

**Minimum Truck Bid Specifications for a 25 Cubic Yard Rear Load Refuse Body**

	COMPLY	
	YES	NO
• 2018 Model year w/set back axle	_____	_____
• Cummins L9 350 HP @ 2000 RMP 1150 LB/FT @1400 RPM	_____	_____
• On board diagnostics	_____	_____
• 1 piece valve cover	_____	_____
• DR 12V 160AMP 28-51 Quardramount pad	_____	_____
• 2 Alliance Model 1231 group 31 12 volt maintenance free 2250 CCA threaded studs	_____	_____
• Cummins turbocharged 18.7CFM air compressor with internal safety valve	_____	_____
• Cummins exhaust brake with on off switch on dash	_____	_____
• 13 gal DEF tank	_____	_____
• 1,100 square inch aluminum radiator	_____	_____
• Gates Blue Striped coolant hoses or equivalent	_____	_____
• Phillips & Temro 1000 watt/115 volt block heater	_____	_____
• Delco 12v 39 MT HD/OCP starter	_____	_____
• Allison 3000 RDS automatic transmission	_____	_____
• Detroit DA-F-16.0-5 16,000# front axle w/16,000 flat leaf suspension with shock absorbers	_____	_____
• Rt-46-160P 46,000# R Series Tandem Rear Axle w/5.63 rear axle ratio	_____	_____
• MXL 17N Meritor drive line with full round yokes	_____	_____
• MXL 17T Meritor internal drive line w/half round yokes	_____	_____
• Differential lock on rear tandem	_____	_____
• Meritor 16.5 x 7 qt cast spider cam rear brakes rear dust shields	_____	_____
• Haldex automatic slack adjusters	_____	_____
• Hendrickson RT 463 46,000 rear suspension	_____	_____
• Fore/aft control rods	_____	_____
• Rear shock absorbers 1 axle	_____	_____
• 226" wheel base	_____	_____
• 11/32 x 3 ½ x 10 15/16" frame w/¼" C channel inner frame reinforcement	_____	_____
• CT 160.45"	_____	_____
• 3 piece 14" chromed steel bumper with collapsible ends	_____	_____
• Front tow hooks	_____	_____
• 80 gallon aluminum fuel tank rectangular LH mounted	_____	_____
• Detroit fuel/water separator with 12 volt pre heater	_____	_____

**COMPLY**  
**YES NO**

- Michelin XZA2 Energy 315/80R 22.5 20 ply radial front tires
- HanKook DL11 11R22.5 14 ply radial rear tires
- Alcoa 22.5 x 9.00 10 Hub Pilot 5.99 inset aluminum rims
- Non removable bug screen mounted behind grill
- LH & RH grab handles
- Chromed plastic grill
- Fiberglass hood
- Single 14" round polished air horn roof mounted
- Dual West Coast bright finished heated mirrors
- 63 X 14" rear window
- RH & LH electric windows
- RH & LH electric door locks
- Triangular reflectors
- High back air suspension driver seat
- 2 man passenger seat
- Pre trip lamp inspection switch
- AM/FM/WB radio w/2 speakers
- Cab color: L0006EB White Elite BC
- Frame Black High Solids Polyurethane chassis paint

**High Compaction Rear Loading Refuse Collection Truck Body  
Suggested Bid Specifications**

**SCOPE:** It is the intent of this specification to describe a hydraulically actuated packer body of the rear loading type with the following minimum specifications considered necessary to perform the work assigned. The body shall be capable of compacting and transporting refuse to a landfill or transfer station and dispensing the load by means of hydraulic ejection. The body shall not be required to be tilted, lifted, or otherwise displaced from the chassis in order to eject the load.

**GENERAL:** All equipment furnished under this contract shall be new and unused, and the same as the manufacturers current production model. Accessories not specifically mentioned, but necessary to furnish a complete unit ready for use shall also be included. The equipment furnished shall conform to all ANSI Safety Standards A245.1-2008.

**SUGGESTED BID SPECIFICATIONS**

Bidder Shall Complete the Following  
If No, State Specifically the Item being offered

				<b>YES</b>	<b>NO</b>	<b>OFFERED</b>
<b>A. CAPACITY</b>						
1. The body shall have a minimum capacity of:						
25 Cubic Yards				_____	_____	_____
2. The body shall have an average compaction rate of 1000 pounds per cubic yard				_____	_____	_____
<b>B. BODY DIMENSIONS</b>						
1. Maximum overall width not to exceed 96".				_____	_____	_____
2. Maximum overall length and height (with tailgate in locked position) above the chassis frame not to exceed:						
Capacity	Length	Height	CT			
25 Cu./Yd.	275.5"	102.5"	160"	_____	_____	_____
3. Body weight (exclusive of options) shall not exceed:						
Capacity	Weight					
25 Cu./Yd.	15,250 pounds			_____	_____	_____

**C. BODY CONSTRUCTION**

**YES      NO      OFFERED**

- |  |       |       |       |
|--|-------|-------|-------|
| 1. The body shall be constructed entirely of 10 gauge 80,000 PSI steel.  | _____ | _____ | _____ |
| 2. All pivot points shall be provided with grease zerks.   | _____ | _____ | _____ |
| 3. Body sides, roof shall be curve shell design without the need of side bracing. Continuous operation at maximum loads without harmful deformation or wear.   | _____ | _____ | _____ |
| 4. The roof shall be constructed of 7 gauge 80,000-PSI steel.  | _____ | _____ | _____ |
| 5. The body sides shall be constructed of 10 gauge, 80,000 PSI steel. Sides shall be braced along the bottom 3 1/2" x 12" from tailgate tapered to a point at the front of the body. Longitudinal braces shall be interconnected with floor gussets and continuously welded. | _____ | _____ | _____ |
| 6. The flat body floor shall be 7 gauge 100,000 PSI steel with 7 gauge supports. (Trough floors not acceptable)  | _____ | _____ | _____ |
| 7. Side access door shall be located on the street side of the body sidewall. The door shall be securely fastened to the body sidewall by stainless steel hinges.  | _____ | _____ | _____ |
| 8. Side access door shall be equipped with a safety interlock to disengage the hydraulic system when open.   | _____ | _____ | _____ |

**D. TAILGATE DIMENSIONS**

- |   |       |       |       |
|---|-------|-------|-------|
| 1. Hopper opening width shall not be less than 80" wide and 55" high.   | _____ | _____ | _____ |
| 2. Hopper capacity shall not be less than 3.5 cubic Yards.  | _____ | _____ | _____ |
| 3. Hopper cycle time with the standard PTO and pump shall not exceed an average of 21-23 seconds.                                 | _____ | _____ | _____ |
| 4. The entire hopper floor shall be a minimum of 1/4" 100,000-PSI steel adequately braced to withstand maximum loading pressures. | _____ | _____ | _____ |

	YES	NO	.OFFERED
5. The hopper sides shall be constructed of 1/4" 100,000 PSI steel.	_____	_____	_____
6. The hopper wall braces shall be 10 gauge 50,000 PSI high strength steel.	_____	_____	_____
7. The hopper tracks are to be 8.5" X 3.5" X 3/8" 50,000 PSI steel, and the track rails are to be 1/2" X 3".	_____	_____	_____

**E. TAILGATE CONSTRUCTION**

1. Tailgate is to be attached by (2), 1" 50,000 PSI heavy-duty hinges.	_____	_____	_____
2. The tailgate shall have a water tight sealing height of 46".	_____	_____	_____
3. The slide panel guide track shall be constructed of 1/2" x 3" 36,000 PSI yield steel. (Free-floating design is not acceptable).	_____	_____	_____
4. The tailgate shall be equipped with a turnbuckle style lock incorporating a 1 1/4" diameter threaded rod.	_____	_____	_____
5. The tailgate shall be raised by two 3 1/2" x 42" double acting cylinders equipped with restrictors to prevent precipitous tailgate decent in the event of a broken hydraulic line.	_____	_____	_____
6. The tailgate perimeter edge shall be reinforced by 3" x 2" x 1/4" wall structural tube steel.	_____	_____	_____
7. Tailgate shall be equipped with a chemically inert seal to provide a watertight seal.	_____	_____	_____
8. Hopper floor shall remain stationary during the packing cycle and shall be equipped with a 1 1/2" drain plug.	_____	_____	_____
9. The hopper load sill shall be constructed from a 1/4" wall formed structure and be 3.5" below the chassis frame height.	_____	_____	_____
10. Self cleaning grip strut steps and grab handles shall be required on both sides of the tailgate. The steps shall be bolted on for easy repair or removal.	_____	_____	_____

YES NO OFFERED

**F. PACKING MECHANISM CONSTRUCTION**

1. The sweep panel shall be of the backhoe packing type, and designed to have a minimum clearance to thoroughly clean the hopper bottom during cycling.

\_\_\_\_

2. The sweep panel face plate shall be constructed of 1/4" 100,000 PSI steel and shall be reinforced with internal braces constructed of 3/8" thick steel. It shall be equipped with 1/2" thick high strength cylinder supports, 3/8" 50,000 PSI steel braces and 1/4" 50,000 PSI gussets.

\_\_\_\_

3. The sweep blade shall be powered by two 4 1/2"x 25 5/8" double acting cushioned cylinders equipped with bronze bushings.

\_\_\_\_

4. The sweep pivot bearings are to be 3" ID x 3 1/2" OD bronze bushings.

\_\_\_\_

5. The sweep panel cutting edge is to be 5/8" AR200 steel.

\_\_\_\_

6. The slide panel face plate shall be constructed of 7 gauge 100,000-PSI steel with 1/2" 50,000 PSI steel side frames and 3/16" 80,000 PSI steel center support braces.

\_\_\_\_

7. The slide panel shall be powered by two 5" x 38 5/8" stroke cushioned double acting cylinders.

\_\_\_\_

8. The linear slide movement of the panel shall be accomplished on two high strength rectangular tubing with each having an upper and lower UHMW pad that measures 4" x 14"

\_\_\_\_

9. The pivotal rotation of the sweep panel shall be accomplished through the sweep panel cylinder pivot which shall consist of two 2" diameter stress proof pivot pins.

\_\_\_\_

10. The slide, sweep and option cycles will be positive and automatic and be operated from the right hand side of the tailgate at the rear; all levers to be clearly identified that allow the operator to start, stop and reverse the direction of any function, at any time throughout the packing cycle.

\_\_\_\_

11. UHMW slide pads shall be easily replaced without removing the slide panel or slide shoes through easy external ports.

\_\_\_\_

YES NO OFFERED

**G. EJECTION PANEL CONSTRUCTION**

- 1. Ejection panel shall form the front of the body and be hydraulically operated and designed to have a minimum clearance to thoroughly clean the body during cycling. \_\_\_\_\_
- 2. The load shall be discharged by means of a center mounted positive ejection system. A double acting, 7.5" bore telescopic cylinder shall extend and retract the full length of the body. \_\_\_\_\_
- 3. The ejection panel face plate shall be curved face constructed of 10 gauge 50,000-PSI sheet steel and reinforced with 4 formed vertical braces, and base structure of 3"x3"x 1/4" and 3"x5" 3/8" wall structural tube. \_\_\_\_\_
- 4. The ejection panel shall slide on four 1"x4" x 53 7/16" UHMW high-density slide bearing blocks. \_\_\_\_\_
- 5. The ejection panel shall extend and retract without The assistance of clamp bars. \_\_\_\_\_
- 6. The ejection panel will be automatically retracted during the packing mode by a hydraulic pressure relief system. \_\_\_\_\_
- 7. The ejector panel and tailgate raise controls to be positive type, manually activated and shall be mounted outside at the front of the body on the front left-handed side of the body. \_\_\_\_\_
- 8. The telescopic cylinder shall not lay in a horizontal position on the floor of the packer. It shall be mounted at an angle so as to prevent trash at the floor level accumulating on it. \_\_\_\_\_

**H. CONTROLS**

- 1. The packing mechanism controls shall be located curbside and incorporate direct linkage to the valve spool. The valve sections will be located within the side frame of the tailgate and be easily accessible without removing hoods or covers. The speed up sensor for the packing mechanism shall be a proximity style switch adequately protected from limbs and debris. \_\_\_\_\_
- 2. An electrical device shall be supplied to automatically raise the engine speed to the proper RPM during the packing cycle. \_\_\_\_\_

- |  | YES   | NO    | OFFERED |
|--|-------|-------|---------|
| 3. An additional throttle advance switch shall be mounted at the front left hand side of the body near the tailgate raise control handle and at the rear right hand side near the packing blade control. | _____ | _____ | _____   |
| 4. A Back Pack Valve shall be required to automatically retract the ejection panel when packing against it.  | _____ | _____ | _____   |
| 5. The packing panel control shall be designed to accomplish the normal packing cycle in two steps and shall be reversible or stopped at any time during the cycle.                                      | _____ | _____ | _____   |
| 6. The packing blade control shall be a two handle design and located at the rear of the tailgate on the curbside.   | _____ | _____ | _____   |

**I. HYDRAULIC SYSTEM**

- |  |       |       |       |
|--|-------|-------|-------|
| 1. A power takeoff/pump combination shall be used to power the hydraulic system.   | _____ | _____ | _____ |
| 2. All hydraulic valving shall be mechanically operated and use direct link controls.  | _____ | _____ | _____ |
| 3. The hydraulic pump shall provide a delivery of 36 GPM at 1000 RPM.  | _____ | _____ | _____ |
| 4. Normal maximum operating pressures shall not exceed 2750 PSI.   | _____ | _____ | _____ |
| 5. The hydraulic system shall incorporate a relief valve and a hydraulic pressure gauge to protect all components from excess pressures.         | _____ | _____ | _____ |
| 6. All hydraulic hoses shall conform to S.A.E. Standards. No flat spots in hoses will be acceptable.   | _____ | _____ | _____ |
| 7. Hydraulic tank shall not be less than 55 gallons and must be equipped with a sight and temperature gauge. The tank shall be frame mounted.    | _____ | _____ | _____ |
| 8. A replaceable 10 micron spin on filter with by-pass valve and visual indicator shall be furnished in the return line of the hydraulic system. | _____ | _____ | _____ |
| 9. A shut-off valve shall be mounted on the suction line near the oil tank.  | _____ | _____ | _____ |



	YES	NO	OFFERED
10. All cylinder rods shall be chrome plated.	_____	_____	_____
11. Sweep and slide cylinder rods to be induction hardened.	_____	_____	_____
12. All cylinders shall incorporate nylon wear rings on the piston and rods to prevent metal to metal contact, and an "O" ring is to be used to pre-load the seal.	_____	_____	_____
13. Steel piping shall be used whenever possible.	_____	_____	_____
14. All hydraulic tubes shall be securely clamped to prevent abrasion and excessive noise.	_____	_____	_____
15. All hydraulic hoses and pipes, wherever they are exposed to limb, ground obstructions, or debris damage, shall be properly shielded or guarded .	_____	_____	_____
16. All hydraulic hoses shall have a 4:1 burst safety factor and use hose ends of 37-degrees JIC fittings wherever possible. All high-pressure hoses shall be sheathed with fabric protective covering.	_____	_____	_____
<b>J. ELECTRICAL</b>			
1. All body wiring shall be loomed and/or in conduit with heat shrunk connectors.	_____	_____	_____
2. The body shall be equipped with LED approved clearance, warning, tail, license, stop and turn signals in compliance with the national safety standards.	_____	_____	_____
3. The body shall be equipped with an external audio back up alarm activated when the chassis is in reverse.	_____	_____	_____
4. Driver alert buzzer shall be installed at the rear of the tailgate located by the packing controls.	_____	_____	_____
5. A light shall illuminate in the cab when the tailgate is open and an audible alarm will sound when the vehicle is placed in reverse while the tailgate is open.	_____	_____	_____
6. A light bar shall be mounted on the upper section of the tailgate and consist of (4) 4" stop, turn and three clearance lights, in accordance to the national safety standards.	_____	_____	_____
7. A color rear vision camera shall be installed with a 7" monitor mounted in the cab.	_____	_____	_____

**K. PAINT**

**YES NO OFFERED**

1. The body shall be properly cleaned with a chemical etching solution to remove all dirt, oil, and prepare surface for good paint adhesion. All surfaces shall be clean of welding slag. White Dupont Color, lead-free primer with rust inhibitors shall be applied.

\_\_\_\_

2. Dupont Imron 5000 paint shall be applied.

\_\_\_\_

Specify paint code: \_\_\_\_\_

Specify paint color: \_\_\_\_\_

**L. MOUNTING**

1. Body shall be mounted in accordance to industry standards. No welding shall be performed on the chassis frame in the mounting process.

\_\_\_\_

2. Do to continually changing chassis specifications, It is the chassis distributor's responsibility that the chassis provided for mounting be suitable and with all proper codes.

\_\_\_\_

**M. SAFETY**

1. Access door to body to be equipped with an interlock switch to disable the hydraulic system when the door is open.

\_\_\_\_

2. Safety Shut Down switch to be provided on the right side of the tailgate.

\_\_\_\_

3. Driver alert switch to be provided at the right rear of the truck

\_\_\_\_

4. 20 lb. Fire extinguisher mounted on body or truck frame.

\_\_\_\_

5. Triangle reflector kit located in cab.

\_\_\_\_

**N. WARRANTY**

1 Year on complete body

\_\_\_\_

2 Years on hydraulic cylinders

\_\_\_\_

**O. OPTIONAL EQUIPMENT REQUIRED**

**YES NO OFFERED**

- |   |       |       |       |
|---|-------|-------|-------|
| 1. Hot Shift PTO with pack-on-go and overspeed protection   | _____ | _____ | _____ |
| 2. Two halogen hopper work lights   | _____ | _____ | _____ |
| 3. Two round LED strobes on upper tailgate  | _____ | _____ | _____ |
| 4. Two round LED strobes on upper front body  | _____ | _____ | _____ |
| 5. 7.0" color flat screen camera system   | _____ | _____ | _____ |
| 6. Mud flaps behind rear axle   | _____ | _____ | _____ |
| 7. Extended width rear rider steps  | _____ | _____ | _____ |
| 8. 12,000# capacity cylinder reeving winch and container attachment.  | _____ | _____ | _____ |
| 9. (2) Perkins D6080C Rotary Tuckaway cart tipper recessed into extended hopper load sill. All cart tipper hydraulic lines on side of tailgate must be steel tubing - rubber hose not acceptable. | _____ | _____ | _____ |
| 10. A 10# fire extinguisher must be housed on tailgate at waist level for easy access.  | _____ | _____ | _____ |
| 11. Backup lights mounted midway each side of body.   | _____ | _____ | _____ |

**May 11, 2018**

**Johnna,**

***Please find attached the specifications for a 2018 model 25-yard garbage packer.***

***I would like to add in the advertisement that would want delivery of the vehicle within 20 days. Copies of the specs can be picked up in the Street Department Monday through Friday from 6:30 a.m.-3:00 p.m.***

**Thanks,**

**Clark Miles**

**Street Commissioner**