round.

WHEELS AND TIRES:

- 1. Front and rear wheels shall be 22.5 hub pilot design.
- 2. Hubs shall be oil lubricated.
- 3. Tires shall be manufacturer recommended for this application.

STEERING:

- 1. Power steering with a sight glass reservoir.
- 2. Multi position tilting steering column.

EXHAUST:

1. A vertical mounted muffler and tail pipe shall be mounted on the left side of the vehicle.

ELECTRICAL SYSTEM:

- 1. 12-volt 160 amp alternator.
- 2. 3 batteries (12 volt) with 650/1950 cca.
- 3. Reset circuit breakers.
- 4. 102 dba back up alarm.
- 5. Work lights shall be mounted on the arm, hopper, and back up position.
- 6. A colored camera system with an arm, hopper, and reverse camera must be provided.

REFUSE BODY:

- 1. The minimum capacity of the body shall be 28 cubic yards excluding the hopper.
- 2. The minimum capacity of the hopper shall be 3.3 cubic yards.
- 3. The body shall pack a minimum of 700 lbs. per cubic yard.
- 4. Refuse body shall be painted Du Pont #546 Green.

BODY DIMENSIONS:

- 1. Maximum inside width shall be 91".
- 2. Maximum outside body width shall be 96".

- 3. Maximum length shall be 280 ".
- 4. Maximum height above the chassis frame shall be 109".

BODY CONSTRUCTION:

- 1. The body floor shall be flat without a trough.
- 2. The body sides and roof shall be curved and smooth.
- 3. No hydraulic cylinders, hoses, or control valves shall come in contact with refuse being packed into the body.
- 4. Roof and sides shall be continuously welded and interlacing with the main frame bolsters.
- 5. Floor shall be a minimum of 7 ga. 50,000 psi minimum yield.
- 6. Floor bracing shall be 1.75"x 6"x 7 gauge hi tensile channels.
- 7. Body roof shall be a minimum of 12 ga, hi-tensile steel fully welded to a full width 6"x 1.75"x7 ga. hi-tensile formed roof channels.
- 8. Body sides shall be a minimum of 10 gauge hi-tensile sheet steel fully welded to the sidewall vertical bolsters.

HOPPER:

- 1. Hopper shall be flat with vertical sides.
- 2. The front of the hopper shall be a radius and free of corners
- 3. Hopper shall be capable of handling thirty (30) through three hundred (300) gallon automated side load containers.
- 4. Hopper floor shall be a minimum of ½" high tensile sheet steel.
- 5. Hopper sides shall be a minimum of $\frac{1}{2}$ " hot rolled steel plate.
- 6. Curb side of hopper shall have a replaceable rubber flap to prevent refuse spillage.

PACKING MECHANISM:

- 1. A hydraulically actuated packing platen shall be suspended between two (2) self aligning hardened steel bushings.
- 2. The packing platen shall complete a pack sweep cycle in a maximum of sixteen (16) seconds and displace a volume of a minimum of three (3) cubic yards of refuse.
- 3. The packing platen shall be capable of operating continuously to allow refuse to be dumped with the platen at any position.

- 4. The packing platen shall be constructed of a minimum of ½" reinforced steel plate.
- 5. The swinging platen shall utilize both sides of the assembly to distribute refuse equally on both sides of the body.
- 6. The platen support bushings shall be capable of being greased without entering the hopper.
- 7. The platen shall be activated by two (2) hydraulic cylinders.
- 8. Hydraulic cylinders shall be single stage cylinders. Cylinders shall have a 5" diameter bore x 1.5" rod x 43" stroke and be mounted to the underside of the body. The cylinders shall be connected to the platen by 1.25" thick steel bars.

TAILGATE:

- 1. Tailgate shall be one piece hinged at the top and shall open ninety (90) degrees.
- 2. Tailgate shall be a minimum of 10 ga. high-tensile on the rear and sides.
- 3. Tailgate shall be reinforced by a minimum of 1.75" x 6" x 7 ga 40,000 PSI yield formed channel.
- 4. The tailgate shall raise on two (2) sets of hinges on the roof.
- 5. The tailgate shall have a one piece vinyl tube gasket to prevent liquid from leaking out of the packer body.
- 6. Tailgate shall raise, lower, lock, and unlock by two (2) hydraulically actuated cylinders with a minimum of 3" bore x 1.12" rod x 18.5" stroke.

LIFTING ARM:

- 1. The arm shall be a 4 ½" x 9 ½" tube structure and be supported by a 4" x 3" structure.
- 2. The lift arm base shall be $\frac{1}{2}$ " x16" x 61", 50,000psi yield steel and be bolted to the chassis frame rails.
- 3. The lifting mechanism shall be capable of lifting a minimum of 1000 lbs.
- 4. Lifting arm shall have a minimum of 9" of reach.
- 5. Dumping cycle time shall be a minimum of 6 seconds at an idle.
- 6. Arm shall be capable of extending, grabbing, raising, dumping, and returning the container from any position without the need to retract the lift arm.
- 7. All hinge points shall be greaseable.
- 8. Reach cylinder shall be one (1) dual acting 3.14" bore x 16" stroke with a 1.57" rod hydraulic cylinder.

9. Grip and release cylinder shall be one (1) dual acting 3.14" bore x 8" stroke x 1.57" rod hydraulic cylinder.

cylinder.

10. Lift cylinder shall be one (1) dual acting 3.14" bore x 16" stroke x 1.57" rod hydraulic cylinder.

11. Lift controls shall be self-centering, returning to neutral. Lift arm functions shall not interfere

with the packing cycle.

12. In cab controls shall be a joystick that is mounted conveniently for the operator. Another set of

controls shall be mounted by the driver's lower portion of the seat. Controls shall be mounted to allow the operator to reach, lift, dump, and return the container from outside the driver's

station.

13. Grippers shall be capable of dumping 30 to 300 gallon containers, configured utilizing a 2(two)

single gripper arm design.

BODY HOIST:

1. The body shall be raised by two (2) 4.5" bore x 56" stroke single acting two (2) stage telescopic

cylinders.

2. Body shall achieve a dump angle of 30 degrees and lower by gravity.

3. Cylinders shall include orifice fittings to prevent rapid descent.

4. There shall be two (2) 3" channel props to hold body in the partially raised position for servicing.

HYDRAULICS:

1. Minimum operating pressure shall be 2400psi.

2. Pump shall be a tandem, dual vane, and front mounted pump producing 34 GPM at 800 RPM.

3. All hydraulic tubes shall be mounted securely to prevent vibration and abrasion.

4. Hydraulic shall hold 40 US. Gallons.

5. System shall have a replaceable, it-tank, return line filter and a washable suction line screen.

VEHICLE TRADED:

2009 Mack

VIN: 1M2AU04C49M003000

Additional Information The bidder shall include all charges, including taxes, fees, freight and shipping (if applicable) The bidder needs to include an anticipated delivery date. (if applicable) In submitting this bid, it is understood by the undersigned bidder that the right is reserved by the City of Conway to reject any and all bids: Contact Information: Cheryl Harrington, Sanitation Director Cheryl.harringon@cityofconway.org 501.450.6155 Danny Alford, Conway Sanitation Dept. Danny.alford@cityofconway.org Bid Specifications can be obtained from our website: www.cityofconway.org City Hall 501.450.6110 1201 Oak Street, Conway, AR 72032



City of Conway – Conway Sanitation Department Bid Number: 2015-13

2015 Automated Side Loading Refuse Truck Bidder Submittal Bid Opening Date: Wednesday, February 18th, 2015 City Hall, Downstairs Conference Room @ 10:00am

www.cityofconway.org

Total Cost for a Automated Side Lo	ading Refuse Truck	\$	
Total Cost for Trade In (2009 Mack)	\$	
Total Cost of after Trade In:		\$	
Type of Truck:			
Estimated Delivery Date:			
Authorized Agent bidding on this p	oroject:		
	Company Name		_
Co	ompany Representative	Name	
Representative's Signature			Date
Address		Email Address	
City	State	Zip	
Telephone Number		Fax Number	

*Unsigned bids will not be accepted.

City of Conway – Mayor's Office Terms & Conditions

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Important – Read Carefully

By Submission of bid, bidder certifies that he has read all terms and conditions and that bid is submitted in accordance therewith.

- 1. Prices quoted will be considered to be net prices unless otherwise stated by the bidder. Cash discounts requiring payments in less than 30 days will not be considered in making awards.
- 2. Prices quoted shall be FOB Conway unless otherwise specifically stated on proposal. In either case, delivery charges must be prepaid.
- 3. All charges including taxes, shipping, freight, and any miscellaneous taxes shall be included in prices quoted, if applicable.
- 4. Bidder certifies that he will make delivery of items for which he bids within 10 days after receipt of award *unless otherwise specifically stated*. Time of delivery in excess of 10 days may be considered a factor in making awards.
- 5. In case of default of contractor in making deliveries as per contract, the City may procure the articles or services from other sources and hold the contractor responsible for all excess costs occasioned thereby. Bidder's record as to satisfactory performance under previous contracts will be considered a factor in making awards and retention on bid lists.
- 6. The City reserves the right to reject any or all bids, in part or in whole and to waive information in bids received.
- 7. If not otherwise specified, bidder must furnish brand names with catalog number, if any, on items which are offered as "equal." In all such cases the burden of establishing equality is upon the bidder and failure to do so within a reasonable time may result in rejection. Alternative bids will not be considered unless no other type bid for the item is received.
- 8. In the case of equal or tie bids, preference will be given to Arkansas bidders. Other than as stated in the first sentence, awards on tie bids will be made at the discretion of the purchasing official. In such cases, "splitting" will be avoided and awards of previous contract(s) to one or more of the bidders will not be a factor.
- 9. In the event that bidder is unable to furnish all of an item, bids on portions thereof may be considered.
- 10. Final inspections and acceptance or rejection will be made after delivery. Items rejected because of non-conformance shall be removed and replaced immediately with those which meet specifications, all at the expense of the contractor. In the event that necessity requires the use of non-conforming items, payment therefore will be made at a proper reduction in price which shall be not greater than contractor's actual cost by purchase, fabrication, manufacture or other production method plus transportation paid to carriers. All costs in connection with testing items that do not meet specifications shall be paid by contractor.
- 11. Quality, time of performance, probability of performance, and location of bidder will be factors in awards of all contracts.
- 12. The City reserves the right to purchase any, all or none of the items listed, in combinations thereof that may be in the best interest of the City of Conway.
- 13. The City reserves the right to change any specifications, terms and/or conditions at any time, with adequate notice in writing to bid invitees of those changes, if any.
- 14. The City is qualified for "GSA" pricing schedules, *if available and applicable*.
- 15. The City reserves the right to waive any informalities or minor defects, but this shall not be construed to indicate waiver of any specification, term and/or condition unless in the best interest of the City in the judgment of the City.
- 16. **CONSTRUCTION/INSTALLATION:** Any construction work that is worth \$20,000 or more must comply with Arkansas Code Annotated § 22-9-204.
- 17. **Arkansas Prevailing Wage Law A.C.A. §22-9-301 through 3-15:** The City of Conway, general contractors or any subcontractors is subject to the Arkansas Prevailing Wage Law, A.C.A. **§22-9-301 through 3-15.**

The Labor Standards Division enforces laws related to <u>prevailing wage</u> (PDF). Arkansas's prevailing wage law is commonly referred to as the "little Davis-Bacon Act." The law requires the division to issue a wage determination for each public works project where the cost of all labor and materials exceeds \$75,000. *Exemptions are public school construction; work done for or by any drainage, improvement, or levee district; highway, road, street or bridge construction and maintenance, or related work contracted for or performed by incorporated towns, cities, counties, or the Arkansas Highway Department.* If you need a copy of the Prevailing wage Regulation and Laws that are required; this information is available at http://www.arkansas.gov/labor/pdf/prevailing wage regs.pdf.

- 18. **PROHIBITED INTEREST CONDITION:** No official of the City authorized on behalf of the City to specify, plan, design, negotiate, make, accept or approve, or take part in specifying, planning, negotiating, making, accepting or approving any construction or material purchase contract or any subcontract in connection with any purchase made by the City of Conway shall become directly or indirectly interested personally in the purchase in the purchase or any part thereof.
- 19. **EQUAL OPPORTUNITY IN EMPLOYMENT:** The City of Conway is an Equal Opportunity Employer and does not discriminate on the basis of race, color, religion, sex, national origin, marital or veteran status, political status, disability status or other legally protected status