

Minimum Specifications for

Furnishing One (New) Front Loading Refuse Compactor Truck

GENERAL CONDITIONS AND INSTRUCTIONS

The Lincoln Parish Police Jury is seeking bids for one (1) Front Loading Refuse Compactor Truck. Bids will be received until 9:00 a.m., Thursday, April 6, 2023, in the regular meeting room in the Courthouse, and then at said office publicly opened and read aloud.

Each bid submitted must be in a sealed envelope addressed to the Lincoln Parish Police Jury, PO Box 979, Ruston LA 71273-0979. Each sealed envelope containing a bid <u>must be plainly marked on the outside as</u> to what the Bid is for (Compactor Truck). All Bids must be made on the required Bid Form. All Bid Forms must be filled out in ink, or typewritten, and signed in ink. Each change or correction must be clearly marked and initialed by Bidder's authorized representative. Failure to comply with these requirements may cause your Bid to be disqualified. Late bids and unsigned bids will not be accepted. Bids can also be submitted electronically at www.centralauctionhouse.com

Bidder represents and warrants by submission of a Bid that all items bid are new and unused and are current production. Features which are regularly furnished as standard equipment with these units shall be furnished by the successful bidder. It is required that this unit, as specified herein, shall be completely assembled and ready for operation.

In these specifications, there may be specified certain equipment and materials most suitable for the service anticipated. This is not done to eliminate other items as good and sufficient. The Bidder may prepare his bid on the basis of other makes of equipment and materials provided that the proposed substitution is superior or equal in construction and/or efficiency, meets the technical specifications and that high quality has been demonstrated by several years of service in similar conditions. Where these specifications are definite specifications, it shall be understood that this is for the purpose of conveying the quality standards of products desired including the general style, type, character, and quality.

The Police Jury may make any such investigations as deemed necessary to determine the ability of Bidders to perform the work, and Bidders shall furnish to the Police Jury all such information and data for this purpose as may be requested. The Police Jury reserves the right to reject any Bid if the evidence submitted by, or the investigation of, such Bidder fails to satisfy the Police Jury that such Bidder is properly qualified to carry out the obligations of this project and to complete the work contemplated herein.

A conditional or qualified Bid will not be accepted. Each bidder is responsible for inspecting and submitting all documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to his Bid.

The Lincoln Parish Police Jury reserves the right to reject any or all bids for just cause.

DELIVERY

Bidders will specify delivery date of the Compactor Truck, F.O.B. at the Lincoln Parish Transfer Station. The exact delivery date must be included on the bid document, the earlier delivery date will be an important consideration in determining the successful bidder.

BODY DIMENSIONS YES NO Body length including 52" cab shield is 352" Overall length with arms down and forks in full tuck position is 415" Overall length with arms down and forks in horizontal position is 453" Body width, outside shall be no more than 96" Body width, inside should be a maximum of 88" Body height, inside should be a minimum of 87-1/2" Body height above chassis rail, arms down is 107 Body height above chassis rail, arms up with full tuck forms is 120" Height above frame with tailgate raised including rear underride guard is 199" Hopper width (bottom), above guide tracks must be no less than 80" Hopper width (top) must be a minimum of 81" Hopper length at roof must be a minimum of 94" Hopper depth must be a minimum of 91" **BODY CONSTRUCTION** YES NO Packer body will have flat hoper and body floor with curved roof and body sides and of overhead loading design. Hopper will be designed to properly handle containers from 1-10 cubic yard capacity. Roof Minimum 8 gauge high tensile steel sheet 80,000 PSI minimum yield Body sides - Minimum 8 gauge high tensile steel sheet, 80,000 PSI minimum yield Body Floor - Minimum 1/4" AR400, 184,000 PSI minimum yield Cross members shall be 7 gauge 80,000 PSI minimum yield, 6"x3" formed channel. Members shall be spaced on approximately 12-1/2" centers in low compaction zone and 17-1/4" centers in high compaction zone. Cross members shall be full width, single piece construction. Cross members shall interlace with body longitudinals to fully support the floor Body longitudinals (long members) - shall be minimum of 7 gauge 80,000 PSI minimum yield formed box section. Upper longitudinal corner brace shall be 11 gauge 80,000 PSI minimum yield 4"x6" deep formed channel fully welded to the roof and body side sheets Lower longitudinal corner brace shall be 11 gauge 80,000 PSI minimum yield 4"x16" deep formed channel fully welded to the body side sheets Forward vertical body side boister shall be 3/16", 80,000 PSI minimum yield 6.72" x 7" deep formed channel conforming to the curved body sides and fully welded to the body sides. Rear vertical body side boister shall be 3/16", 80,000 PSI minimum yield 6.7" x 5" deep formed channel conforming to the curved body sides and fully welded to the body sides. Side access door - The side access door shall be located at the front street

side of the body with minimum opening of 27" x 29-1/2" (796.5 in). Steps and grab handles shall be provided for ease of entry. An electrical interlock shall be

Roof Access Ladder - A ladder shall be provided on the rear of the tailgate for

provided to disable the pump whenever the side door is open.

access to the body roof. Steps must be of "non-slip" material.

Front Head Closure - A 51" x 79" front head closure screen made of expanded metal shall be provided to present loose debris from entering the area in front of the packer and to prevent unauthorized entry by non-service personnel.

HOPPER

Hopper Floor - minimum 1/4" AR400, 184,000 PSI minimum yield Lower hopper sides - minimum 3/16" AR400 abrasion resistant steel plate, 184,000 PSI minimum yield.

Upper hopper sides - minimum 8 gauge high tensile steel sheet, 80,000 PSI minimum yield.

The bottom side brace shall be 7 gauge formed 6" x 2" channel, 50,000 PSI minimum yield.

Lower and Intermediate side bracing - minimum of five (5) 11 gauge 80,000 PSI minimum yield 7-1/4" x 1-1/2" formed angles of lap construction.

All external welds of hopper side bracing shall be continuous full seam.

A hydraulically actuated sliding top door will be provided to cover the hopper for traveling to the discharge site. The top door cylinder shall be double acting and have a minimum 2-1/2" bore x 90" stroke with a 1-1/2" diameter chrome plated rod. An in-cab mounted light will be provided to indicate when the top door is not fully open.

Hopper Sump - A 32 gallon hopper liquid sump with a $14" \times 5.5"$ door each side of the hopper will be provided for ease of clean out.

PACKING MECHANISM

A hydraulically actuated packer traversing a minimum of 83-1/2", from the front head, shall clear the hopper of material with a maximum cycle time of twenty-six (26) seconds.

The lower packing panel face will be a minimum 3/16" AR400 184,000 PSI minimum yield, abrasion resistant steel plate. The upper vertical face will be a minimum 7 gauge, 80,000 PSI minimum yield. The packer will be reinforced with a combination of structural members for maximum rigidity.

The hopper zone packer guide rails (2) in the side of the body shall be comprised of 3/8" 50,000 PSI minimum yield structural angle welded to $3-1/2 \times 1/4$ " ASTM A500 Grade B structural tubing on each side of body. The structural tubing shall be a continuous piece the full interior length of the hopper, 128" long.

Abrasion resistant wear bars, 145,000 PSI minimum yield x400 BHN, shall be clad to the hopper zone guide rails, each side, in the following manner: The ejection zone guide rails shall be 3/8" 50,000 PSI minimum yield structural angle welded to the full length 3-1/2" x 3-1/2" x 3/16" ASTM A500 Grade B structural tube. A 1/4" x 2-1/2" H.R.S. wear bar shall be welded to the vertical and undersides surface of the guide rail assembly. The top wear surface shall be clad with 1/4" x 3-1/2 HRS steel.

The packer panel shall be guided on each side of the body with 3" x 6" x 1/4"

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ASTM A500 Grade B structural tubing clad with 145,000 PSI minimum yield abrasion resistant wear bars in the following manner:

Two (2) vertical packer panel wear bars, located below the structural tubing, shall be 1/4" thick x 2" wide x 18" long.

The packer panel shall be provided with bolt-on lugs for each of the two (2) packing cylinders. The cylinders shall be attached to the packer panel lugs via two inch (2") diameter pins. Cylinder removal may be accomplished by either pulling the pins or by removing the entire bolt-on lugs. The lugs shall be attached to the packing panel with six (6) 3/4" diameter bolts for each lug assembly.

The body front head shall also be provided with bolt-on lugs for packing cylinders. The lugs shall retain cylinder pins with four (4) 3/4" diameter bolts. The packer will be hydraulically actuated by two (2) double acting telescopic cylinders with 5-1/2" bore.

Packer cylinders shall have spherical bearings on both ends.

Packing force - minimum cylinder compaction force shall be 105,000 pounds.

BUSTILE TAILGATE

Tailgate must be one piece, top hinged and shall open approximately 30 deg above horizontal.

Tailgate back sheets shall be constructed of a minimum 10 gauge, 80,000 PSI minimum yield steel.

Tailgate side sheets shall be constructed of a minimum 11 gauge, 80,000 PSI minimum yield steel.

The tailgate shall be reinforced by a minimum 1/4" 80,000 PSI minimum yield horizontal boxed braces.

The tailgate will be secured to the body by two (2) sets of hinges with 2" hinge pins at the roof line.

A heavy duty rear door positive seal of rubberized gasket material will be installed the full length of the bottom and 68" up the sides of the tailgate to prevent leakage.

The tailgate shall be secured in the closed position by means of a fully automatic latching mechanism actuated by a separate control in the cab. The tailgate shall be raised and lowered hydraulically actuated by two (2) double acting cylinders with a minimum bore of 3" x 28-1/4" stroke with 1-1/2" diameter hardened chrome plated rod. Cylinder design shall also include an orifice fitting in the base port which will prevent the rapid descent of the tailgate in the event of a hydraulic failure.

The tailgate shall be locked by two (2) lock cylinders with a minimum bore of 3° x 3-5/8" stroke with 1-1/2" diamter hardened chrome plated rod. Lock and tailgate raise cylinders shall be actuated by separate controls in the cab. An in-cab light and audible alarm will be provided to indicate that the tailgate is not fully closed. A mechanical flag device must be included to indicate that the tailgate is locked.

YES NO

LIFT ARMS YES NO The lift arms will be 3" x 8" box reinforced type construction rated and capable of lifting 8,000 pound gross container and payload. Lift arms shall be capable of lifting loaded containers from a truck dock with 10' maximum pocket height. Lift arm cycle time will be approximately 18-20 seconds. Pick-up, dump and disengagement will be done without the need for assistance and without the driver leaving the cab. The lift arms, during the dump cycle must not obstruct or interfere with the opening of the truck cab doors on either side. The two (2) 3" x 8" rigidly constructed lift arms will be held tight to the torque tube using 4" thick ASTM A-487, 60,000 PSI yield cast steel clamping devices, and secured using two (2) 7/8" Grade 8 bolts and lock nuts on each side. The arm torque tube will be mounted in four (4) split bearing blocks with four (4) replaceable split bronze bushings with grease provisions. The split bearing blocks will be rigidly welded to the lower front of the body. The lift arms will be hydraulically actuated by two (2) double acting cylinders 4-1-2" bore x 41-1/2" stroke with a 2-1/2" diameter induction hardened and chrome plated rod. The cylinders will be located outside the body at the body floor level and directly attached to the lift arms. Two (2) 1-1/2" x 51" grip high tensile, 50,000 PSI minimum yield forks shall be welded to a 4-1/2' O.D. x 3/8" wall C-1018 Seamless tubing fork cross shaft assembly. This assembly shall include rubber bumpers to reduce impact and prevent damage to containers. Fork cross shaft assembly shall be attached to the arms with two (2) split bearing blocks with replaceable split bronze bushings fitted with grease provisions. Fork Hydraulics - The forks will be hydraulically actuated by two (2) double acting cylinders, 4" bore x 25" stroke with a 2" diameter induction hardened and chrome plated rod. Forks shall be designed to provide the necessary dump angle to assure complete discharge of materials from the refuse containers. Lift arms shall be brought to a smooth stop in the raised and lowered position by use of cushioned hydraulic arm cylinders. Heavy duty bolt-on hard rubber arms stops located at the side of the body will cushion and prevent over travel of the lift arms. Maximum height with the lift arms raised in the full up and forms fully tucked position will be 13'6" (based on a chassis rail height of 42")

YES NO

An in-cab mounted warning light will be provided to indicate when any part of

The maximum operating pressure of the system will be 2500 PSI.

the arms are raised above the body.

HYDRAULICS

The hydraulic pump shall be a front engine, crank driven, Denison single vane pump with electronic over-speed control. The packer panel operation shall be limited to a flow 52 GPM @ 1500 RPM in neutral or foot on brake. Pump-to-body hard plumbing shall be provided and shall be securely supported and clamped to prevent vibration, abrasion, and excessive noise. Flex hoses shall be provided at each end of the hard plumbing to provide adequate flexure to prevent hydraulic leaks.

All hydraulic hoses shall conform to SAE standards for designed pressure. Bends shall not be more than recommended by SAE standards. Flat spots in hoses will not be acceptable.

All pressure hoses shall be protected with fabric guard.

The hydraulic oil reservoir shall have a gross capacity of 47 gallons filled with 41 gallons of hydraulic fluid.

The tank shall be complete with a screeened fill pipe and cap, filter breather, clean out cover, shut off valve, oil level sight, and temperature gauge.

The hydraulic system shall be protected by three (3) micron, in tank, return line filter along with a 100 mesh (140 micron) reusable oil strainer in the suction line.

The return line filter shall also include an in-cab filter by-pass monitor which shall alert the operator or service personnel when the filter is need of replacement.

The hydraulic pump shut down system shall be included which shall prohibit prolonged operation of the hydraulics when the filter is in the bypass mode. The main control valve will be a six (6) section stack valve with relief to prevent overload damage. Valve capacity will be minimum 50 GPM @ 2500 PSI and designed to preperly operate all hydraulic components.

CONTROLS

Arm, fork, packer, top door, tailgate raise, and tallgate lock controls shall be provided. Arm and fork movement shall be accomplished by an air over hydraulic, self-centering joystick that returns to the neutral position when released. An arm rest shall be provided for operator comfort. Packer, top door, tailgate raise, and tailgate lock controls shall be air toggle type. All controls shall be located inside the cab within easy access to the driver. A separate incab control shall be provided for tailgate lock function.

All controls shall be properly labeled and indicate the direction of travel (i.e., arms up, arms down, etc.) with warning lights to indicate "Tailgate Open", "Top Door Closed" and "Arms Above Transit Position."

ELECTRICAL

A PLC (Programmable Logic Controller) electronic controls center shall be provided to monitor system funcations and operate the auto pack function. The PLC shall be installed inside the truck cab and shall possess self diagnosing error codes which identify the trouble source. Both audio and LED outputs must be made available to aid in locating trouble source.

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YES NO

All electrical wiring connectors to be automotive double-seal, with wiring in split convoluted loom. All wiring connections to be soidered with rubber molded covering or crimp type connectors with shrink wrap. Unprotected wiring in any application is unacceptable.

All switches not manually operated shall be proximity in type. Mechanical switches are not acceptable.

Clearnace, back up, and directional lights shall be Lexan lens, shock mounted in a protective housing. The whole unit shall be pop out and replaceable. All lights shall be provided in accordance with FMVSS#108, plus mid body turn signals on each side of the body and a center brake light on the rear.

REAR UNDERRIDE GUARD

The body shall be equipped with a rear under-ride guard as standard equipment, to meet Federal Motor Carrier Safety Regulation.

PAINTING

The entire body shall be properly cleaned of all dirt, grease, and weld slag before painting. Cleaning shall be in keeping with accepted industry practices. A seal coat, primer coat and two -component plyurethane enamel topcoat is to be applied.

The body is to be equipped with ICC regulation high visibility tape. The reflective tape is to be installed on lower side perimeter and across rear hopper lip.

The body color shall be Lincoln Parish choice, white.

ADDITIONAL FEATURES

Packers controls shall provide an AutoPack feature to enable a single button automatic packing cycle.

A floodlight with in-cab switch shall be mounted in the front bulkhead area to illuminate the body hopper.

A flashing amber strobe light is to be installed onto the rear tailgate.

Body Service hoise shall be included.

Dual camera system - rear & hopper view.

20lb Fire Extinguisher shall be included.

II. CHASSIS

Cab over style, LH Steering position.

Minimum WB: 197" Minimum CT: 172"

Minimum Platform: 264"
3/8" Variable drop steel frame
1/4" inside channel reinforcement

ENGINE & EQUIPMENT

Min. 365 HP @ 1200 RPM Cummins ISX or Equal

Min. 1250 ft lb Torque

Min. Air compressor, 18.7 CFM Min. Alternator, 12V 145 AMP

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Batteries, Three (3) 12V 2250 CCA Total			
Battery disconnect switch			
Min Engine block heater, 1000W			
Exhaust: Single vertical RH side, Stainless Steel vertical muffler shield, vertical			
diffuser, aluminum turbo/exhaust pipe debris shield			· ·
Engine protection system, Audible/Visual alarm, low oil pressure, high			
temperature, low water level.			
Min. Starter, 12V			
15" Air cleaner, Single stage.			
Air intake restriction indicator, graduated, air cleaner mounted.			
Electric circuit protection package, automatic circuit breakers			· · · · · · · · · · · · · · · · · · ·
Main Driverline: Spicer 1760 heavy duty 1/2 round			
Bodybuilder wiring harness to END OF FRAME			
TRANSMISSION	YES	NO	
Min. Allison 4500 RDS 6-speed Automatic			
Oil to water transmission cooler		1	
Allison programming package 105 group 142			
Transynd transmission fluid			
<u>CAB</u>	YES	NO	-
Air conditioner with integral heater			
Engine protection shutdown system (oil pressure, coolant temperature, engine			
oil temperature.)			
Electronic speedometer with trip odometer			
Electronic tachometer with hour meter			
Electric oil temperature gauge			
Transmission oil temperature gauge with light and buzzer			
Electric rear axle lube temperature gauge			
Electric voltmeter			
Single electric horn			
Twin trumpet air horn mounted under cab			
AM/FM radio	YES	NO	
Cab protector			
Driver Seat - high back, air suspension, Dura Cloth seat cover.			
Rider Seat - low-back, fixed			
Adjustable steering column			
FRAME EQUIPMENT	YES	NO	
Steel front bumper with front frame extension for refuse service front mount			
hydraulic pump			
Front tow pin			
<u>FUEL</u>	YES	NO	
Min 75 gallon LH			
Fuel/water separator with probe and dashlight			

FRONT AXLE/EQUIPMENT/TIRES

Axle: Min 20,000 lbs

Tires: Min. 315/80R22.5, 20 ply

Wheels: Min. 9.0" x 22.5" Hub piloted, 5.25" inset, 5 hand hold

Brakes: Min 16.5" x 7"
Automatic slack adjusters

Suspension: Min Flat-leaf 22,000 lbs

Integral power steering Front shock absorbers

REAR AXLE/EQUIPMENT/TIRES

Min. 46,000 lbs Capacity rear Axle Suspension: Min. 46,000 lb capacity

Tires: 11R22.5 16 ply

Wheels: 8.25" x 22.5" Hub Pilot, 5 hand hold

Brakes: Min 16.5" x 8.62" Automatic slack adjusters

Longitudinal and transverse torque rods - rubber bushed

Shock absorbers

AIR/BRAKES

ABS Bendix anti-lock braking system without traction control.

Air Dryer: ADIP/heated

Automatic drain valve, Bendix (heated)

Air reservoirs, relocation mounted inside frame rail

PAINT

Lincoln Parish Choice, White

PTO/SPECIALTY/ADDITIONAL EQUIPMENT

PTO: Front crankshaft adapter 1350 series flange for refuse front mount PTO

drive.

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YES	NO	
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YES	NO	
YES	NO	
YES	NO	



DESCRIPTION.

Lincoln Parish Police Jury Minimum Specifications for

Furnishing a (New) Front Loading Refuse Compactor Truck

Thursday, April 6, 2023 at 9:00 a.m.

WRITTEN BID AMOUNT:	
One (1) New Front Loading Refuse Compactor Truck	
Note: 1. Bid price shall include all applicable taxes, fees at 2. The Lincoln Parish Police Jury is exempt from al 3. The completed bid package must be returned with the complete bid bid package.	l sales taxes.
Manufacturer and Model Number:	
Are manufacturer's specifications included with this bid?	YES NO
Exact Delivery Date:	
Location of Service Shop:	
BIDDER:	
PRINTED NAME:	
SIGNATURE:	
_ TITLE:	
ADDRESS:	
CONTACT NUMBER:	