

## 23-19 SCOPE OF WORK

Requirements of the fuel system:

- The Contractor shall furnish all technical and professional services required to obtain and maintain compliant on-site refueling operations including but not limited to site survey(s), drawings, permit applications, inspections, certifications, controls, protection, and equipment.
- Equipment furnished under this specification shall be the latest improved mode in current production, as offered to commercial trade, and shall be of quality workmanship and material.
- The Contractor shall represent that all equipment offered under this eRFP will through the intent of this agreement remain in good working order and shall be in compliance with the current Liquefied Petroleum Gas (LPG) Safety Rules, National Fire Protection Association (NFPA:58) safety codes, and all other applicable Federal, State & local Codes or regulations.
- All equipment (Tank, Pump, and Dispenser System) shall be considered leased and will remain the property of and in the care of the supplier for duration of the lease agreement.
- An authorized propane installer with State of Georgia Fire Marshall's office with current license shall be required for a complete turnkey operation of an Autogas (LPG) vehicle fueling station. Include the name of the Propane installer and License# in the proposal. All workmanship shall meet or exceed the accepted standards of the industry. Electrical work must be performed by a licensed electrician.
- The propane fueling station shall be a horizontal tank that must meet the plot size restrictions as determined by supplier. The tank shall be an ASME propane tank 250 psi working pressure and 18,000 gallons. Initially JCSS expects to purchase 10 LPG powered school buses. JCSS expects to add 40-50 LPG propane powered school buses annually throughout the duration of this lease. The average annual route miles per bus is 12,000 miles.
  - Site Location: 237 Railroad Street, Gray Ga 31032.
  - Additional Site(s) may be added in the future if required. The additional site(s) will be determined by the Transportation Department.

The selected Contractor is expected to provide training to JCSS employees on all aspects of the onsite fueling system, to include, but not be limited to:

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through academic Achievement, responsible Behavior, and an engaged Community

- Autogas station operator & maintenance training.
- Propane properties and characteristics, safe handling.
- Station operation and maintenance and fueling vehicle propane tanks.

### **Billing and Supply Management:**

- Supplier to provide monitoring of fuel levels and provide auto-replenish order and delivery.
- Provide supply disruption plan and alternative fueling capability in the event of site outages or natural disaster. Plan shall include bobtail truck fueling and 24-hour service.
- Provide end customer billing/invoicing and bulk tank inventory reconciliation reports.
- All site work and installation of said equipment must be coordinated with the Transportation and Maintenance Departments. The contact names will be given after notice of award.

### **Method of Award and Delivery:**

- All items are to be proposed F.O.B.; 237 Railroad St. Gray, GA 31032. The title and risk of loss of the goods will not pass to JCSS until receipt and acceptance takes place at the F.O.B point.

### **Products Quoted:**

- All equipment shall meet specifications with specified LPG gas as written.
- Mobile to Vehicle Refueling:
- Whereby the supplier presents that mobile refueling is the best option for an interim solution, the selected supplier shall be fully responsible for providing such services ensuring all Federal, State, and local regulations are met.
- Vehicles shall not be refueled inside a building.
- Regular, agreed upon refueling schedules, will be established based upon usage and vehicle availability. Refueling will not occur during high entry/exit traffic periods of the property. Appropriate refueling times will be between 7:30 am to 9:30 am, Tuesday and Thursday.

- Unscheduled, on-demand or emergency refueling must be provided within two (2) hours of request.
- Metering systems must be used that can capture fuel dispensed by vehicle and summarized by customer.
- Supplier must have delivery capability for remote fueling of vehicles as required. This will be done by supplier vehicles and personnel, not sub-contractors or third-party designees.
- Supplier shall disclose the number of delivery vehicles available to service primary location and potential remote fueling needs.
- Supplier must be a nationwide propane company, who is capable of providing fuel to JCSS at various locations throughout the U.S.

### **Technical Specifications**

The tank shall be specifically designed for Autogas (LPG) fueling station service and shall have the following minimum design:

#### **Tank:**

- Three (3) top or bottom openings in the tank, minimum 1¼" NPT - two (2) for vapor service, one for liquid service.
- Pressure Relief Valve with fully internal spring design. Number of valves, size, and flow/discharge rate as required for tank.
- 1¼" NPT x 1¾" ACME fill valve (bulkhead) mounted near tank for ease of access and within a protective guard for protection from impact.
- 1¼" Vapor pump bypass return port with internal valve pneumatic operation, auto open/close controlled by emergency shutoff valve.
- 1¼" Meter Vapor return port with internal valve pneumatic operated, auto open/close controlled by dispenser is preferred. Optionally, for tanks equipped with a dedicated ¾" NPT Vapor opening not shared with any other function, the use of a properly rated internal excess flow valve with full port manual shutoff valve shall be accepted.

- Pneumatically controlled internal valves shall be Fisher Model C407 series or equivalent and installed in accordance with manufacturer's recommendations.
- Pneumatic control actuators for internal valves shall be Fisher 389 or equivalent and installed in accordance with manufacturer's recommendations.
- Use of domestic/industrial “multivalve” or “combination” valves for pumping system operation shall not be accepted.
- Must be able to operate at ambient temperatures from -20°C to 55°C
- Piping shall be schedule 80 cut and threaded black iron, painted or otherwise protected to prevent corrosion. Use of flanged connections or welded pipe, if assembled and installed in accordance with NFPA 58 is acceptable.

### **Supply digital readout for propane.**

#### **Pump:**

- Pump supply piping shall be a minimum of 1¼" NPT from the tank internal valve to the pump inlet.
- Pump bypass return piping shall be minimum of ¾" NPT from the bypass valve to the tank internal valve. Dispenser meter vapor return piping shall be a minimum of ¾" NPT from the meter vapor return outlet connection.
- Pipe fittings shall be forged and rated at a minimum of 2000 psi, all ball valves shall be full port design and 600 psi WOG rated, 80 mesh strainer installed at the outlet of the tank before the fuel pump rated at 2000 psi and installed in a position so as to easily allow access for maintenance.
- High differential pressure pump specific for propane Autogas fuel dispensing. Pump and motor combination must be capable of pumping 8-12 gpm into school bus as recommended by the manufacturer for higher differential pressure pumps. Pump shall be installed in accordance with manufacturer's recommendations.
- The pump shall be isolated by minimum of 1¼" full port ball valves to facilitate ease of service and maintenance with minimum loss of fuel.
- Motor requirement shall be a minimum of 3 HP, manufacturer recommended rpm, Tri PH, 60. Hz, 215-volt, Explosion proof, NEMA Class I group C.
- Explosion proof electrical control panel specifically designed to integrate dispenser, pump, control valves, internal valves, and associated equipment with facility power if

located in classified area. Minimum NEMA enclosure specification for outside installation. JCSS will supply Electrical power to electrical control panel.

- Emergency Shutoff Device (ESD) button type, (circuit breakers shall not be accepted). ESD shall not be capable of being locked in the "ON" position. ESD capable of "Lock out-Tag out" shall be only lockable in the off position.
- Crash Protection Bollards installed in accordance with NFPA 58. Crash protection and bollards shall not be permanently affixed to the structure of the tank or integral frame assembly to prevent transfer of impact energy to the tank and plumbing.
- Labeling in accordance with NFPA 58.
- Explosion proof electrical connections, in accordance with NEC class1, division 1 & 2 where TRRC allows.
- Land site preparation and electrical requirements will be provided by the supplier.

**Dispenser:**

- Qty 2- Dispenser with single hose shall be installed.
- White painted finish steel cabinet enclosure.
- Electronic control computer.
- Each dispenser must include a fuel filter of 5 microns or smaller.
- Electronic calibration.
- Automatic electronic temperature compensation.
- Ability to be remotely mounted from pump to allow remote fueling points.
- Ability to be mounted and function with third party fuel management pedestals.
- Eighteen (18) foot retractable hose with quick disconnect.
- Must be able to interfere with the Fluid Secure System