

City of Conway Office of the Mayor Mayor Tab Townsell <u>www.cityofconway.org</u>

INVITATION TO THE VENDOR ADDRESSED:

Bidders are invited to furnish the items listed herein in accordance with the terms and conditions attached. <u>Sealed</u> bids must be in the Office of the Mayor; no later than <u>10:00am</u>, <u>Wednesday</u>, <u>February</u> <u>18th</u>, <u>2015</u> 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>Conway Sanitation Department</u> <u>Bid Number 2015-12</u> 2015 Commercial Rear Load Refuse Truck_CNG Bid Specifications

It is intended that the following set of bid specifications be used as a guideline for a **2015 new and unused CNG powered, rear loading refuse trucks.** The body must be capable of compacting and transporting refuse to a landfill and dispensing the load by hydraulically ejecting the load from the rear of the body. The truck must be able to maintain a highway speed of 70 mph. Equipment must be ready to use when delivered on site. Bidder must have an established complete parts and service center for the chassis and packer body within a 60 mile radius of the City of Conway and have on hand a representative amount of parts suggested by the manufacture.

The service center must have factory trained technicians at their facility. Bidder must provide a list of references that have used this service center within the last twelve months. Parts, service, and operator's manuals must be provided with this unit, in hard copy as well as CD form. 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. All cylinders shall have a five year manufacturer's warranty.

Any exceptions must be listed and summated to the City of Conway Sanitation Dept. within five business days before bid is awarded.

General Specifications:

- 1. Truck must have a minimum Gross Vehicle Weight of 54,000lbs.
- 2. Cab must be of the conventional cab design.
- 3. Cab to axle measurement shall be 156".
- 4. Refuse body must be 25 cubic yards.
- 5. Truck must meet requirements for severe duty operations.

Engine:

- 1. 6 cylinder in-line water cooled turbo charged CNG powered.
- 2. Shall provide a minimum of 320hp / 1000 lb-ft.
- 3. Shall have 120 volt AC engine block heater with plug mounted in front of truck.
- 4. Shall be equipped with Extended Life Coolant.
- 5. Shall be equipped with an engine braking system.
- 6. A gear driven air compressor shall be 13.2 cfm.

Transmission:

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

Front Axle:

- 1. Front axle must be a minimum of 14,000lbs capacity.
- 2. Front springs shall be 14,000lb tapered leaf springs.
- 3. Front shocks absorbers are required.

Rear Axle:

- 1. Rear axle capacity must be a minimum of 40,000lbs.
- 2. Axle suspension shall be tandem axle walking beam style.
- 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. Cab mounting shall utilize air ride suspension.
- 3. Heated West Coast and convex style mirrors must be mounted to cab with breakaway feature.
- 4. Exterior grab handles shall be provided.

Cab Interior:

- 1. Driver's seat shall be air ride equipped.
- 2. Passengers seat shall be bench design to accommodate two passengers.

3. Gauges shall include; speedometer, tachometer, engine oil pressure, engine temperature,

voltmeter, air pressure, and fuel gauge.

- 4. An AM/FM radio shall be provided.
- 5. Cab interior grab handles.
- 6. Driver and passenger side sun visors.
- 7. Air conditioning and heat is required to 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 sight glass reservoir shall be provided.
- 2. Multi position tilting steering column.

Exhaust:

1. A vertical mounted muffler and tailpipe shall be mounted on the right side of the vehicle.

Electrical System:

- 1. 12-volt 160 amp alternator.
- 2. 3 batteries (12-volt) with 650 cca for a total of 1950 cca.
- 3. Manual reset circuit breakers.
- 4. 102 dba back up alarm.
- 5. Work lights mounted on the rear of refuse body and in hopper.
- 6. Reverse camera with color monitor.

Refuse Body:

- 1. The minimum capacity of the body shall be 25 cubic yards excluding the hopper.
- 2. The minimum capacity of the hopper shall be 3.94 cubic yards.
- 3. The body shall pack a minimum of 1000lbs per cubic yard.
- 4. Refuse Body must be painted Du Pont #546 Green.

Body Dimensions:

- 1. Maximum width shall be 96".
- 2. Maximum length shall be 270".
- 3. Maximum height over the chassis frame shall be 96".
- 4. Body width, inside 89".
- 5. Body height, inside 79".

Body Construction:

- 1. The body shall have a smooth floor without a trough.
- 2. In order to prevent corrosion and fire damage, no hydraulics components shall come in contact with refuse being packed into the body.
- Body sides & roof shall be curved stress skin construction connecting with the corner mainframe bolsters.
- Rear bolsters shall be 5"x 20" formed channel at the major upper and lower connecting points of the mainframe.
- 5. Front bolsters shall be 5"x8" formed channel at the major upper and lower connecting points of the mainframe.
- 6. Body roof shall be a minimum of 8 gauge, 80,000psi minimum yield hi-tensile steel that is fully welded to a full length roof crown.
- 7. Roof crown shall be 11 gauge 50,000psi yield.
- 8. Body sides shall be 8 gauge, 80,000psi high tensile steel. The sides shall be fully welded to the roof crown and to a 4.7"x18" floor skirt rail.
- Rear mainframe bolsters shall be fully welded to the curved body sides and be a minimum of 3"x20" contoured to sidewall. Bolsters shall be a minimum of 7 gauge 80,000psi yield.
- 10. Body floor shall be flat across the full width with no inboard guide rails or trough. Floor shall be a minimum of 7 gauge 80,000psi yield.
- 11. Floor long members shall be a formed trapezoidal shape of 9.6"x11" with a 3.3" base sill that is 7 gauge 80,000psi minimum yield formed channel that is continuously welded to the floor.

12. Floor cross members shall be 3"x3" 7 gauge 80,000psi minimum yield channel. Cross members shall be interlaced through the long members on 18" centers and be full width, single piece.

Tailgate Dimensions:

- 1. Maximum width at hopper opening shall be 84.5".
- 2. Inside tailgate loading width shall be a minimum of 80".
- 3. Hopper opening height shall be 55".

Tailgate Construction:

- 1. Sides shall be one piece 3/16" 184,000 psi AR400 plate steel.
- Side reinforcements shall be 6"x 1 7/8" 11 gauge 50,000psi formed channel that is fully welded edge of side sheets. A network of 6"x 1 7/8" 11 gauge 50,000psi and 6 5/8"x 1 7/8" 11 gauge 80,000psi formed channel shall be fully welded to the tailgate sides for support.
- 3. Hopper floor shall be a minimum of 3/16" 180,000psi AR400 steel plate.
- Hopper lateral reinforcement shall be 3/16" 80,000psi formed channel cross members. Forward Reinforcements shall be a lateral network of 3/16" 80,000psi & 3/8" 50,000psi formed steel channel.
- 5. Hopper compaction face shall be 5/16" 180,000psi AR400 steel plate.
- 6. Tailgate shall have 1" heavy duty turnbuckles (one per side) to hold tailgate in the closed position.
- Two ¾" hot rolled steel grab handles shall be provided on each side of tailgate for operator safety during vehicle movement.
- Steps shall be bolted to the sides and constructed out of 12 gauge slip resistant, self-cleaning material. They shall provide 396 square inches of footing for a single rider and meet ANSI standards.
- 9. The tailgate raise cylinders (one per side) shall be single acting 4" bore x 26" stroke hydraulic cylinders with internal orifices to limit descent in case of hose failure.
- 10. The tailgate shall have a one piece replaceable gasket which extends across the entire bottom

and no less than 20" up the sides.

11. The hopper sill shall be 3/16" 80,000psi steel.

Packing Mechanism:

- 1. Packing controls shall be two levers mounted to the right side of tailgate with the ability to stop, start, and reverse directions of all functions of packing cycle.
- 2. Packing control valve shall be mounted in the center above hopper on the upper cross member.
- 3. Packing cycle shall be no greater than 25 seconds.
- 4. Packing mechanism shall have an upper packer panel and lower packing blade.
- 5. The upper packing panel shall be mounted to the tailgate with 2 sets of upper and lower link arms. Upper link arms shall be secured to the panel and tailgate with 2" hardened pins. Lower link arms shall be secured to tailgate with 2" hardened pins and the panel with 2 5/16" hardened hinge pins.
- Upper panel shall be 3/16" 180,000psi AR400 steel plate. Packing blade hinges shall be 3" thick 50,000psi steel plate.
- Upper panel cylinders shall be 5" bore x 36" stroke double acting cylinders located on the outside of the hopper. Cylinders shall provide a minimum force of 73,500 lbs.
- 8. Upper cylinders shall be accessed by doors mounted to the tailgate.

Packing Blade:

- 1. The packing blade shall pivot on the upper panel with 3" hardened steel pins.
- 2. Packing blade shall be 3/16" 180,000psi AR400 steel.
- Packing blade cylinders shall be 5 ½" bore x 24" stroke double acting cylinders located inside of the hopper. Cylinders shall provide a minimum force of 111,670 lbs.
- Ejector panel shall automatically move forward when refuse is packed between the packing Blade, upper panel, and ejector panel.
- 5. An electrical device shall automatically advance RPM during packing cycle.

Ejector Panel:

- 1. The load shall be ejected by an ejector panel with a telescopic hydraulic cylinder capable of extending and retracting the ejector panel the full length of the refuse body.
- 2. The ejector shall be a 4 stage cylinder with a 6" bore x 134" stroke.
- Panel face shall be 11 gauges steel with 4 steel channels going across. The vertical post shall be
 0.375 hi-tensile steel.
- 4. Ejector panel shall extend and retract with the ejector cylinder only.
- 5. The ejector shall have two cast alloy replaceable shoes on each side of panel.
- 6. Ejector and tailgate raise controls shall be mounted outside of the body on the left side front with an electrical device to raise engine RPM.

Hydraulic System:

- 1. A direct mounted pump with electric shift PTO shall be mounted to the chassis transmission.
- 2. The operating pressure shall be 2500 psi.
- 3. The pump shall be a heavy-duty gear drive with a capacity of 28 GPM @ 1200 RPM.
- 4. The hydraulic system shall incorporate the use of adjustable relief valves.
- 5. All hydraulic tubes shall be mounted securely to body to prevent excessive wear.

Attachments:

- 1. A hydraulic reeving cylinder shall be mounted to the top of the body, and be capable of dumping dumpsters into the hopper by means of a cable. Control handle shall be mounted on right side of body next to the packer panel control.
- 2. A dumpster roll bar shall be mounted to rear of truck and be capable of dumping dumpsters into the hopper. Control handle shall be mounted to the right side of body next to the packer panel control.
- 3. Two (one per side) cart tippers shall be mounted to rear end of truck and be capable of dumping refuse carts into the hopper. All provision must be made to ensure no trash can escape while dumping. Control handles shall be mounted on each side of truck at the rear.

TRADE-IN

2009 International

VIN 1HTWYAHR9AJ208419

City Hall

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

> > 501.450.6155

Bid Specifications can be obtained from our website: www.cityofconway.org

1201 Oak Street, Conway, AR 72032

501.450.6110



City of Conway – Conway Sanitation Department Bid Number: 2015-12 2015 Commercial Rear Load Refuse Truck_CNG Bidder Submittal Bid Opening Date: Wednesday, February 18th, 2015 City Hall, Downstairs Conference Room @ 10:00am

*Unsigned bids will	not be accepted.		
Telephone Number		Fax Number	
City	State	Zip	
Address		Email Address	
Representative's Signature		Dat	
	Company Representative I	Name	
	Company Name		
Authorized Agent b	idding on this project:		
Estimated Delivery I	Date:		
Total Cost after Trade In: Type of Truck:			
		\$	
Total Cost for Trade In: (2009 Freightliner)		\$	
Total Cost for a Commercial Rear Load Refuse Truck		\$	

City of Conway – Mayor's Office Terms & Conditions <u>www.cityofconway.org</u> 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.
- 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 nonconformance 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