

Mini-bid #T16080016
Department of Environmental Conservation
(2) Class 8 Chassis New Waste Vacuum Trucks (6x4)

1. **Model Year and Class:** 2017 or Newer, Medium Duty – Class 8 – Chassis Truck (6 x4), Septic Pumper Application, with the most current (2010 or newer) Federal Emissions Standard for Diesel Engines
2. **Overall Wheelbase:** 201”
3. **Cab to Axle Distance:** 126”
4. **Axle To Frame:** 75”
5. **Gross Vehicle Weight Rating (GVWR):** Minimum 56,000 lbs.
6. **Diesel Engine:**
 - a. Minimum 350 HP at 2000 RPM, EPA 2010 or most current, 1,000 lb. torque at 1,400 RPM, 2,200 RPM Governed Speed, 350 Peak HP (Max)
 - b. Air Compressor Air Supply Line
 - c. Antifreeze, Red Shell Rotella Extended Life Coolant to minimum -40 degrees F, or similar Performing Product
 - d. Cold Starting Equipment, Intake Manifold Electric Grid Heater
 - e. Air Cleaner with Service Protection Element
 - f. Governor, Electronic
 - g. Engine Block Heater, minimum 120 volt, 1250 watt
 - h. Block Heater Socket
 - i. Engine Oil Drain Plug, Magnetic
 - j. Engine Shutdown, Electric, Key Operated
 - k. Electronic Cruise Control
 - l. Fuel Filter with Fuel/Water Separator
 - m. Oil Filter, Spin On Type
 - n. Wet Type Cylinder Sleeves
7. **Axles:**
 - a. Front Axle- Wide Track, I-Beam Type, Minimum 16,000 lb. Capacity
 - b. Rear Axle-Tandem, Single Reduction, 0.433 Wall Thickness, 40,000 lb. Capacity, R Wheel Ends, With Driver Controlled Locking Differential in Forward-Rear and Rear-Rear Axle, Gear Ratio 5.29, includes Power Divider Lock, Electric Over Air Operated, Cab Control with Indicator Light, Rear Axle Drain Plugs (2) Magnetic, For Tandem Axle
8. **Suspension:**
 - a. Front Axle - Minimum 16,000 Capacity, with Auxiliary Rubber Springs, Parabolic, Taper Leaf with Shock Absorbers, includes Spring Pins with Rubber Bushings, Maintenance Free

- b. Rear Axle – Walking Beam Type, with Rubber Spring, 54” Axle Spacing; 40,000 Capacity, With High Stability (HS) Restrictor Cans, (8) Torque Rods Less Shocks, including Cross Member Suspension, Stamped Steel Double Dogbone
- c. Shock Absorbers, Rear (4), Mounted from Frame to Beam

9. **Transmission:**

- a. Automatic Transmission- (Allison 3000 RDS P or similar), 5th Generation Controls, Close Ratio, 6-Speed, With Double Overdrive, On-Off Highway, Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000 lb. GVW and GCW Max
- b. Transmission Shift Control- (Allison 3000 or 4000 Series Transmission or similar)
- c. Allison Spare Input/Output for Rugged Duty Series (RDS) or similar, Airport Refueler, Sewer Evac
- d. Transmission TCM Location- Located Inside Cab
- e. Transmission Oil- Synthetic, 29 thru 42 pints
- f. PTO Control, Dash Mounted, Includes Switch, Electric/Air Solenoid, Piping and Wiring
- g. PTO Location – Duel, Left and Right Side of Transmission

10. **Brakes:**

- a. Air Brake System- Duel System for Straight Truck Application
- b. Air Brake ABS Full Vehicle Wheel Control System (4-Channel) with Automatic Traction Control – The system will also include at a minimum; Brake Lines- Color and Size Coded Nylon; Drain Valve, Twist- Type; Air Pressure Gauge located in Instrument Panel; Parking Brake Control (Yellow Knob); Parking Brake Valve for Truck; Quick Release Valve, on Rear Axle for Spring Brake Release; Automatic Front and Rear Slack Adjusters; Spring Brake Modulator Valve R-7 for 4 x 2 with Relay Valve for 6 x 4
- c. Brake Chambers, Front Axle, 24 Square inches minimum
- d. Brake Chambers, Rear Axle, 30/30 Spring
- e. Air Compressor, minimum 18.7 CFM Capacity
- f. Air Dryer with Heater
- g. Drain Valve, Automatic; with Heater; for Air Tank
- h. Brakes, Front, Air Cam S-Cam 16.5” x 6”, Includes 24 Square inch Long Stroke Brake Chambers
- i. Brakes, Rear, Air Cam S-Cam; 16.5” x 7.0”; includes 30/30 Square inch Long Stroke Brake Chamber and Spring Actuated Parking Brake

11. **Exhaust System:**

- a. Switchback Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab; Includes Single vertical Tail Pipe, Frame Mounted Right Side of cab
- b. Tail pipe – (1) Turnback type, Non-Bright, for Single Exhaust
- c. Engine Compression Brake – With Selector Switch and On/Off Switch

- d. Exhaust Height – minimum 10' 11"
- e. Switch, For Exhaust – 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable, INHIBIT REGEN, Mounted in IP Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While Engine is Running, Resets When Ignition is Turned OFF
- f. DEF Tank –minimum 9.5 gal., 36.0L, Frame Mounted

12. Electrical System:

- a. 12 Volt Electrical System
- b. Electric Horn
- c. Horn, Air (2) – Single Tone, Rectangular, Chrome. Roof Mounted
- d. Snow Shield (2) – Chrome, for Duel Air Horns
- e. Steel Battery Box
- f. Data Link Connector – For Vehicle Programming and Diagnostics in Cab
- g. Fuses, Electrical – SAE, Blade Type
- h. Hazard Switch
- i. Headlight Dimmer Switch – Integral with Turn Signal Lever
- j. Body Building Wiring
- k. Switch, Body Circuits-Mid
- l. Two Way Radio Wiring
- m. Battery System – Maintenance Free (3), 12-Volt- minimum Total Combined CCA-2775
- n. Alternator – Brush Type, 12 Volt, minimum 160 Amp Capacity, Pad Mount with Remote Sensor
- o. Power Source – Cigar Type Receptacle without Plug and Cord
- p. Back-Up Alarm – Electric, minimum 102 dBA
- q. Switch, Marker Interrupt, For Cab and Body Clearance Marker Lights, Single Position, Blinks Lights when Headlight Switch is in “On” or “Off” Position
- r. Jump Start Stud
- s. LED Stop, Turn, tail, and Back-up Lights Duel Rear, Combination with Reflector
- t. LED Turn Signals, Front, Includes LED Side Marker Lights, Mounted on Fender
- u. Circuit Breakers – Manual-Reset (Main Panel), SAE Type III with Trip Indicators, Replaces All Fuses Except 5 Amp Fuses
- v. Auxiliary Switch- minimum 40 Amp, Includes Wiring Connection at PDC and Control in Cab
- w. Radio – AM/FM/WB/Clock/Bluetooth/USB, Input 3MM Auxiliary Input. MP3, Apple Device Play and Control, Bluetooth for Phone and Music, with Multiple Speakers
- x. Windshield Wipers – Single Motor, Electric, Cowl Mounted
- y. Windshield Wiper Speed Control
- z. Body Integrated, Remote Power Module, mounted in Cab Behind Driver’s Seat; Up to 6 Outputs and 6 Inputs, Maximum 20 Amp. Per Channel, Maximum 80 Amp Total (Includes 1 Switch Pack with Latched Switches)

- aa. Body Integrated, Indicator Lights (2) 1 for Gate Open and 1 for Rear Alert, Includes Audible Alarm, Programmable Mode for Various Switch Action (Requires 2 Remote Power Module Inputs)

13. **Fuel System:**

- a. Fuel Tank – Top draw, Non-Polished Aluminum, 70 U.S. Gallons, 265 L. Capacity, Mounted left Side Under Cab
- b. Fuel/Water Separator, Unheated, with Primer Pump and WIF Sensor

14. **Cab:**

- a. Conventional, Regular Cab
- b. Glass, Tinted, All Windows
- c. Cab Rear Suspension, Air Bag Type
- d. Clearance/Marker Lights (5), Amber LED Lights, Flush Mounted on Cab or Sunshade
- e. Dome Light, Door Activated and Push ON and OFF at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted
- f. Grab Handles, Cab Interior (2), Safety Yellow
- g. Grab Handles, Cab Interior (1), “A” Pillar Mounted, Passenger Side
- h. Grab Handles, Cab Interior (2), Front of “B” Pillar Mounted, One Each Side
- i. Grab handles, Exterior, Chrome, Towel Bar Type with Anti Slip Inserts; for Cab Entry, Mounted Left and Right Side
- j. Gauge Cluster, English with English Electronic Speedometer
- k. Gauge Cluster, Includes Engine Oil pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid
- l. Gauge, DEF Fluid Level
- m. Gauge, Oil Temperature, Automatic Transmission
- n. Gauge, Temperature, Ambient, Mounted in Cluster
- o. Diagnostic Display of Fault Codes in Gauge Cluster
- p. Seat, Driver, Air Suspension, High Back with Integral Headrest, and Right Arm Rest
- q. Seat, Passenger, Non Suspension, High Back with Integral Headrest
- r. Mirrors (2), Rectangular, Power Both Sides Flat Glass Only, Thermostatically Controlled Heated Heads, Clearance Lights LED, Bright Finish Heads, Brackets and Arms, Breakaway Type, Minimum 7” x 15” and Integral Convex Both Sides
- s. Mirrors, Convex, Hood Mounted, Right and Left Side, Heated, minimum 7.4” square inches, Bright Finish
- t. Air Conditioner, with Integral Heater and Defroster
- u. Power Windows (2), and Power Door Locks, Left and Right Doors, Includes Express Down Feature
- v. Premium Cab with Deluxe Trim
- w. Cab Sound Insulation
- x. Fresh Air Filter, HVAC
- y. Bar Light, Amber, LED, minimum 36” x 12”, attached to Roof of Cab

- z. Coat Hook
- aa. Cup Holders
- bb. Operator/Owner's Manual (2 each truck)
- cc. Fire Extinguisher
- dd. Flare/Triangle Kit
- ee. Steering Gear (2), Dual power
- ff. Steering Column, Tilting and Telescoping
- gg. Premium paint, Dark Green, color will be confirmed with the NYSDEC
- hh. Paint Schematic, PT-1, Single Color, Design 100

15. **Chassis**

- a. Frame Rails, Heat Treated Alloy Steel, (minimum 120,000 PSI Yield); Minimum 10.866" x 3.622" (276.00 mm x 92.00 mm); 456.0" (11582 mm) Maximum OAL
- b. Tow Loop, Front
- c. Tow Hook (2), Rear, Frame Mounted
- d. Bumper, Front, Full Width, Aerodynamic, Polished Stainless Steel, minimum 0.125 " material
- e. Frame/Running Gear, Painted Black, Less Fuel tanks
- f. Paint Identity, PT-2 Single Color, Frame Running Gear less Fuel tanks

16. **Wheels:**

- a. Wheels, Front Disc- 22.5" x 12.25" Rims, Painted Steel, 5-hand Hole, 10 Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs, Offset 5.375"
- b. Paint Identity, Front Wheels, White
- c. Wheels, Rear – Dual Disc: 22.5" x 8.25" Rims, painted Steel, 2-Hand Hole, 10 Stud, 285.75mm BC, Hub Piloted, Flanged Nut, with Steel Hubs
- d. Paint Identity, Rear Wheels, White

17. **Tires:**

- a. Tires, Rear (8), 11R22.5 G622 RSD (Goodyear) 497 Rev/Mile. Load range J, 14 Ply
- b. Tires, Front (2), 385/65R22.5 G296 MSA (Goodyear) 488 Rev/Mile, Load range J, 18 Ply

18. **Cooling and Air Filter Systems:**

- a. Fan Drive, Direct Drive Type, Two Speed with Residual Torque Device for Disengaged Fan Speed
- b. Radiator, Cross Flow, Series System, minimum 1228 Sq. Inch Aluminum Core and minimum 1167 Sq. Inch Charge Air Cooler
- c. Radiator Hoses, Premium, Rubber
- d. Air Cleaner, Single Element
- e. De-aeration System with Surge Tank

- f. Gauge, Air Cleaner Restriction, Air Cleaner Mounted
- g. Fan Override, Manual, With Electric Switch on Instrument Panel, (Fan On with Switch On)

19. Tank and Accessories:

- a. 3,000 gallon Vacuum tank, minimum 5/16" X 72" Diameter ASME Flanged and Dished Heads, minimum 1/4" x 16' Prime Carbon Steel Shell, minimum 184" Overall Length, Double Butt Welded
- b. Lifting Rings (2)
- c. Full Height Baffles Padded to Interior (2)
- d. Full Length Angle Skids, Padded to Bottom, Sloped to Rear (2)
- e. One Set of Bolt Down Brackets with (12) Grade 9 Bolts, Springs
- f. Rubber Mount System (6), 4' Pads
- g. Full Length Stainless Steel One Piece Hose Tray Fenders Bolted to Steel Supports (2)
- h. Black Rubber Mud Flaps with Front Stainless Steel No Fly Brackets (One Set in Front of Front Duals, One Set in Back of Rear Duals)
- i. Set of Aluminum Tank protectors (1)
- j. 22" Top Hatch with Galvanized Ladder Assembly (1)
- k. 3" Primary Check Valve with 6" Stainless Steel Float Ball, Galvanized Steel Cage (1)
- l. 3" Secondary Moisture trap with 6" Stainless Steel Float Ball, Pressure Relief, Vacuum Relief, 2" Drain Valve, Liquid Filled Compound Gauge, Mounted LH Front (1)
- m. Wallenstein Model (or similar model) 753HRV30A 420 CFM free Air, 350 CFM @ 15" Hg @ 1150 RPM, 27" Capable, Complete with Off Road Valve, Fan, Air Pressure Lubricator (1)
- n. HD Vacuum Pump Mount Stand (1)
- o. Hydraulic Drive Package to include; Frame Mounted Reservoir, Hose/Filter Set (1)
- p. Air Shift PTO for Automatic Transmission
- q. Operator Level Control Panel with Smart RPM System
- r. 3" frame Mounted Oil Catch Muffler LH Side to RH Side w/ High Level
- s. 24" Rear Cleanout with 6" Brass Stem Valve, Handle, Part F and Cap, 6" Spreader
- t. 4" Load Port with Internal Riser and Deflector, 4" Lever Valve, 4' x 3" Reducer Cap
- u. Rear Hose Hooks (2)
- v. # SE450 Sight Eyes on Rear Head, 1/2, 3/4, and Near Full (3)
- w. Anti- Corrosion Bolt Kit
- x. Painted Heavy Duty Rear Bumper
- y. 22" x 22" x 36" Frame Mounted Tool Box (Diamond Plated, Aluminum), with Locking Door
- z. Complete Set Betts (or similar model) Vapor Proof, Common Ground, Hardwire Lighting, Including Aluminum Tail Light Modules, Tri-Light, Side Markers, (2) Rear Flood Lamps, and Junction Box
- aa. Low Profile LED Lights on Top Rear of Tank (2)
- bb. Above Tank Exterior Grit Blasted to Near White Metal, 2 Part Epoxy Primer, Polyurethane Finish to Match Cab

- cc. Air Actuated Rear Discharge Valve within Cab Control including Indication Light
- dd. PTO Programmed to disengage at 15 MPH

20. **Delivery:**

- a. Both Trucks will be delivered to the New York State Fish Hatchery, 8306 Fish Hatchery Road, Rome, NY 13440. County of Delivery: Oneida
- b. Delivery of trucks will be on or before February 1, 2017.