

**INVITATION TO BID**

Bid Invitation Number: #26-2014

Date of Issue: 02/11/2014

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **02/19/2014**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

**Division of Central Purchasing  
200 East Main Street, Room 338  
Lexington, KY 40507, (859) 258-3320**

**The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.**

All bids must have the company name and address, bid invitation number, and the commodity/service on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: 669 Byrd Thurman Drive

Bid Security Required:  Yes  No      Performance Bond Required:  Yes  No  
*Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).*

Quantity	Commodity/Service
<b>Price Contract</b>	<b>Front Loader CNG Refuse Vehicles</b>

<p style="text-align: center;"><b><u>Check One:</u></b></p> <p><input type="checkbox"/> Bid Specifications Met</p> <p><input type="checkbox"/> Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i></p>	<p style="text-align: center;"><b><u>Proposed Delivery:</u></b></p> <p>_____ days after acceptance of bid.</p>
<p><b><u>Procurement Card Usage</u></b></p> <p><input type="checkbox"/> Yes    The Lexington-Fayette Urban County Government will be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards?</p> <p><input type="checkbox"/> No</p>	

Submitted by: Peterbilt of Louisville  
Firm  
4415 Hamburg Pike  
Address  
Jeffersonville, IN 47130  
City, State & Zip

**Bid must be signed:  
(original signature)**

Bill Hite  
Signature of Authorized Company Representative – Title  
Bill Hite  
Representative's Name (Typed or printed)  
812-288-8007      812-285-8438  
Area Code - Phone - Extension      Fax #  
white@tlgtrucks.com  
E-Mail Address

*The Affidavit in this bid must be completed before your firm can be considered for award of this contract.*

**AFFIDAVIT**

Comes the Affiant, Bill Hite, and after being first duly sworn under penalty of perjury as follows:

1. His/her name is Bill Hite and he/she is the individual submitting the bid or is the authorized representative of Peterbilt of Louisville, the entity submitting the bid (hereinafter referred to as "Bidder").

2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.

6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Bill Hite

STATE OF Indiana

COUNTY OF Clark

The foregoing instrument was subscribed, sworn to and acknowledged before me

by Bill Hite on this the 19 day

of February, 2014.

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC, STATE AT LARGE

*Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.*

## **I. GREEN PROCUREMENT**

### **A. ENERGY**

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to [www.Energystar.gov](http://www.Energystar.gov)). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

#### Key Benefits

These products use 25 to 50% less energy  
Reduced energy costs without compromising quality or performance  
Reduced air pollution because fewer fossil fuels are burned  
Significant return on investment  
Extended product life and decreased maintenance

### **B. GREEN SEAL CERTIFIED PRODUCTS**

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to [www.Greenseal.org](http://www.Greenseal.org) to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

### **C. GREEN COMMUNITY**

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes  No



delivered in accordance with specifications. In the event of failure to perform within the time period set forth in this bid, it is agreed the certified / cashier's check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.

- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not tax exempt and are the sole responsibility of the bidder.
- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:
  - During the performance of this contract, the contractor agrees as follows:
    - (1) *The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
    - (2) *The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
    - (3) *The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
    - (4) *The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) *For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.*
- (2) *Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) *If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) *If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.*
- (3) *The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

KRS 45.630 Termination of existing employee not required, when

*Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.*

KRS 45.640 Minimum skills

*Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.*

It is recommended that all of the provisions above quoted to be included as special conditions in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

- U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the

contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) *Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and*
- (2) *Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.*

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

- V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

### **LFUCG Non-Appropriation Clause**

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.



## GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the

LFUCG.

11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.
13. Assignment of Contract: The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
15. Authority to do Business: Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
16. Governing Law: This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
17. Ability to Meet Obligations: Bidder affirmatively states that there are no actions, suits or

proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.

18. Bidder understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.
19. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

Bell Hlt  
Signature

2-18-14  
Date

EQUAL OPPORTUNITY AGREEMENT

The Law

Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.

Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.

Section 503 of the Rehabilitation Act of 1973 states:

*The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.*

Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

*The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.*


\*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

*I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.*

  
Signature

  
Name of

### III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for 1 year with 1 one-year renewal from the date of acceptance of this contract by the Lexington-Fayette Urban County Government.
- B. Price Changes (**Space Checked Applies**)
  - (XXX) 1. A price contract shall be awarded to the responsive and responsible bidder who has demonstrated the capability to best comply with the requirements contained herein at the lowest unit price. The price contract price shall remain in effect for one (1) year after date of award with an option to renew for one (1) additional year if agreed by both parties. Adequately documented price adjustments may be considered at time of renewal.
  - () 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
  - () 3. Procurement Level Contract
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- F. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- G. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.

## 1.0 SCOPE OF BID

- 1.1 This specification describes the minimum requirements for a cab & chassis truck with front loading refuse collection body.
- 1.2 It is anticipated that the original order will be for three (3) units.

## 2.0 REQUIREMENTS

- 2.1 Engine and Drivetrain
- 2.2 Engine: Engine displacement shall be not less than 725 in<sup>3</sup> and specifically designed to operate on compressed natural gas (CNG). Engine shall be rated at no less than 330 horsepower and 1250 lb-ft. of torque. Engine manufacturer's warranty shall cover all internally lubricated components, gaskets, seals, fuel system parts, and electronic engine management components for a period of not less than 5 years, 150,000 miles, or 4,500 hours whichever occurs first. Complete description of engine warranty shall be provided in bid package.
- 2.3 Starting: Engine starter shall be 12 volt with overcrank protection.
- 2.4 Batteries: Maximum of three (3) 12-volt threaded post batteries providing a combined total of not less than 2700 CCA at 0° F. Jump start terminals shall be provided in a convenient location outside the battery enclosure. Battery enclosure shall include all available options to minimize corrosive damage to enclosure. A master battery disconnect shall be located on the outside of the battery enclosure with a pilot light indication of when the truck is energized.
- 2.5 Charging: Engine alternator shall have a rated output of not less than 180 amps.
- 2.6 Air Cleaner: Engine shall be equipped with a dry type air filter system with restriction indicator.
- 2.7 Cooling: Cooling system shall have external spin-on type coolant filter. Coolant shall be all-weather, extended life, providing antifreeze protection to -30° F. All coolant hoses shall be silicone rubber with hose clamps designed for use with silicone hose.
- 2.8 Engine Heater: Engine shall be equipped with 110-120 volt, 1500 watt immersion type pre heater. Engine heater receptacle shall be flush mounted on driver's (left) side of cab easily visible by person entering cab.
- 2.9 Engine Protection: Engine management system shall provide warning, and shutdown for conditions such as low engine oil pressure, high engine oil temperature, high coolant temperature, and low coolant level.
- 2.10 Exhaust: Unit shall have vertical exhaust system with chrome plated rain proof stack.
- 2.11 Transmission: Allison model 4500-RDS, six forward speeds with all electronic packages required by body manufacturer. Transmission shall be provided with Allison Extended Transmission Coverage (ETC) for a period of three (3) years beyond the standard warranty for a total warranty period of five (5) years. Transmission shall be filled with Allison TranSynd™ transmission fluid prior to delivery.

## 3.0 Chassis

- 3.1 Frame: Each frame rail shall have a RBM rating of not less than 3,000,000 in-lb. Frame shall have two front tow eyes installed. Front bumper shall be painted steel (black).

- 3.2 Wheel Base: As determined by body manufacturer.
- 3.3 Front Axle & Suspension: Front axle shall have a rated capacity of not less than 20,000 lbs. Front suspension and related components shall have a rated capacity of not less than 23,000 lbs. Front suspension shall include single overload cushions and shock absorbers.
- 3.4 Rear Axle & Suspension: Tandem rear axles and suspension shall have a rated capacity of not less than 46,000 lbs. Axle ratio shall provide a top speed of approximately sixty miles per hour (60 MPH).
- 3.5 Steering: Hydraulic power assisted, with power steering oil cooler.
- 3.6 Brakes: Brake system shall be air actuated, "S" cam, outboard, drum type. Rear spring brake chambers shall be MGM TR-LP3TSHD series. Front spring brake chambers shall be MGM CL series. Front brakes shall be no less than 16.5" in diameter, 7" in width. Rear brakes shall be no less than 16.5" in diameter, 8.6" in width. All wheel positions shall have automatic slack adjusters.
- 3.7 Air Dryer and Tanks: Brake system shall be equipped with a Bendix desiccant type air dryer. Air reservoirs shall be drained from a single point. Air brake system shall include a Schrader valve fill port for charging from an external compressed air source.
- 3.8 Tires & Wheels: Front wheels- 22.5" X 12.25" pilot mount steel disc. Front tires- 425/65R-22.5 load range L, Michelin XZY 3. Rear wheels- 22.5" X 8.25" pilot mount steel disc. Rear tires- Goodyear 12R22.5 G622 RSD load range H. All wheels shall be furnished with a gloss black powder coat finish.

#### **4.0 Cab and Fixtures**

- 4.1 Cab: Tilt type cab over engine design. Front wheel openings shall have rubber flares installed. Cab shall have a factory installed windshield guard.
- 4.2 Cab Fixtures: Driver's seat shall be air suspended. All seating positions shall be equipped with a high visibility seat belt. Cab shall be equipped with an automotive type integrated air conditioner/heater/defroster with variable speed fan, and an AM/FM radio.
- 4.3 Instruments: Cab shall include instrumentation for driver monitoring of coolant temperature, engine oil pressure, air pressure, fuel level (pressure), battery voltage, vehicle speed (MPH), engine speed (RPM), transmission oil temperature, alternator output (amps), miles traveled, and engine hours. Warning lights shall be provided for low air pressure, low engine oil pressure, high coolant temperature, differential lock, and parking brake application.
- 4.4 Backup Alarm: Vehicle shall have an electronic backup alarm device installed. Alarm must meet OSHA requirements.
- 4.5 Mirrors: Power remote control, heated, west coast style with adjustable convex lower section, with an additional 8 inch convex mirror mounted below main mirror.
- 4.6 Horns: Dual electric horns. Single air horn mounted on cab bottom.

- 4.7 Fuel Tank: Diesel gallon equivalent (DGE) of ninety (90) gallons. (see section 11.0)
- 4.8 Paint: Frame shall be gloss black. Cab shall be finished with blue DuPont Imron Elite #44426. Bottom of cab shall be finished and undercoated.
- 4.9 Other Equipment: Vehicle shall retain all standard equipment unless specified or replaced by optional equipment.

#### **5.0 Power Take-Off**

- 5.1 Cab & chassis shall be designed to accept front mounting of a crankshaft driven hydraulic pump. Design shall allow PTO operation when cab is in a tilted position.

#### **6.0 Body Construction**

- 6.1 Payload Capacity: Net usable capacity shall be not less than 40 cubic yards.
- 6.2 Floor: Body floor shall be constructed of 3/16" abrasion resisting steel plate having a yield strength of not less than 100,000 PSI. Hopper floor shall be constructed of 1/4" abrasion resisting steel plate having a yield strength of not less than 155,000 PSI. The rear body floor shall be lower by four (4) inches to maintain a 100 gallon sump for liquid containment and to aid in load retention. Rear portion of body floor shall be curved similar to roof and sidewalls.
- 6.3 Body Sidewalls: Body sides shall be 3/16" abrasion resisting steel plate having a yield strength of not less than 100,000 PSI. Body shall have curved sidewalls to provide additional strength without additional exterior bracing.
- 6.4 Body Roof: Roof shall be curved and constructed of 10 gauge, abrasion resisting steel having a yield strength of not less than 100,000 PSI.
- 6.5 Tailgate: Tailgate shall be one piece, constructed of 10 gauge, not less than 100,000 PSI yield steel, hinged at top of body. Vertical and horizontal braces shall be 7 gauge, not less than 100,000 PSI yield steel. Raising, lowering, and latching of tailgate shall be done hydraulically. Tailgate opening shall include a rubber seal to prevent liquid seepage. Tailgate hinge points shall be structurally connected to boxed rear body posts such that a continuous load path is established between the tailgate hinges and the main structural elements of the body. An in-cab console mounted light and audible alarm shall be provided to indicate when the tailgate is not fully closed and locked.
- 6.6 Access Opening: The body shall have an opening, with door large enough to provide entry into the body. The door shall not open into the path of the lift arms. An interlock shall be provided to instantly stop all hydraulic operations if the access door is opened. A stow-away step arrangement shall be provided for access to the door from the ground.
- 6.7 A liquid waste collection sump shall also be located in the forward end of the body. The sump shall have an easy access drain. The sump shall not drain directly onto any components of the truck, such as the battery box, air dryer, etc. Drain shall be constructed in such a way not to be hit by arm at any time.
- 6.8 Material retaining teeth or a step shall be located between the hopper and the body to prevent fall back of compacted material.



- 6.9 The volumetric size of the hopper shall be not less than ten cubic yards (10 yd<sup>3</sup>), and have a single cover that will completely close the hopper opening during compaction and travel. The hopper door shall be constructed of a minimum 10 gauge steel sheet with perimeter and center reinforcement. An interlock system shall be provided to prevent dumping a container when hopper door is closed. The hopper door shall slide open so as not to require any additional overhead clearance. The hopper opening shall be provided with wind-blown spillage protection.
- 6.10 Cab Protector: A steel cab protector shall be an integral part of the body. The cab protector shall prevent material from falling between cab and the body and divert liquid spillage from the roof of the truck cab and from entering the truck windows. Cab protector design must allow for tilting of the cab and be well clear of the arms, forks, and container during loading operations.

## **7.0 Packing Mechanism**

- 7.1 The packing mechanism shall be single blade design, hydraulically actuated, automatically sweeping the hopper and returning upon activation ("auto-pack"). Packing blade shall travel the full length of body (full ejection) for discharge of load. Interlock system shall prevent packing blade from traveling beyond the hopper unless tailgate is open.
- 7.2 Construction: All packing panel face material shall be at minimum 1/4" thick steel plate having a yield strength of not less than 155,000 PSI. Remainder of panel assembly shall be reinforced and constructed of materials suitable to withstand all compaction and ejection forces. Packing panel shall be supported by replaceable wear shoes riding on abrasion resistant steel tracks. Packing panel shoes shall be serviceable without removing the blade from the body.
- 7.3 Cycle Time: Maximum time for packing mechanism to clear hopper and return to forward position: 25 seconds.
- 7.4 Compaction: Indicate the average level of compaction attainable expressed in pounds per cubic yard. Minimum: 900 lbs. per yd<sup>3</sup>.

## **8.0 Lifting Mechanism**

- 8.1 The body shall be equipped with a loader assembly having a capacity of not less than 10,000 lbs. Loader shall be designed to lift and dump the contents of an industry standard eight cubic yard (8 yd<sup>3</sup>) detachable container. The lift arms shall clear truck cab doors at all times to prevent trapping driver in truck cab.
- 8.2 Lift Arms: The lift arms shall be attached to a tubular shaft mounted on the forward end of the body. The shaft shall rotate in replaceable bushings. Shaft bushings shall be provided with grease fittings. The lift arms shall be one piece, box type construction. Lift arms shall maintain a minimum clearance of 3 inches from truck cab throughout all phases of operation.
- 8.3 Fork Tines: A fork tine assembly shall be attached to the lifting arms by means of a tubular shaft. The shaft shall rotate in replaceable bushings provided with grease fittings. The fork tines shall have a retainer lug at each forward tip to prevent loss of a container during dump cycle. Fork tine operation shall be independent of the lift arms and shall be capable of achieving a position perpendicular to the street for travel. Fork tines shall be at least 1" thick, heat treated, structural quality alloy steel having a yield strength of not less than 100,000 PSI.
- 8.4 Interlock system shall be provided to prohibit dumping while packing blade is not in the forward position.

- 8.5 Arm Stops: Reinforced, bolt-on polyurethane arm stops shall be provided to cushion shock loads and prevent arm over-travel at the height of the loading sequence.
- 8.6 Fork Tube Cradle: The fork tine pivot tube shall rest in bumper mounted cradles or otherwise supported to protect the arm lift cylinders from undo stress during travel.
- 8.7 Cycle Time: Maximum time for lifting mechanism to raise, dump, and lower after container engagement: 20 seconds.

## 9.0 Hydraulic Controls

- 9.1 Controls: All body functions shall be controlled from inside the truck cab. Lift shall be operated by a single joystick type control. Push-pull cable controls will not be accepted. All body function controls shall be housed in a console or integrated into the truck cab. Push button controls with pilot lights shall be provided for automatic hopper sweep, eject, and retract functions of the packing mechanism. Controls shall be clearly marked as to their function. A warning light shall be provided to indicate when the tailgate is not down and latched and to indicate the status of the hopper door. All sensors required for proper body function shall be sealed proximity type. Control panel shall include an "auto-pack" switch; when activated, the compactor panel will complete one (1) packing cycle. An "Emergency STOP" button shall be included which will interrupt all hydraulic flow. Mechanical limit switches will not be accepted, including sensors for all safety warning circuits.
- 9.2 Hydraulic Pump: Hydraulic pump shall be primarily constructed of cast iron and/or steel.
- 9.3 Hydraulic Tank: Tank shall be of sufficient capacity to allow repeated cycling without overheating hydraulic oil. Tank shall be provided with an internally mounted suction screen with service access, return line filter with spin-on element, electrical by-pass indicator, shut-off ball valve, and screened fill port. All tank venting shall be filtered. Tank shall have a temperature gauge and an oil sight gauge with a minimum length of 5 inches.
- 9.4 Overspeed Protection: A mechanical or electronic method shall be incorporated to protect the hydraulic pump from damage due to an overspeed condition. Electronic solutions shall utilize the existing management system(s) of the truck. External electronic overspeed systems will not be accepted.
- 9.5 Valve Bank: No cable operated valves will be accepted. Hydraulic system shall have adjustable main relief valve. A pressure gauge measuring main system pressure shall be installed in close proximity to main relief adjustment.
- 9.6 Hydraulic Plumbing: Welded steel tubing shall be used wherever possible secured by cushioned clamps. All hydraulic hose shall meet or exceed SAE 100R2 Type AT requirements and shall be protected by protective nylon sock. No hose clamp connections will be accepted.

## 10.0 Miscellaneous

- 10.1 The frame rails of the truck shall not be drilled, cut, or altered in any way other than that approved by the chassis manufacturer.
- 10.2 Anti-sail mud flaps shall be installed behind rear wheels.

- 10.3 Lighting: All lighting required by the Federal Motor Vehicle Safety Standard #108, shall be installed. All rear facing stop, turn, or tail lamps shall be flush mounted, sealed LED units. All clearance lamps shall be grommet mounted sealed LED units. License plate lamp shall be a sealed LED unit. Backup lamps shall be sealed LED units. One (1) sealed LED lamp shall be used to illuminate the area in front of the ejector panel and controlled by a switch in truck cab.
- 10.4 Strobe Lights: Two (2) rear facing four inch (4") round, grommet mounted, amber strobe lights shall be mounted on the tailgate in a manner consistent with other rear facing lights. Strobe lights shall be self-contained LED units. Strobe box systems will not be accepted.
- 10.5 Wiring: Any circuit added to the truck requiring fuse protection shall be wired through the truck's fuse panel. All connections to a component shall be made with a molded plug or otherwise environmentally sealed connector. Individual wires shall be terminated with a terminal which is crimped, soldered, and covered with heat shrink tubing. Splices should be avoided. If a spliced wire cannot be avoided, the splice shall be soldered and covered with heat shrink tubing. Under no circumstances will the use of the following items or methods be accepted: crimp-type butt connectors, Scotchlok™s, solderless terminals, electrical tape, wire nuts, in-line fuses. All wiring shall be encased in protective flexible loom.
- 10.6 Painting/Coating: Entire body shall be thoroughly cleaned of dirt, oil, grease, and welding slag prior to painting or coating. No electrical wire, hydraulic hose, hose end fitting or other hydraulic fittings shall be painted or coated. Body to be metallic gray (DuPont Imron Elite 44400U). Bid package shall include thorough description of painting or coating process and any warranty provided.
- 10.7 Safety Equipment: A 10 lb. fully rechargeable, A-B-C fire extinguisher shall be mounted on the outside of the driver's side of packer body in a convenient location. A set of reflecting safety triangles shall be provided. Caution signage similar to illustration below shall be installed on tailgate:



- 10.8 Back-Up Vision System: A closed circuit rear vision system utilizing (2) two color cameras and a color multi-view LCD monitor positioned for convenient viewing by driver shall be installed. System shall automatically activate when truck is in reverse gear or may be manually activated. Cameras shall be protected by a stainless steel cage. One camera shall provide a view of the area immediately behind the center of the truck; the other shall provide a view of the area to the right rear of the truck. Vision system components shall be provided with a two (2) year warranty.
- 10.9 Finished Overall Height: Bid package must state the overall finished height of the unit. Bid packages failing to state finished height cannot be evaluated. Finished heights in excess of thirteen feet (13') may be rejected.
- 10.10 Cylinder Attachment: Hydraulic cylinder attachment pins shall be drilled and taped such that pulling equipment can be used to facilitate their removal. Pins retained by removable saddles are exempt from this requirement.

- 10.11 AutoLube System: A Lincoln Quicklube<sup>®</sup> On Board Grease System shall be installed to service all critical points of lubrication on the refuse body. All hoses and components shall be installed in a manner where there will be no inference with body or chassis components or operations.
- 10.12 Tool box: A weatherproof stainless steel tool box shall be installed under the right side of truck, mounted on truck frame. Tool box shall measure (36") inches long, (24") inches tall, and (24") inches wide, with a lockable fold down door.
- 10.13 Unit Graphics: Graphics designed and furnished by the LFUCG shall be installed on body.

### **11.0 Compressed Natural Gas**

- 11.1 Unit shall be provided with a compressed natural gas fuel system with a capacity of not less than the equivalent of ninety (90) diesel gallons (DGE). Fuel tank(s) shall be appropriately protected from damage caused by vehicle collision or other calamity. System shall include both a fast and slow fill port conveniently located on drivers side, a maintenance defueling port, and an interlock to prevent engine start unless fill hoses have been disconnected. Additional fast and slow fill fueling ports shall be provided in the front bumper. Pressure sending unit capable of driving the chassis OEM fuel gauge, shall be installed. Routing of fuel lines to fuel storage cylinders shall not be exposed on side of body, but must be routed through and protected by steel raceways built into the structure of the body.
- 11.2 Methane Detection: Each unit shall have a dual zone methane detection system installed with sensors located in the engine compartment and inside the truck cab.

### **12.0 NOTES**

#### **12.1 Testing and Inspection**

- 12.1.1 Each unit furnished shall be physically inspected by LFUCG personnel prior to acceptance. Appropriate measurements will be taken to insure compliance with specifications; unit(s) will be checked for completeness and functionality. All equipment, standard and specified, shall be installed and tested prior to delivery. Failure to meet any aspect of this specification for which an exception was not taken may be grounds for refusal of delivery and/or payment.

#### **12.2 Delivery**

- 12.2.1 Completed vehicle(s) shall be delivered and titled to LFUCG Division of Fleet Services facility located at 669 Byrd Thurman Drive, Lexington, Kentucky. Units shall be ready to work upon delivery.

#### **12.3 Literature**

- 12.3.1 Manufacturer's literature which shall include complete specifications and warranty shall be included with bid and becomes integral part of bid. All literature submitted shall be original printed material- no photocopied material. Any modifications which may be necessary to meet specifications must be listed in writing and submitted as integral part of bid.

#### **12.4 Method of Award**

12.4.1 A price contract shall be awarded to the responsive and responsible bidder who has demonstrated the capability to best comply with the requirements contained herein at the lowest unit price. The price contract price shall remain in effect for one (1) year after date of award with an option to re-new for one (1) additional year if agreed by both parties. Adequately documented price adjustments may be considered at time of renewal.

### 13.0 General

- 13.1 All equipment furnished shall be new and unused, current model production.
- 13.2 Training: Manufacturer's representative shall spend a minimum of two (2) days instructing LFUCG mechanics and operators in the maintenance and operation of the equipment provided. One (1) day for LFUCG mechanics and one (1) day for operators. Training shall include the cab & chassis, packer body and the CNG fuel system.
- 13.3 Successful bidder shall provide one (1) repair manual and one (1) parts manual with each group of units delivered. Electronic delivery or internet access to parts and service manuals is acceptable. Each unit shall be provided with a printed operator's manual. All manuals shall be original printed editions.
- 13.4 Warranty Repairs: (Applies to entire unit) If the vendor providing warranty service for any portion of unit(s) described herein whose repair facility is in excess of fifteen (15) miles from the LFUCG Fleet Services facility, at the vendor's option, warranty repairs may be performed at the vendor's location provided vendor picks up the vehicle within 24 hours of notification and returns vehicle upon completion of repairs. When vendor elects this option, all transportation expenses shall be included in the warranty coverage. In the interest of reduced downtime, the Division of Fleet Services may be designated a warranty repair shop. An in-house warranty agreement shall include reimbursement or credit for parts at 100% of their cost and labor at a rate of eighty three dollars (\$83.00) per hour. If the manufacturer publishes a time table for standard repair operations, one will be furnished and used to determine billable labor. If such a standard does not exist, vendor agrees to reimburse labor as recorded on LFUCG repair orders (actual time). Vendor shall furnish any forms the manufacturer may require for warranty return parts. LFUCG will invoice vendor for warranty repairs during the warranty period. Vendor shall agree to accept LFUCG repair orders as evidence of work performed.
- 13.5 References: If specific model bid is not currently in use by the LFUCG; upon request, bidder shall provide a list of at least five (5) users of the exact model bid.
- 13.6 Demonstrator: If specific model bid is not currently in use by the LFUCG, LFUCG reserves the right to request a demonstrator unit of the model proposed to be tested and inspected by LFUCG personnel for a minimum of five (5) business days. Demonstrator unit must be available within ten (10) business days of request.
- 13.7 Unit(s) shall retain all standard equipment as shown in published literature unless replaced by optional equipment specified herein. Units provided under this specification shall fully comply with any and all applicable OSHA, ANSI, and FMVSS standards as well as all applicable Federal, State, and local laws, regulations, ordinances, resolutions, and codes at time of delivery.
- 13.8 Tools: One each tool and/or software required for interfacing, diagnosing and/or programming engine, transmission, brakes, chassis components, body functions, and the CNG fuel system, shall be provided for each year model group of vehicles delivered with cost included in bid price.

#### 14.0 Addendums

- 14.1 **Exceptions** to any parts of these specifications shall be listed on the attached "Exception Page" with reference to the applicable paragraph number from this document.
- 14.2 **Warranty** page must be completed in its entirety in order to have your bid evaluated.
- 14.3 **Other Information** page must be completed in its entirety in order to have your bid evaluated.



### Warranty Description

Basic Vehicle Warranty (cab & chassis)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>1 year 100,000 miles</i>	<i>Peterbilt</i>	<input checked="" type="radio"/> Yes / No
Basic Warranty (body)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>See attached</i>	<i>from Body Builder</i>	Yes / No
Engine Warranty (paragraph 2.2)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>5 years 150,000</i>	<i>Cummins</i>	<input checked="" type="radio"/> Yes / No
Transmission Warranty (paragraph 2.11)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>5 years</i>	<i>Allison</i>	<input checked="" type="radio"/> Yes / No
Exterior Finish Warranty (body)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>See attached</i>		Yes / No
Hydraulic Pump Warranty (paragraph 9.2)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>See attached</i>		Yes / No
Hydraulic Cylinder Warranty (body)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>See attached</i>		Yes / No
Back-Up Vision System Warranty (paragraph 10.8)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?
	<i>See attached</i>		Yes / No



### Other Information

Packer Performance	Clear Hopper Cycle Time <small>(paragraph 7.3)</small>	Load Sequence Cycle Time <small>(paragraph 8.7)</small>	Compaction <small>(paragraph 7.4)</small>
	<i>see attached</i>		

Exterior Finish <small>(paragraph 10.6)</small>	Describe painting or coating system for the exterior surfaces of the body.
	<i>See attached</i>

Finished Overall Height <small>(paragraph 10.9)</small>	Measured height from the ground to the highest point of finished unit.	The LFUCG Division of Waste Management will have final approval of finished vehicle height. Stated heights in excess of thirteen feet (13') may be cause for rejection. Any unit whose measured height upon delivery exceeds that stated herein will not be accepted.
	<i>See attached</i>	

## Pricing Sheet for Front Loader CNG Refuse Vehicles

Item #1 – One (1) cab & chassis truck with front loading refuse collection body per the specifications

Price Each \$ 272,927.<sup>00</sup>

Item #2 – Two (2) cab & chassis trucks with front loading refuse collection body per the specifications

Price Each \$ 272,927.<sup>00</sup>

Item #3 – Three (3) cab & chassis trucks with front loading refuse collection body per the specifications

Price Each \$ 272,243.<sup>00</sup>

PHONE: 502-584-3524

FAX: 502-584-7067

**J. EDINGER & SON, INC.**  
1010 STORY AVENUE  
LOUISVILLE, KY 40206  
EST. 1867

February 18, 2014

Bill Hite  
Peterbilt of Louisville  
BHite@TLGtrucks.com

RE: Lexington-Fayette bid invitation 26-2014 Front Loader CNG refuse vehicle

Bill,

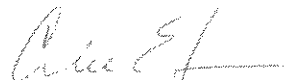
Our bid price to your dealership is \$135,215.00 net each F.O.B. Cynthiana for an E-Z Pack model CNG Hercules FL0010J40SE 40 cubic yard front loader with 90 gallon tanks integrated into the tailgate. Delivery after the end of May is approximately 75-90 days after receipt of chassis.

I have enclosed E-Z Pack's Checkoff sheet.

As a reminder our cost does not include the methane detector in paragraph 11.2.

Payment terms are net 7 days after Lexington has paid your dealership.

Thank you for the opportunity to quote. We hope that we may be favored by your order.

  
Charlie Edinger

A

4.7 Fuel Tank: Diesel gallon equivalent (DGE) of ninety (90) gallons. (see section 11.0)

4.8 Paint: Frame shall be gloss black. Cab shall be finished with blue DuPont Imron Elite #44426. Bottom of cab shall be finished and undercoated.

4.9 Other Equipment: Vehicle shall retain all standard equipment unless specified or replaced by optional equipment.

#### 5.0 Power Take-Off

5.1 Cab & chassis shall be designed to accept front mounting of a crankshaft driven hydraulic pump. Design shall allow PTO operation when cab is in a tilted position.

#### 6.0 Body Construction

✓ 6.1 Payload Capacity: Net usable capacity shall be not less than 40 cubic yards.

✓ 6.2 Floor: Body floor shall be constructed of 3/16" abrasion resisting steel plate having a yield strength of not less than 100,000 PSI. Hopper floor shall be constructed of 1/4" abrasion resisting steel plate having a yield strength of not less than 155,000 PSI. The rear body floor shall be lower by four (4) inches to maintain a 100 gallon sump for liquid containment and to aid in load retention. Rear portion of body floor shall be curved similar to roof and sidewalls.

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✓ 6.6 Access Opening: The body shall have an opening, with door large enough to provide entry into the body. The door shall not open into the path of the lift arms. An interlock shall be provided to instantly stop all hydraulic operations if the access door is opened. A stow-away step arrangement shall be provided for access to the door from the ground.

✓ 6.7 A liquid waste collection sump shall also be located in the forward end of the body. The sump shall have an easy access drain. The sump shall not drain directly onto any components of the truck, such as the battery box, air dryer, etc. Drain shall be constructed in such a way not to be hit by arm at any time.

✓ 6.8 Material retaining teeth or a step shall be located between the hopper and the body to prevent fall back of compacted material.

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✓ 7.3 Cycle Time: Maximum time for packing mechanism to clear hopper and return to forward position: 25 seconds.

✓ 7.4 Compaction: Indicate the average level of compaction attainable expressed in pounds per cubic yard. Minimum: 900 lbs. per yd<sup>3</sup>.

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- 8.6 Fork Tube Cradle: The fork tine pivot tube shall rest in bumper mounted cradles or otherwise supported to protect the arm lift cylinders from undo stress during travel. *NOT Required w/ S-Z Arm design*
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- ✓ 10.4 Strobe Lights: Two (2) rear facing four inch (4") round, grommet mounted, amber strobe lights shall be mounted on the tailgate in a manner consistent with other rear facing lights. Strobe lights shall be self-contained LED units. Strobe box systems will not be accepted.
- ✓ 10.5 Wiring: Any circuit added to the truck requiring fuse protection shall be wired through the truck's fuse panel. All connections to a component shall be made with a molded plug or otherwise environmentally sealed connector. Individual wires shall be terminated with a terminal which is crimped, soldered, and covered with heat shrink tubing. Splices should be avoided. If a spliced wire cannot be avoided, the splice shall be soldered and covered with heat shrink tubing. Under no circumstances will the use of the following items or methods be accepted: crimp-type butt connectors, Scotchlok™s, solderless terminals, electrical tape, wire nuts, in-line fuses. All wiring shall be encased in protective flexible loom.
- ✓ 10.6 Painting/Coating: Entire body shall be thoroughly cleaned of dirt, oil, grease, and welding slag prior to painting or coating. No electrical wire, hydraulic hose, hose end fitting or other hydraulic fittings shall be painted or coated. Body to be metallic gray (DuPont Imron Elite 44400U). Bid package shall include thorough description of painting or coating process and any warranty provided.
- ✓ 10.7 Safety Equipment: A 10 lb. fully rechargeable, A-B-C fire extinguisher shall be mounted on the outside of the driver's side of packer body in a convenient location. A set of reflecting safety triangles shall be provided. Caution signage similar to illustration below shall be installed on tailgate:



- ✓ 10.8 Back-Up Vision System: A closed circuit rear vision system utilizing (2) two color cameras and a color multi-view LCD monitor positioned for convenient viewing by driver shall be installed. System shall automatically activate when truck is in reverse gear or may be manually activated. Cameras shall be protected by a stainless steel cage. One camera shall provide a view of the area immediately behind the center of the truck; the other shall provide a view of the area to the right rear of the truck. Vision system components shall be provided with a two (2) year warranty. *3rd eye camera system*
- ✓ 10.9 Finished Overall Height: Bid package must state the overall finished height of the unit. Bid packages failing to state finished height cannot be evaluated. Finished heights in excess of thirteen feet (13') may be rejected. *Overall height above chassis frame ARMS DOWN 10' 3 1/8" ARMS UP 11' 9 1/2"*
- ✓ 10.10 Cylinder Attachment: Hydraulic cylinder attachment pins shall be drilled and tapped such that pulling equipment can be used to facilitate their removal. Pins retained by removable saddles are exempt from this requirement. *Standard production ejector pins ARE drilled and tapped. 6 of 13 Other pins can be drilled and tapped if required*

- ✓ 10.11 AutoLube System: A Lincoln Quicklube On Board Grease System shall be installed to service all critical points of lubrication on the refuse body. All hoses and components shall be installed in a manner where there will be no inference with body or chassis components or operations.
- ✓ 10.12 Tool box: A weatherproof stainless steel tool box shall be installed under the right side of truck, mounted on truck frame. Tool box shall measure (36") inches long, (24") inches tall, and (24") inches wide, with a lockable fold down door.
- ✓ 10.13 Unit Graphics: Graphics designed and furnished by the LFUCG shall be installed on body.

#### 11.0 Compressed Natural Gas

- ✓ 11.1 Unit shall be provided with a compressed natural gas fuel system with a capacity of not less than the equivalent of ninety (90) diesel gallons (DGE). Fuel tank(s) shall be appropriately protected from damage caused by vehicle collision or other calamity. System shall include both a fast and slow fill port conveniently located on drivers side, a maintenance defueling port, and an interlock to prevent engine start unless fill hoses have been disconnected. Additional fast and slow fill fueling ports shall be provided in the front bumper. Pressure sending unit capable of driving the chassis OEM fuel gauge, shall be installed. Routing of fuel lines to fuel storage cylinders shall not be exposed on side of body, but must be routed through and protected by steel raceways built into the structure of the body.
- 11.2 Methane Detection: Each unit shall have a dual zone methane detection system installed with sensors located in the engine compartment and inside the truck cab. *By chassis dealer*

#### 12.0 NOTES

##### 12.1 Testing and Inspection

- ✓ 12.1.1 Each unit furnished shall be physically inspected by LFUCG personnel prior to acceptance. Appropriate measurements will be taken to insure compliance with specifications; unit(s) will be checked for completeness and functionality. All equipment, standard and specified, shall be installed and tested prior to delivery. Failure to meet any aspect of this specification for which an exception was not taken may be grounds for refusal of delivery and/or payment.

##### 12.2 Delivery

- ✓ 12.2.1 Completed vehicle(s) shall be delivered and titled to LFUCG Division of Fleet Services facility located at 669 Byrd Thurman Drive, Lexington, Kentucky. Units shall be ready to work upon delivery.

##### 12.3 Literature

- ✓ 12.3.1 Manufacturer's literature which shall include complete specifications and warranty shall be included with bid and becomes integral part of bid. All literature submitted shall be original printed material- no photocopied material. Any modifications which may be necessary to meet specifications must be listed in writing and submitted as integral part of bid.

##### 12.4 Method of Award



✓ 12.4.1 A price contract shall be awarded to the responsive and responsible bidder who has demonstrated the capability to best comply with the requirements contained herein at the lowest unit price. The price contract price shall remain in effect for one (1) year after date of award with an option to re-new for one (1) additional year if agreed by both parties. Adequately documented price adjustments may be considered at time of renewal.

### 13.0 General

✓ 13.1 All equipment furnished shall be new and unused, current model production.

✓ 13.2 Training: Manufacturer's representative shall spend a minimum of two (2) days instructing LFUCG mechanics and operators in the maintenance and operation of the equipment provided. One (1) day for LFUCG mechanics and one (1) day for operators. Training shall include the cab & chassis, packer body and the CNG fuel system.

✓ 13.3 Successful bidder shall provide one (1) repair manual and one (1) parts manual with each group of units delivered. Electronic delivery or internet access to parts and service manuals is acceptable. Each unit shall be provided with a printed operator's manual. All manuals shall be original printed editions.

✓ 13.4 Warranty Repairs: (Applies to entire unit) If the vendor providing warranty service for any portion of unit(s) described herein whose repair facility is in excess of fifteen (15) miles from the LFUCG Fleet Services facility, at the vendor's option, warranty repairs may be performed at the vendor's location provided vendor picks up the vehicle within 24 hours of notification and returns vehicle upon completion of repairs. When vendor elects this option, all transportation expenses shall be included in the warranty coverage. In the interest of reduced downtime, the Division of Fleet Services may be designated a warranty repair shop. An in-house warranty agreement shall include reimbursement or credit for parts at 100% of their cost and labor at a rate of eighty three dollars (\$83.00) per hour. If the manufacturer publishes a time table for standard repair operations, one will be furnished and used to determine billable labor. If such a standard does not exist, vendor agrees to reimburse labor as recorded on LFUCG repair orders (actual time). Vendor shall furnish any forms the manufacturer may require for warranty return parts. LFUCG will invoice vendor for warranty repairs during the warranty period. Vendor shall agree to accept LFUCG repair orders as evidence of work performed.

13.5 References: If specific model bid is not currently in use by the LFUCG; upon request, bidder shall provide a list of at least five (5) users of the exact model bid.

13.6 Demonstrator: If specific model bid is not currently in use by the LFUCG, LFUCG reserves the right to request a demonstrator unit of the model proposed to be tested and inspected by LFUCG personnel for a minimum of five (5) business days. Demonstrator unit must be available within ten (10) business days of request.

✓ 13.7 Unit(s) shall retain all standard equipment as shown in published literature unless replaced by optional equipment specified herein. Units provided under this specification shall fully comply with any and all applicable OSHA, ANSI, and FMVSS standards as well as all applicable Federal, State, and local laws, regulations, ordinances, resolutions, and codes at time of delivery.

13.8 Tools: One each tool and/or software required for interfacing, diagnosing and/or programming engine, transmission, brakes, chassis components, body functions, and the CNG fuel system, shall be provided for each year model group of vehicles delivered with cost included in bid price.

14.0 Addendums

- 14.1 Exceptions to any parts of these specifications shall be listed on the attached "Exception Page" with reference to the applicable paragraph number from this document.
- 14.2 Warranty page must be completed in its entirety in order to have your bid evaluated.
- 14.3 Other Information page must be completed in its entirety in order to have your bid evaluated.



### Warranty Description

Basic Vehicle Warranty (Cat 5, chassis)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Basic Warranty (body)	Length of Warranty Period (time, mileage, etc.)  12 months	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Engine Warranty (paragraph 2.2)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Transmission Warranty (paragraph 2.11)	Length of Warranty Period (time, mileage, etc.)	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Exterior Finish Warranty (body)	Length of Warranty Period (time, mileage, etc.)  12 months	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Hydraulic Pump Warranty (paragraph 2.2)	Length of Warranty Period (time, mileage, etc.)  36 months	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Hydraulic Cylinder Warranty (body)	Length of Warranty Period (time, mileage, etc.)  12 months and 36 months packing cylinder	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No
Back-Up Vision System Warranty (paragraph 10.2)	Length of Warranty Period (time, mileage, etc.)  2.4 months	Warranty Provided By:	Vendor agrees to warranty terms stated in paragraph 13.4?  Yes / No

### Other Information

Packer Performance	Clear Hopper Cycle Time <small>(paragraph 7.3)</small>	Load Sequence Cycle Time <small>(paragraph 8.2)</small>	Compaction <small>(paragraph 7.4)</small>
	<i>25 seconds</i>	<i>20 seconds</i>	<i>400 lb per yr</i>

Exterior Finish <small>(paragraph 10.5)</small>	Describe painting or coating system for the exterior surfaces of the body
	<i>please see Attached</i>

Finished Overall Height <small>(paragraph 10.6)</small>	Measured height from the ground to the highest point of finished unit.	The LFUCG Division of Waste Management will have final approval of finished vehicle height. Stated heights in excess of thirteen feet (13') may be cause for rejection. Any unit whose measured height upon delivery exceeds that stated herein will not be accepted.
	<i>See comment on 10.9</i>	

(B)

**PAINTING**

**COMPLY**

**YES**

**NO**

1) **The following process is required in order to obtain minimum characteristics of a long lasting durable paint system with excellent adhesion, color fastness, solid hiding, and abrasive resistance.**

\_\_\_\_\_

2) All components will be cleaned, deburred, weld spatter and slag removed, prior to assembly. Major assemblies such as packer blades, tailgates, arms and forks, cylinders, valves, etc., in order to promote consistent paint coverage and long term rust and corrosion prevention, shall be painted separately and assembled after finish coat has fully cured.

\_\_\_\_\_

a. The following multi-stage chemical treatment/  
high pressure wash is required:

i. All components must be high pressure washed (above 1500 PSI) with a heated solution process that will remove all oil and dirt residues, then phosphatized, rinsed and sealed with a non-chromated environmentally safe compound.

\_\_\_\_\_

ii. This process will first wash with dual purpose detergent/ iron phosphating compound to prepare for maximum paint performance.

\_\_\_\_\_

iii. A final rinse treatment must include passivating agents specifically formulated to enhance corrosion resistance and provide uniform surface conditioning that is highly receptive to paint adhesion.

\_\_\_\_\_

iv. Immediately following the final rinse, the product shall be moved into an environmentally controlled room and elevated to approx 200 degrees F in order to thoroughly dry all parts and components quickly, and to control humidity and timing, so that surfaces will remain in ultimate condition for applying coatings.

\_\_\_\_\_

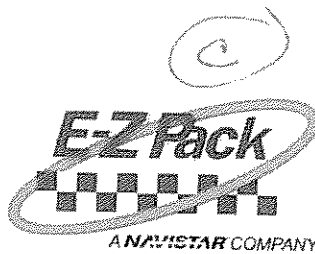
b. While maintaining elevated temperature, and controlled environment, in order to promote initial and inter-coat adhesion, thermoset powder primer and high gloss thermoset powder top coat are to be applied electro statically. After powder coat application, the temperature is to be further elevated to curing temperature of approximately 325 degrees Fahrenheit until fully cured.

\_\_\_\_\_

c. Color to be: S/vec

\_\_\_\_\_





E-Z Pack Manufacturing, 200 Ladish Road, Cynthiana, KY 41031

## *Manufacturer's Warranty*

TO ESTABLISH YOUR WARRANTY, PLEASE FILL OUT THE ATTACHED WARRANTY REGISTRATION CARD AND MAIL WITHIN 2 WEEKS OF DATE UNIT IS PLACED INTO SERVICE TO: E-Z PACK MANUFACTURING, 200 Ladish Road, CYNTHIANA, KY 41031

E-Z Pack Manufacturing, referred to herein as the Manufacturer, warrants each new product of it's own manufacture to be free from defects in material and workmanship, under normal use and service, to the original user only, for a period of 12 months body and 36 months packing cylinders and hydraulic pump from date of purchase, subject to conditions outlined below. Manufacturer's obligation under this warranty is limited to repair, or replacement with a similar part, any part of the product of our manufacture which is returned to us within 30 days after discovery of the defect, properly identified and transportation charges prepaid, and not more than 12 months after purchase by the original user, provided that in Manufacturer's judgment the part is defective in material or workmanship.

Manufacturer will furnish without charge FOB it's plant a similar part to replace any part of a product of it's manufacture which proves to be defective in material or workmanship while in normal use and service during this period.

The Manufacturer's warranty or obligation in connection with the sale of the product:

1. Shall be expressly limited to the repair or replacement of defective parts, as stated above, all other damage and claims, statutory or otherwise, being hereby expressly waived by the purchaser and covers only those labor charges specifically authorized by Manufacturer.
2. Shall not apply if the product has been operated beyond the Manufacturer's recommended capacity.
3. Shall not apply to any failure or damage incurred through neglect, lack of maintenance, misuse, accident, improper installation, reconstructing or modifying of assemblies or through any other cause beyond the control of the Manufacturer.
4. Does not cover products of other manufacturer beyond such warranty as is made by such manufacturer.

No claim under this warranty shall be valid unless such claim is submitted within twelve (12) months after date of sale or within thirty (30) days after discovery of the defect which is the basis for such claim, whichever event shall occur first.

THE FOREGOING IS MANUFACTURER'S SOLE WARRANTY AND MANUFACTURER MAKES NO OTHER WARRANTIES OF ANY KIND WHATSOEVER, EXPRESS, IMPLIED OR STATUTORY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WRITTEN OR ORAL ARE HEREBY DISCLAIMED BY THE MANUFACTURER.

IN NO EVENT SHALL E-Z PACK MANUFACTURING BE LIABLE FOR CONSEQUENTIAL DAMAGES, NOR SHALL E-Z PACK MANUFACTURING'S LIABILITY ON ANY CLAIM FOR ANY DIRECT INCIDENTAL OR SPECIAL DAMAGES ARISING OUT OF OR CONNECTED WITH THE SALES CONTRACT OR MANUFACTURE, SALE, DELIVERY, OR USE OF THE PRODUCTS EXCEED THE PURCHASE PRICE OF THE GOODS.

DISTRIBUTOR MUST OBTAIN FACTORY AUTHORIZATION  
BEFORE MAKING WARRANTY REPAIRS OR REPLACEMENT





(D)

# E-Z PACK MANUFACTURING

200 Ladish Road - Cynthiana, KY 41031  
 Phone: (859) 234-1100 Fax: (859) 235-2011

QUOTATION # 021-IKC

DATE: February 17, 2014

Attn:	CHARLIE EDINGER		
Company:	J. EDINGER & SON		
City:	LOUISVILLE	State	KY
Ref:	CITY OF LEXINGTON		

Qty:	2	Model	CNG HERCULES FLOO10J40SE	Capacity	40 CU. YD.	Unit Price
X		Including All Standard Equipment and				
X		10,000 LBS. LIFT ARM CAPACITY				
X		7 GA. BODY SIDES				
X		BODY ACCESS LADDER				
X		HOPPER SUMP WITH 4" DRAIN				
X		FRONT BODY SCREEN ENCLOSURE				
X		HOPPER FLOODLIGHT				
X		(2) PETERSON STROBES				
X		L.E.D. LIGHTS				
X		AUTO CYCLE RETRACT				
X		DUAL 3 <sup>RD</sup> EYE CAMERA SYSTEM WITH COLOR MONITOR & DUAL FLOODLIGHTS				
X		10# FIRE EXTINGUISHER AND MOUNTING BRACKET				
X		SAFETY TRIANGE KIT				
X		"CAUTION" DECAL ON TAILGATE				
X		SHARKS TEETH ON PACKER PANEL				
X		H.D. YELLOW ARM BUMPER PADS				
X		TOP DOOR/FORKS INTERLOCK				
X		10" CABSHIELD EXTENSION				
X		PRESSURE GAUGE				
X		TELESCOPING SIDE DOOR LADDER				
X		24"x24"x36" TOOL BOX				
X		FRONT BODY SPRING MOUNTS				
X		TAILGATE INTEGRATED CNG TANKS WITH 90 DGE & ADDITIONAL FILL PORT ON FRONT BUMPER				
X		LINCOLN ASL LUBE SYSTEM ON FRONTLOADER BODY ONLY				
X		NOTE: LFUCG BODY DECALS TO BE INSTALLED BY EDINGER				
X		Warranty-Body 12 MONTHS	X	Warranty-Cyl. 12 MONTHS		
X		Factory Mount	X	Powder Coat Paint SILVER	X	Warranty-Pack Cyls. 36 MONTHS

E

# **BID SPECIFICATIONS FOR AN E-Z PACK HERCULES CNG FRONT END LOADING COMPACTION BODY MODEL FLOO10J40SE**

CITY OF: LEXINGTON DATE: February 18, 2014

IN THE STATE OF: KENTUCKY

It is the intent of these specifications to describe the minimum requirements of a complete front end loading compaction body with lifting arms to service pick-up sleeve front loader containerized refuse equipment with compressed natural gas (CNG) fuel cylinders integrated into the body, capable of providing up to 90 diesel gallon equivalent (DGE), and provide off loading of collected waste by means of full ejection. Refer to page 11 for CNG fuel system requirements.

### **DUMP OFF LOADING BODIES WILL NOT BE CONSIDERED**

The omission of any standard feature description shall not alleviate the bidder from the responsibility of furnishing a complete body with all standard equipment of the manufacturer's latest improved model in current production as offered to commercial trade. The body shall conform in strength, quality of material and workmanship to that provided by the best manufacturing and engineering practices of the industry.

It is required that the units, as specified herein, shall be completely assembled and adjusted and that all equipment, including standard and optional equipment, be installed on a chassis furnished by others and the unit made ready for continuous operation.

As it is our desire to buy American, bidders using components or parts of other than American manufacture shall so state in their bid.

The bidder shall represent by his bid that all equipment to be furnished under this bid is new and unused.

All bidders shall attach a statement that the unit offered meets these specifications exactly, or list any exceptions fully and accurately.

The following bid specifications are the minimum acceptable specifications, based on economy and usability.

**EACH BIDDER IS REQUIRED TO COMPLETE EVERY SPACE IN THE BIDDERS RESPONSE COLUMN BY CHECK (X) UNDER YES OR NO TO INDICATE ITEM BEING BID IS EXACTLY AS SPECIFIED. ALL NO RESPONSES AND ALL DEVIATIONS WHATSOEVER MUST BE FULLY EXPLAINED ON A SEPARATE PAGE. FAILURE TO DO SO CAN BE USED AS BASIS FOR**

REJECTION OF BID. FAILURE TO DELIVER UNIT AS PROPOSED WILL RESULT IN REJECTION OF UNIT.

**SPECIFICATIONS AND STANDARDS**

When factory-printed literature, submitted to support the bid, does not indicate compliance with the specifications and your company can meet these specifications by modifications, you must so state in writing that you can meet the specifications and the necessary modifications be listed. Such writing must be submitted at bid opening time as part of your bid. Bidders must state make and model number of the unit they are offering. Bids submitted shall be on the latest current model of equipment meeting specifications.

**BODY CAPACITY**

**BIDDER'S RESPONSE COLUMN**

**YES                  NO**

The net capacity of the body including the usable body and hopper volume shall be 40 cubic yards minimum.

If less than minimum, state yardage. 40

✓                  \_\_\_\_\_

**BODY CONSTRUCTION**

- 1) For maximum life the body sides, floor and roof, shall be constructed of a minimum 100,000 PSI yield steel.
- 2) Body dimensions:  
     107-3/8" Height with Arms Down (Above chassis frame).  
     119-1/4" Height with Arms Up (Above chassis frame).  
     96" Width

✓                  \_\_\_\_\_  
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✓                  \_\_\_\_\_  
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✓                  \_\_\_\_\_  
 \_\_\_\_\_

Length: Body and Tailgate – 40 cu. yd. = 318"

✓                  \_\_\_\_\_

- 3) For strength with light weight, the side, roof and floor sheet rearward of the hopper area shall be radiused outward on a continuous arc from each horizontal corner mating. This will allow maximum strength without the added weight of vertical or horizontal bracing.
- 4) Body minimum acceptable material rearward of hopper area.
  - A. Floor 7 Ga. - 100,000 PSI yield steel.
  - B. Sides 7 Ga. - 100,000 PSI yield steel.
  - C. Roof 10 Ga. - 100,000 PSI yield steel.
- 5) Front roof reinforcement shall be 7 ga. 50,000 PSI yield, 6-5/8" x 2-3/16" wide formed channel, reinforced with 7 Ga. 50,000 PSI yield steel plate. Rear roof reinforcement shall be 3" x 2" x 3/16" wall structural tube interlaced with rear corner post.

✓                  \_\_\_\_\_  
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**BODY CONSTRUCTION (CONT'D.)**

**BIDDER'S RESPONSE COLUMN**

- 6) Supporting the radiused floor sheet shall be two (2) 7" high "Vee" flange formed long sills with 13" of width at the floor sheet and 3" of width at the truck frame. The sills shall be formed of 7 Ga. 100,000 PSI yield steel, fully gusseted internally. The front of the "Vee" long sills shall butt into a 6" x 4" x 1/4" wall structural tube crossmember.
- 7) The rear body floor shall be lower by 4" to maintain a 100 gallon sump for liquid containment and to aid in load retention.
- 8) The rear bolster shall be 7 Ga. 100,000 PSI yield formed channel 10-1/2" with 2-3/4" leg. The rear body corner post shall be 1/4" 100,000 PSI yield formed channel 7-1/2" x 8" wide.

YES	NO
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/	

**HOPPER CONSTRUCTION**

- 1) Hopper size: The hopper shall be a minimum of 10 cubic yards. The hopper opening (packer to roof) shall be 101" x 80-1/4" wide on 40 & 44 cu. yd. & 89" x 80-1/4" on 35 & 37 cu. yd.
- 2) The hopper long sills shall be 10" high x 3" wide, 7 Ga. 100,000 PSI yield steel interlaced with five (5) full hopper width structural tube crossmembers.
  - A. Crossmembers shall be 4"x 3" x 3/16" wall full width structural tube.
    - A1. The transition crossmember shall be 6"x 4"x 1/4" wall tube located at the rear of the hopper floor.
  - B. The crossmembers shall support and be welded securely to a one-piece hopper floor sheet of 1/4" plate 400 BHN, 155,000 PSI yield.
  - C. The crossmembers shall be supported by 7 Ga. thick 8" long sleeves at each point of contact to the long sill and interlaced with long sill.
- 3) Hopper lower side walls shall be flat, 7 Ga. 100,000 PSI yield steel reinforced with 10 ga. 100,000 PSI yield steel liner above the guide rail up 22" to the first horizontal brace. Hopper upper side walls shall be flat, 10 ga. 100,000 PSI yield steel.
- 4) Each hopper side shall be braced by a minimum of four (4) horizontal braces. The braces shall be 4" x 2" x 7 Ga. formed channel, 1/4" front post 2"x 5" wide and 1/4" 100,000 PSI yield 7-1/2"x 6" wide center post.
- 5) An access door, 21" wide x 39" high, to the hopper area shall be provided on the streetside of the body. This door must be sliding type. No part of door opening shall be to the rear of packer panel. An interlock shall be provided to instantly stop all hydraulic operation if the access door is opened.

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**TAILGATE**

**BIDDER'S RESPONSE COLUMN**

YES NO

- 1) The tailgate shall be a rounded type with a minimum 3.75 cu. yd on 35 & 40 cu. yd. body capacities and 5.75 cu. yd. on 37 & 44 cu. yd. body capacities. Construction shall be a minimum of 10 Ga. 100,000 PSI yield steel. The vertical and horizontal braces shall be 7 Ga. 100,000 PSI yield.
- 2) The tailgate shall be opened and unlocked by two (2) double acting hydraulic cylinders.
  - A. Tailgate cylinders shall be a minimum 3" I.D. 33" stroke with 1-3/4" induction hardened chrome rod, buffer seal, DU rod bearing and canned wiper.
  - B. The tailgate shall be secured by two (2) steel locks powered automatically by hydraulic cylinders. Locks shall capture latch pins (2 per side), pull and hold tailgate tight to rear of body. The tailgate shall open above horizontal position for clean ejection of load. Bodies that require additional cylinders to lock and unlock the tailgate or tailgates that must first slide vertically to unlock are not acceptable.
- 3) The tailgate shall be securely hinged, using 1" plates, to the reinforced rear edge of the roof, tied directly into the rear post, and rotate on cold rolled steel hinge pins with a minimum of 2-1/2" diameter. The tailgate hinge plates shall be four (4) 1/2" plates with 3-1/2" diameter 1/2" wall bosses.
- 4) Tailgate shall include a maintenance prop to prop tailgate open for servicing inside body.
- 5) Tailgate shall have a bulb type gasket seal to prevent leakage at the bottom and 41" up each side of tailgate. Seal must be installed on the tailgate.
- 6) An in-cab console mounted light and audible alarm will be provided to indicate the tailgate is not fully closed and locked.


**LIFT ARMS**

- 1) The lift arms shall be two (2) "U" shaped weldments, minimum 3-1/2" x 9-1/2" at rear, 8" at front bolted to a full body width torque tube of 4" OD 5/8" wall seamless steel tube located at the forward bottom of the hopper directly behind the truck cab.
- 2) The arms shall be constructed of, full length, 3/4" x 3" 80,000 psi yield outer and inner arm bars, with 1/4" 100,000 psi yield side plates, 1/2" 50,000 psi yield cylinder anchor point. The arm mounting to torque tube block shall be 1-1/2" thick. The fork assembly end shall have a bolt on bearing assembly with pressed-in 3" bronze bearing (split bearing block is not acceptable).




**LIFT ARMS (CONT'D)**

**BIDDER'S RESPONSE COLUMN**

**YES                  NO**

A. Fork rotation shall be by two (2) 4-1/2" I.D. double acting hydraulic cylinders 25" stroke, having a minimum 2" hardened chrome rod, buffer seal, DU rod bearing, and canned wiper. Fork rotation shall be 123 degrees.

✓

16) The design of the hopper, body and arms shall be such that the arms may be transported in the full raised position and the entire unit will not exceed an overall height of 13'6". (based upon 42" maximum chassis frame rail height)

✓

**BODY CAB SHIELD**

1) A full width all steel cab shield shall be provided to protect the cab from spillage and damage. Cab shield shall be fabricated from 12 Ga. 50,000 PSI yield steel. Cab shield shall extend rearward to the body front wall to provide protection over turbos, engine extension, transmission and mufflers/tailpipes.

✓

**PACKING MECHANISM**

1) The sweep of the hopper and load compaction shall be achieved by compactor panel traveling a minimum of 85-1/4".

✓

2) The compactor panel shall be engineered and designed with a 22-1/2" vertical section packing surface. (sloped packing section is not acceptable)

✓

3) The packer panel shall be constructed of (4) 3" x 3" x 1/4" vertical tubes, 1/4" steel 100,000 PSI yield lower 22-1/2" packing face, 7 Ga. 100,000 PSI yield sloped section, 10 gauge 100,000 PSI yield top vertical section reinforced by 1/4" plate full width top crossmember. The cylinder mounting, packing beam to be constructed of 1/4" plate 100,000 PSI yield, with 2" formed leg by 8" wide top brace, 1/2" plate 100,000 PSI yield, by 8" wide center brace and 1/4" plate 100,000 PSI yield, by 8" wide bottom brace.

✓

4) Compactor panel shall be powered by twin 5-1/2" dia. telescopic double acting hydraulic cylinders:

180" stroke, 3-stage - 40 cu. yd.

All cylinder stages shall be chrome plated. The cylinders shall have cold rolled steel pins of not less than 2" dia. stress proof steel on both ends. The pins shall be free floating design.

✓

A. Total compaction force generated by these cylinders shall be 118,792 pounds minimum.

✓

**PACKING MECHANISM (CONT'D)**

**BIDDER'S RESPONSE COLUMN**

YES NO

5) Compactor panel guide rails in the hopper area shall be two (2) 3/8" formed angle 50,000 PSI yield steel welded to 4" x 2"x 1/4" steel tube. Each tube shall be topped with a wear bar of 3/8" x 3" AR500 180,000 PSI yield steel. Top of formed angle shall be reinforced with 1/4" plate. The guide rails shall be 2-3/8" off the floor and extend the full length of the body.

✓

A. Compactor panel shall ride on two (2) 3/8" x 3" x 48" AR500 180,000 PSI yield steel shoes on the outside edge of packer panel.

✓

B. Compactor panel shall also ride on two (2) 3/8" x 6" x 18" AR500 180,000 PSI yield steel shoes in the center of packer panel. The center shoes shall ride on two (2) 3/8" x 6" wide AR500 wear plates welded to the full length of hopper floor.

✓

6) The hydraulic system shall incorporate a hopper sweep cycle. The compaction panel shall sweep the hopper area and return to rest at the forward end of the body. The complete sweep cycle shall be automatic after the push of a single start button. The control switches for the packing system must be proximity switches.

✓

7) The hydraulic system shall incorporate a dump limit control, when the packer is extended, to eliminate dumping behind the packer panel.

✓

8) The body shall be equipped with - SLIDING - hopper cover. The hopper cover shall move forward and rearward to enclose the roof of the hopper.

✓

A. Hopper cover shall be constructed of 12 gauge 50,000 PSI yield sheet reinforced by 2-1/2" x 2-1/2" x 3/16" tube front crossmember, 3" x 2" x 10 ga. second crossmember, 2" x 2" x 3/16" third and fourth crossmember. Must have drain hole to eliminate water and ice build up in hopper cover.

✓

B. Hopper cover shall be powered by a hydraulic cylinder having a minimum, 3" I.D., 89" stroke, with a 1-3/4" chrome-plated rod. Cylinders to have hardened chrome rod, buffer seal, DU rod bearing, and canned wiper.

✓

**OFF LOADING BODY**

1) The body design shall be full eject off loading by use of the 2nd and 3rd stages of the packing cylinder. The 2nd and 3rd stages to be interlocked using a gate position switch within the tailgate and operate only with the tailgate in the full raised position.

✓



**OPERATING CONTROLS**

**BIDDER'S RESPONSE COLUMN**

**YES                      NO**

- 1) The operating controls for lift arms, container forks, packing panel, tailgate locking and opening, hopper door, body ejection system for unloading or any optional devise shall be located in the truck cab easily accessible to the operator while seated in a driving position. The controls shall be of the self-centering type, returning to neutral when released.
- 2) Control Panel shall be housed in a weather resistant control box provided with marine grade rocker type switches. Control box shall contain a circuit card with Self Diagnostic LED lights and control relay switches. A Warning Buzzer and Indicator Light shall be provided to alert the operator of an unsafe travel condition.
  - A. Each control function shall be properly labeled.
  - B. Body wiring to be connected directly into the control panel with common type cable connections.
- 3) Indicator lights shall be on a separate dash mounted console within direct view of the operator to indicate "System On", "Pump On", "Hopper Door Closed", "Tailgate Open", "Tailgate Full Open", "Unsafe Travel", "Service Filter" and "Side Door Open".
- 4) All fork and arm movements shall be controlled by a single joy stick or optional two lever control operating an air control valve.
- 5) Tailgate lock and lifting controls shall be a lock type switch to reduce the chance of an accidental operation. The tailgate shall have hardened safety lock pins (one per side) that must be removed manually before tailgate can be opened.
- 6) Control panel shall include an "Auto-Pack Cycle" switch, which when activated, the compactor panel will complete one packing cycle. An Emergency "STOP" button shall be included which when activated will instantly render control panel inoperative.

/	
/	
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**HYDRAULIC SYSTEM**

- 1) The system shall be designed to operate at a maximum of 2500 PSI.
- 2) A factory sealed pressure relief valve shall be provided to protect the hydraulic system. All hydraulic lines and tubing shall be equipped with 37 degrees flare fittings of sufficient size for the oil flow. All high pressure hydraulic tubing shall be corrosion protected using Zinc Di-Chromate coating and clamped using bolt on molded clamps. All high pressure hoses shall have a protective nylon sock.

/	
/	

**HYDRAULIC SYSTEM (CONT'D)**

**BIDDER'S RESPONSE COLUMN**

	YES	NO
3) A driveline driven front engine mounted cast iron flow diverter type pump, Vane style cast iron pump, with overflow protection and capacity of not less than 42 GPM at 1200 RPM shall be provided. The suction line feeding the pump from the reservoir shall be no less than 2" diameter and shall mate to a 2" diameter pump suction inlet opening.	/	
4) The 47 gallon oil capacity reservoir shall be equipped with a suction screen mounted internally, 6 micron absolute return line replaceable element filter, with electrical by-pass indicator, shut-off ball valve, screened fill port, 10" long magnet mounted in lower corner of the tank, sloped top to shed water, return line defuser to eliminate aeration, channel over the suction screen to eliminate air ingestion, lower sump area, internal baffled and constructed of 1/4" plate.		
A. The return line filter shall have a Beta rating of 200=4.6 and a dirt holding capacity of 146 grams.	/	
B. The hydraulic reservoir shall have two (2) 3 micron filtered breather caps.	/	
C. The hydraulic reservoir shall have a temperature gauge and An oil sight gauge with a minimum length of 5".	/	
5) The hydraulic pump shall have a minimum 1-1/4" diameter pressure port and shall mate to a system pressure feed line with a minimum diameter of 1-1/4".	/	
6) The pressure line from the pump shall supply the body mounted five (5) spool main control valve. Control valve shall be air actuated by in cab controls.	/	
7) All hydraulic functions shall be controlled by a sectional air operated hydraulic valve of no more than five (5) spools. Control valve shall be mounted at front of body. (Chassis mounted control valves are not acceptable.)	/	
8) The control valve shall have a minimum of 1-1/2" return port equipped with a 2" diameter return line to the chassis mounted oil reservoir.	/	
9) The hydraulic system shall have a fast retract valve in the packer system.	/	

**LIGHTING**

1) All lighting shall comply with D.O.T. and F.M.V.S.S. 108 regulations.	/	
2) For long life and ease of service, all clearance, tail, stop and back-up lights shall be plug-in type, grommet mounted, shock resistant, waterproof, with Lexan lens.	/	



## WARRANTY

- 1) The body and hydraulics shall be covered by a minimum of one year warranty.

## 90 DGE CNG FUEL SYSTEM INTEGRATED INTO TAILGATE

### **90 Diesel Gallon Equivalent (DGE) Compressed Natural Gas Fuel System**

Body shall include minimum of 90 DGE fuel system integrated into the tailgate. The system shall be designed to meet FMVSS 304 and NGV2 specifications for use with heavy-duty class 8 vocational vehicles suitable for refuse application.

For protection purposes, fuel cylinders shall **not** protrude above normal roof line of the body. Body shall be no taller than body of comparable diesel fueled model in order to prevent mishaps from obstructions, such as overhead wires, tree limbs, or overhanging canopies. Fuel cells shall also be elevated at least 6 feet above ground in order to avoid traffic mishaps from vehicle collision.

### **Fuel cylinders mounted on roof of body or to chassis frame will not be acceptable.**

System shall include fuel management module (FMM) conveniently located with fast/time fill fuel port, interlocked to prevent engine start unless fill hoses have been disconnected. Must also include a defuel port for maintenance purposes. An additional fill port shall be provided on the front bumper. Routing of fuel lines to fuel storage cylinders shall not be exposed on side of body, but must be routed through and protected by steel raceways built into structure of the body. Tanks shall be elevated minimum of 6 ft. above ground level and protected from rear collision by horizontal barrier structure constructed from minimum 100,000 psi yield strength steel. CNG system to be designed and engineered from system manufacturer with a Certification of Compliance, signed by a professional engineer, enclosed with bid proposal.

## SILENCE OF SPECIFICATIONS

The apparent silence of this specification and any supplemental specification as to any details or the omission from it of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement.

The right is reserved to reject any and all bids or to accept that deemed most advantageous to this office for value received.

Bid prices shall include delivery of the completed unit to: Lexington Fleet Services

Date: 2/18/14

Name of Firm Bidding: J. Edingford Son INC

Address: 1010 Stony Ave

Louisville, Ky 40206

Signed By: [Signature]

Title: President



Peterbilt of Louisville P615  
4415 Hamburg Pike

Lexington Fayette County  
200 East Main Street

Jeffersonville, Indiana United States 47131  
Phone: (812) 288-8007  
Fax:  
Email:

Lexington, Kentucky United States 40507  
Phone: (502) 962-9527  
Fax:  
Contact Email:  
Prepared for:

### Vehicle Summary

Unit		Chassis	
Model:	Model 320	Fr Axle Load (lbs):	20000
Type:	Full Truck	Rr Axle Load (lbs)	46000
Description:	New Pres102056	G.C.W. (lbs):	66000
<b>Application</b>		Road Conditions:	
Intended Serv.:	Refuse/On-Highway	Class A (Highway)	100
Commodity:	Refuse, Scrap	Class B (Hwy/Mtn)	0
		Class C (Off-Hwy)	0
		Class D (Off-Road)	0
<b>Body</b>		Maximum Grade:	
Type:	Residential Front Loader		6
Length (ft):	24	Wheelbase (in):	210
Height (ft):	13.5	Fr Axle to BOC (in):	0.1
Max Laden Weight (lbs):	1000	Cab to Axle (in):	209.9
		Cab to EOF (in):	266.9
<b>Trailer</b>		<b>Special Req.</b>	
No. of Trailer Axles:	0	United States Registry	
Type:			
Length (ft):	0		
Height (ft):	0.0		
Kingpin Inset (in):	0		
Corner Radius (in):	0		
<b>Restrictions</b>			
Length (ft):	40		
Width (in):	102		
Height (ft):	13.5		

Approved by:

Date:

2-19-14

Note: All sales are F.O.B. designated plant of manufacture.

<b>PACCAR FINANCIAL</b>	Ask your dealer for a quote today, or visit our website @ <a href="http://www.paccarfinancial.com">www.paccarfinancial.com</a> .
	PACCAR Financial offers innovative finance, lease and insurance programs customized to meet your needs.

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Printed: 2/19/2014 9:55:22 AM  
 Effective Date: Jan 1, 2014  
 Prepared by: ID: bhite

**Complete**

Model Number: Model 320  
 Quote/DTPO/CO: Q45561030  
 Version Number: 28.10



**Peterbilt of Louisville P615**  
 4415 Hamburg Pike

**Lexington Fayette County**  
 200 East Main Street

**Jeffersonville, Indiana United States 47131**  
 Phone: (812) 288-8007  
 Fax:  
 Email:

**Lexington, Kentucky United States 40507**  
 Phone: (502) 962-9527  
 Fax:  
 Contact Email:  
 Prepared for:

Base Model	Description	Weight
	<b>Model 320</b>	15,784
	<b>Refuse, Scrap</b>	0
	<b>Refuse/On-Highway</b> Truck or tractor which hauls refuse, recycled material, etc. Includes roll-on/roll-off container movement, as well as hauling refuse from transfer stations to, but not into, landfills.	0
	<b>Residential Front Loader</b>	0
	<b>United States Registry</b>	0
<b>Frame &amp; Equipment</b>		
	<b>10-3/4in Steel Rails 306-342in</b> 10.75x3.5x.375 Dimension, 2,136,000 RBM	149
	<b>Full Steel Inner Liner</b>	653
	<b>FEPTO Provision 9in Bumper Extension</b> Includes 1350 Series Front Drive PTO attachment provision, radiator with PTO cut-out in grille, radiator protection sleeve, and bumper extension.	42
	<b>EOF Square without Xnbr</b> For use with body builder installed crossmember.	0
	<b>Omit Rear Mudflaps and Hangers</b>	0
	<b>(2) Solid Mount Cable Hooks</b>	0
<b>Front Axle &amp; Equipment</b>		
	<b>Dana Spicer D2000F 20,000 lb, 3.5in Drop</b> Factory front axle alignment to improve handling & reduce tire wear. Zerk fittings on tie rod ends, king pins, & draglink ball joints for ease of maintenance & help extend service life of components. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	0
	<b>Taper Leaf Springs, Shocks 23,000 lb</b> Standard with Heavy Resistance Shocks.	410
	<b>Power Steering Sheppard SD110 Dual</b> Glidekote splines on steering shaft extend service life of components.	40
	<b>PHP10 Iron LMS Hubs</b> 11-1/4" bolt circle. Includes a supplier extended coverage up to 3 years / 350,000 miles for bearings & seals.	0

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Description	Weight
<b>Dana Spicer Wide Track IPO Std, Front Axle</b> 71in KPI IPO 69in for E1202, E1322, E1462 front axles. For improved turning radius.	5
<b>Bendix Air Cam Front Drum Brakes 16.5x7</b> For use with 20,000 lbs to 22,000 lbs steer axles or front drive axles. Includes automatic slack adjusters & outboard mounted brake drums.	0

**Rear Axle & Equipment**

<b>Meritor RT46-160 46,000 lb</b> Interaxle diff lock air rocker occupies space of one gauge. Laser factory axle alignment to improve handling & reduce tire wear. Magnetic rear axle oil drain plug captures & holds any metal fragments in drive axle lube to extend service life. Parking brakes on all drive axles for optimal performance. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	-15
<b>PHP10 Iron LMS Hubs</b> 11-1/4" bolt circle. Includes a supplier extended coverage up to 3 years / 350,000 miles for bearings & seals.	60
<b>Long Stroke Parking Brakes, Drive Axle(s)</b>	0
<b>Refuse Service Brakes, Steer And Drive Axles</b> N/A with Air Disc Brakes	0
<b>Rear Brake Camshaft Reinforcement</b>	9
<b>SBM Valve</b> Full trucks require a spring brake modulation (SBM) system for emergency braking application. This system requires an SBM valve and a relay valve with spring brakes on the rear axles. The SBM valve allows the foot valve to operate the rear axle spring brakes if a failure exists in the rear air system.	0
<b>Anti-Lock Braking System (ABS) 4S4M</b> ABS-6. Includes air braking system.	0
<b>Synthetic Axle Lubricant All Axles</b> The conventional model product line includes Fuel Efficient Cognis EMGARD FE75W-90 which provides customers performance advantages over current synthetic lubricants with reduced gear wear and extended maintenance intervals, resulting in increased uptime. In addition, the lubricant provides improved fluid flow to protect gears in extreme cold conditions and withstand the stress from high temperatures, extending component life.	0
<b>Bendix Air Cam Rear Drum Brakes 16.5x8.6</b> Inc automatic slack adjusters & outboard mounted brake drums.	0
<b>Ratio 6.14 Rear Axle</b>	0
<b>Hendrickson RT463 46,000 lb, 54in Axle Spacing</b>	505
<b>Tracking Rods, Rubber Center Bearings</b> R(T/E)403-523	99



Engine & Equipment

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Description	Weight
<b>ISX12 G 330R@2100 GOV@2100 1250@1200</b>	<b>1,110</b>
Refuse Rating (2013 Emissions)	
N21320 N205 120..Standard Maximum Speed Limit [LSL]	
N21330 N207 0....Expiration Distance	
N21340 P112 120..Hard Maximum Speed Limit	
N21350 P001 60...Maximum Accelerator Pedal Vehicle Speed	
N21360 P110 0....Accelerator Lower Droop	
N21370 P059 60...Maximum Cruise Speed	
N21380 P111 0....Cruise Control Lower Droop	
N21400 N203 252..Reserve Speed Function Reset Distance	
N21410 N202 0....Maximum Cycle Distance	
N21420 N206 0....Maximum Active Distance	
N21430 N201 0....Reserve Speed Limit Offset	
N21440 P015 Yes..Engine Protection Shutdown	
N21450 P026 No...Gear Down Protection	
N21460 P046 1400.Max PTO Speed	
N21470 P062 No...Cruise Control Auto Resume	
N21480 P068 No...Auto Engine Brake in Cruise	
N21500 N209 0....Expiration Distance	
N21510 P520 Yes..Enable Idle Shutdown Park Brake Set	
N21520 P030 600..Timer Setting	
N21530 P233 Yes..Enable Impending Shutdown Warning	
N21540 P234 60...Timer For Impending Shutdown Warning	
N21550 P516 35...Engine Load Threshold	
N21570 P031 Yes..Idle Shutdown Manual Overrule	
N21590 P230 Yes..Enable Hot Ambient Automatic Overrule	
N21610 P172 40...Low Ambient Temperature Threshold	
N21620 P173 60...Intermediate Ambient Temperature Threshold	
N21630 P171 80...High Ambient Temperature Threshold	
<b>Engine Idle Shutdown Timer Enabled</b>	<b>0</b>
<b>Enable EIST Ambient Temp Overrule</b>	<b>0</b>
<b>Enable EIST in PTO Mode</b>	<b>0</b>
<b>Eff EIST NA Expiration Miles</b>	<b>0</b>
<b>Effective VSL Setting NA</b>	<b>0</b>
<b>CARB Engine Idling Compliance DECLINED By Dealer/Customer</b>	<b>0</b>
<b>200 Amp Alternator, Standard Brush</b>	<b>0</b>
12 Volt system with circuit protection for reliable easy maintenance & service. Weather pack silicone sealed electrical chassis connectors enhance value, durability, reliability. Wires numbered every 4" or less.	
<b>Immersion Type Pre-Heater 110-120V</b>	<b>2</b>
Phillips	
<b>PACCAR 12V Starter</b>	<b>0</b>
<b>3 Optima DT31T Batteries 2700 CCA Threaded</b>	<b>7</b>

stud type terminal. AGM (Absorbent Glass material). Stranded copper battery cables are double aught (00) or larger to reduce resistance.

<b>Big Switch Battery Disconnect</b> Mounted on battery box	4
<b>Battery Jumper Terminals Mtd In Front</b> Of Battery Box	4
<b>2-Speed Fan Clutch For Frequent Start/Stops</b>	0

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Description	Weight
<b>18.7 CFM Air Compressor</b> Furnished on engine. Teflon lined stainless steel braided compressor discharge line.	0
<b>Spin-On Fuel Filter, Natural Gas</b> Supplied with engine	0
<b>Engine Protection Shutdown</b> Includes oil pressure, oil temperature, coolant temperature, and intake manifold temperature.	0
<b>High Efficiency Cooling System</b> Silicone radiator & heater hoses enhance value, durability, & reliability. Constant tension band clamps reduce leaks. ClimaTech extended life coolant extends maintenance intervals which reduces maintenance costs. Anti-freeze effective to -30 degrees F helps protect the engine. Low coolant level sensor warns of low coolant condition to prevent engine damage.	0
<b>Wing Nut Style Mounted Grille</b>	0
<b>16in FVG Air Cleaner Horizontal Mounted</b> (FVG16-0619) Dual Element/Dual Stage. Molded rubber air intake connections with lined stainless steel clamps seal to prevent contaminants in air intake.	0
<b>Exhaust Single Vertical LH (ISL-G or ISX12G Only)</b> Includes Single Exhaust Guard Stainless Steel	0
<b>Single 36in Standpipe</b>	0

**Transmission & Equipment**

<b>Allison 4500 RDS-P Transmission, Gen 5</b> Rugged Duty Series. Includes Rear Transmission Support, TranSynd Transmission Fluid, and Water Oil Heat Exchange. Also includes features that monitor the transmission fluid, filter and clutch condition. Will display percent life remaining for the transmission fluid, filter and clutches on the shift selector. This information may be displayed using the Mode and Up and Down buttons. A wrench icon will also be included to indicate when the transmission fluid, filter or clutches need servicing. (Suited for vehicles operating on/off highway and/or requiring PTO operation)	0
<b>1760 HD Driveline, Single Midship Bearing</b>	80
<b>(1) Dash Mounted Single Acting Air PTO Control</b> Standard with PTO engaged indicator light on Class 8 units. Occupies the space of one gauge.	0
<b>Console Mounted Push Button Shifter</b>	0

## Allison transmissions

**Allison 6-Speed Configuration, Wide Ratio Gears** 0

Allison 4500 Trans only

**Allison Output Function `S` Neutral Indicator** 0

For PTO. Required on Refuse Packer Applications.

**Allison Load Based Shift Schedule (LBSS)** 0**Air & Trailer Equipment**

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Description	Weight
<b>Bendix AD-IS EP Air Dryer with Heater</b> Extended Purge (for use with higher air consumption applications). An integrated system air dryer that incorporates the functions of the air dryer, purge reservoir (which increases the drying capacity), wet air tank, pressure relief valve, single check valves, and pressure protection valve for air susp and other air accessories. Includes easy-to-service spin-on desiccant cartridge.	0
<b>Nylon Chassis Hose</b>	0
<b>Central Location for Air Tank Drain Valves</b> with Wire Braid Hose to Air Tanks. (Not available with optional drain valves.)	8
<b>Steel Painted Air Tanks</b> All air tanks are steel with painted finish except when Code 4543330 Polish Aluminum Air Tanks is also selected (then exposed air tanks outside the frame rails will be polished aluminum). Peterbilt will determine the optimal size and location of required air tanks. Narratives requesting a specific air tank size or location will not be accepted for factory installation. See ECAT to determine number or location of air tanks installed.	0

**Tires & Wheels**

<b>FF: MN 20ply 425/65R22.5 XZY3</b>	92
<b>RR: GY 16ply 12R22.5 G182 RSD</b>	288
<b>Code-rear Tire Qty 08</b>	0
<b>FF: Accur 29807 Plt 22.5x12.25 Stl Whl</b> Pilot Mount. 11,500 lb. load rating per wheel.	44
<b>RR: Accur 29300 Plt 22.5x9.00 Stl Whl</b> Pilot Mount, Five Hand Holes. 9,000 lb. load rating per wheel.	328
<b>Code-rear Rim Qty 08</b>	0
<b>Accuride Powder Coat Black ipo Standard</b> Requires steel wheels.	0

**Fuel Tanks**

<b>No Fuel Tank/Fuel System Provided, CNG Only</b>	0
<b>Location LH BOC 000 Gal</b>	0

**Battery Box & Bumper**

<b>Aluminum Battery Box RH Fender Mounted</b>	0
<b>Steel Bumper Channel Painted</b>	0
Includes two front tow eyes with pins.	

**Cab & Equipment**

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Description	Weight
<b>53in LCF ProBilt Cab LH Drive</b>	0
Includes steel frames with alum and fiberglass panels, all alum doors, dual door stops, door locks, tinted safety glass thru-out, cab and door mounted entry grab handles, 65 degree hydraulic tilt, stainless steel grille, dual rear cab fenders, service module BOC (cab tilt pump, oil fill and dipstick, coolant fill and check, fluid fill and dipstick for auto trans), door mounted armrests, power windows, full insulation, rubber floor mats, ergonomic center control console, removable instrument panel, Driver Information Display, LED backlit gauges, pull down windshield sunshade, 16in steering wheel with integrated horn button, tilt/telescopic adjustable column, over-door storage, driver and passenger side cup holders, USB charging port and 12VDC charging outlet, header includes HVAC controls and 12V power connection behind header cover, rear cab corner windows, 18in bolt-on step each side, self-canceling turn signals and front directional and side mounted turn signals	
<b>4.5 Inch Rubber Flares on Cab and Wheel Well Fenders</b>	0
<b>Peterbilt Driver Seat</b>	0
<b>Peterbilt Passenger Seat</b>	0
<b>Seat Belt Color Orange IPO Standard Black</b>	0
<b>Air Ride Driver</b>	15
<b>Non-Air Ride Driver</b>	0
<b>Low Back Driver</b>	0
<b>Vinyl Driver</b>	0
<b>Non-Air Ride Passenger</b>	0
<b>Low Back Passenger</b>	0
<b>Vinyl Passenger</b>	0
<b>Gray Interior Color</b>	0
Includes ABS gray headliner & rear cab panel, gray vinyl engine tunnel	

cover.	
<b>Adjustable Steering Column - Tilt/Telescope</b>	0
<b>Steering Wheel with Peterbilt Logo</b>	0
Steering Wheel with embossed Peterbilt logo over horn button.	
<b>Rear Window Back of Cab Standard Tint</b>	0
18.5in X 54in	
<b>Two Piece Flat Windshield</b>	0
<b>Combo Fresh Air Heater/Air Conditioner</b>	4
With radiator mounted condenser, dedicated side window defrosters, Bi-Level Heater/Defroster Controls, 54,500 BTU/HR, and silicone heater hoses.	
<b>Black LH/RH Tri-plane Mirrors, Heated,</b>	0
Motorized, Mounted to Doors	
<b>(1) Air Horn 15in Painted</b>	0
Mounted under cab.	
<b>ConcertClass Without CD, Includes BT Phone and</b>	10
Audio, AM/FM, WB, USB and MP3.	

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Description	Weight
<b>Midlevel Speaker Package For Cab</b> (4) Speakers	6
<b>Peterbilt Electric Windshield Wipers</b> with Intermittent Feature	0
<b>Front Cab Guard/Ladder, Painted Black</b>	15
<b>Triangle Reflector Kit Shipped Loose</b>	13
<b>Backup Alarm (107dB)</b>	3
<b>Axle Temp Gauges, Tandem Drive</b> Located in Driver Information Display	0
<b>Oil Temp Gauge, Engine</b> Located in Driver Information Display	0
<b>Main Transmission Oil Temperature Gauge</b> Located in Driver Information Display	0
<b>Air Application Gauge</b> Located in Driver Information Display	0
<b>Air Restriction Indicator</b> Mounted on air cleaner or intake piping.	0
<b>Warning Light Battery Disconnect, Switch Engaged</b> (Marker light) external mounted.	0
<b>Up To (4) Additional Electric Switches</b> Without wiring	1
<b>Headlights Dual Rectangular Halogen</b>	0
<b>(5) LED Clearance With (2) LED Marker Lights</b> Includes (5) lights mounted on roof of cab and (1) cab side marker light	0

mounted in front of each cab door.

**None Furnished Stop/Tail/Backup Lights**

Available with Full Truck only. Not available with Tractor.

0

**Paint**

**(1) Color Axalta Two Stage - Cab/Hood**

0

Base Coat/Clear Coat

N85020 A - 44426EB BRIGHT BLUE

N85500 CAB ROOF 44426EB BRIGHT BLUE

N85200 FRAME N0001EA BLACK

N85700 BUMPER N0001EA BLACK

**Axalta Two Stage Effect - Metallic/Pearl**

0

Cab/Hood & Sleeper Only

**Options Not Subject To Discount**

**Cummins ISX12 G Protection Plan 1 (5/150)**

0

Five Years/150,000 Miles/241,401 Kilometers.

**Miscellaneous**

**Presentation Created Using Featured Spec**

0

for model

Total Weight

19764

**Prices and Specifications Subject to Change Without Notice.**

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

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**Complete**

Model Number: Model 320

Effective Date: Jan 1, 2014

Quote/DTPO/CO: Q45561030

Prepared by: ID: bhite

Version Number: 28.10